



PROJECT ID: PV467NOG4-R

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF PUBLIC BUILDINGS

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

**LAW**

VOLUME 1 OF 3

# BID BOOKLET

FOR FURNISHING ALL LABOR AND MATERIALS  
NECESSARY AND REQUIRED FOR:

## Noguchi Masterplan Phase IC.2 Renovation

LOCATION:  
BOROUGH:  
CITY OF NEW YORK

32-37 Vernon Blvd  
Long Island City, 11101

CONTRACT NO. 1

GENERAL CONSTRUCTION

DCA

Sage & Coombe Architects



Date: April 26, 2013

**3-060**



NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION

DAVID J. BURNEY, FAIA  
Commissioner

December 17, 2013

CERTIFIED MAIL - RETURN RECEIPT REQUEST

N.S.P. ENTERPRISES INC.

247 - 52nd Street  
Brooklyn, NY 11220

RE: FMS ID: PV467NOG4  
E-PIN: 85013B0114001  
DDC PIN: 8502013PV0021C  
NOGUCHI MASTERPLAN PHASE IC.2  
RENOVATION - BOROUGH OF QUEENS  
**NOTICE OF AWARD**

Dear Contractor:

You are hereby awarded the above referenced contract based upon your bid in the amount of \$1,833,000.00 submitted at the bid opening on August 01, 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, 1<sup>st</sup> Floor, Long Island City, New York (IDCNY Building). A Commissioner of Deeds will be available to witness and notarize your signature. The Agreement must be signed by an officer of the corporation or a partner of the firm.
- (2) Submit to the Contracts Unit 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	NOGUCHI MASTERPLAN PHASE IC.2 RENOVATION - BOROUGH OF QUEENS		
Bid Date	8/1/2013	FMS ID	PV467NOG4-R
Estimated Cost	\$1,457,000	PLA	No
Bid Security	2% of Total Bid Price	Client Agency	Dept. of Cultural Affairs
Time Allowed	480 CCD	Contract Manager	Eugene Werner
Addendum	2	Project Manager	Opalka, Justin
PIN	8502013PV0021C	E-PIN	85013B0114
Selective Bidding	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Consultant	Sage & Coombe Architects

Bid Rank	Vendor	Bid Amount	Security Type
1	OLYMPIC CONTRACTING CORP.	Alt. 1 \$979,390.00 Alt. 2 \$103,335.00 Alt. 3 \$96,950.00	Bond
2	N.S.P. ENTERPRISES INC.	Alt. 1 \$1,521,000.00 Alt. 2 \$1,725,000.00 Alt. 3 \$1,833,000.00	Bond
3	BQE INDUSTRIES, INC	Alt. 1 \$1,639,339.00 Alt. 2 \$1,886,159.00 Alt. 3 \$1,979,559.00	Bond
4	PAUL J. SCARIANO INC.	Alt. 1 \$1,667,573.75 Alt. 2 \$1,727,993.57 Alt. 3 \$1,858,683.57	Bond
5	ATLAS RESTORATION CORP.	Alt. 1 \$1,732,000.00 Alt. 2 \$1,853,000.00 Alt. 3 \$1,959,000.00	Bond
6	NEELAM CONSTRUCTION CORP.	Alt. 1 \$1,838,338.00 Alt. 2 \$2,107,088.00 Alt. 3 \$2,213,338.00	Bond
7	MONGIOVE ASSOCIATES LTD.	Alt. 1 \$2,187,889.00 Alt. 2 \$2,324,835.00 Alt. 3 \$2,467,709.00	Bond

**Sub-Contractors:**

Plumbing & Gas Fitting – Varsity Plumbing & Heating, Inc. - \$20,548.00  
 Electrical – Epoch Electrical Inc. - \$312,780.00

Recorder: Phyllis Lopez – ext. 1283

Approver: 

Bid Tab

Pin: 8502013PV0021C

**Qualification Form**

Project ID: PV467N094-R

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: NSP ENTERPRISES, INC

Name of Project: EXTERIOR RESTORATION OF STATEN ISLAND BOROUGH HALL

Location of Project: 10 RICHMOND TERRACE, STATEN ISLAND, NY

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

Name: BRUNO ROMEO, DCAS

Title: PROJECT MANAGER Phone Number: 917-337-6278

Brief description of work completed: EXTERIOR RESTORATION INCLUDING MASONRY, CONCRETE WINDOW REPLACEMENT, SITE WORK, WATERPROOFING, ROOFING, NEW ADA RAMP, STEEL INSTALLATION

Was the work performed as a prime or a subcontractor: PRIME

Amount of Contract: \$4,125,000

Date of Completion: 08/31/07

\*\*\*\*\*

Name of Contractor: NSP ENTERPRISES, INC

Name of Project: STRUCTURAL REPAIRS OF EXISTING FLOOR SLAB AT 11 FRONT STREET

Location of Project: 11 FRONT STREET, BROOKLYN, NY

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

Name: OKEY OREADU, NYPD

Title: ARCHITECT Phone Number: 718-476-7519

Brief description of work completed: CONCRETE DEMOLITION AND REPAIR OF FLOOR SLABS AND FOOTINGS THROUGHOUT, INSTALLATION OF STEEL, INSTALLATION OF NEW TRAFFIC COATING SYSTEM, SIDEWALK AND RAMP REPLACEMENT AT NYPD FLEET SERVICES FACILITY

Was the work performed as a prime or a subcontractor: PRIME

Amount of Contract: \$1,416,460

Date of Completion: 09/30/09

**Qualification Form**

Project ID: PV467N094-R

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: NSP ENTERPRISES, INC

Name of Project: ROOF REPLACEMENT AND RELATED WORK AT VARIOUS LIBRARIES

Location of Project: BROOKLYN

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

Name: MIKE GILTENANE, DDC

Title: PROJECT MANAGER Phone Number: 718-391-1349

Brief description of work completed: ROOF REPLACEMENT, WATERPROOFING, MASONRY AND CONCRETE WORK, STEEL INSTALLATION, SIDEWALK SHEDS AND SCAFFOLDING, ABATEMENT, METAL PANELS AND FLASHING SYSTEMS, RAILINGS, ETC.

Was the work performed as a prime or a subcontractor: PRIME

Amount of Contract: \$4,664,253

Date of Completion: 12/13/12

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Name of Contractor: NSP ENTERPRISES, INC

Name of Project: NEW MAINTENANCE GARAGE

Location of Project: PLEASE SEE ATTACHED FOR ADDITIONAL PROJECTS

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

Name: HITANDER PATEL, NYCHA

Title: PROJECT MANAGER Phone Number: 212-306-4203

Brief description of work completed: CONSTRUCTION OF A NEW GARAGE

Was the work performed as a prime or a subcontractor: PRIME

Amount of Contract: \$1,458,050

Date of Completion: 12/31/07

#2

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

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

**PROJECT ID: PV467NOG4-R**

**Noguchi Masterplan Phase IC.2  
32-37 Vernon Blvd  
Long Island City, 11101**

Name of Bidder: NSP ENTERPRISES, INC

Date of Bid Opening: 8/1/13

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

Place of Business of Bidder: 247 52ND ST, BROOKLYN, NY 11220

Bidder's Telephone Number: 718 492 7990 Bidder's Fax Number: 718 921 0935

Bidder's Email Address: info@NSPENTERPRISES.COM

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

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

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

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

Organized under the laws of the State of NEW YORK

Name and Home Address of President: NICK PLAKOUDAS  
91 SCHOOL ROAD WEST MARLBORO, NJ 07746

Name and Home Address of Secretary: SAME AS ABOVE

Name and Home Address of Treasurer: SOTIRIOS PLAKOUDAS  
91 SCHOOL ROAD WEST, MARLBORO, NJ 07746

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## BID FORM

NSP ENTERPRISES, INC

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 17 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 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:

## Alternate Bids

Bidder is advised that the City is requesting the submission of three (3) alternate bids for **Contract #1 – General Construction Work** (Bid Alternate #1, Bid Alternate #2, and Bid Alternate #3). Each of these Bid Alternates addresses a different specific Scope of Work, as described below. Bid prices for these three (3) different Scopes of Work for General Construction Work shall be submitted on BID FORM - Bid Alternate 1, BID FORM - Bid Alternate 2, and BID FORM - Bid Alternate 3, in this Bid Booklet.

**BID ALTERNATE #1:** Requires a Total Lump Sum Price for all labor and material necessary to perform all required work described in the Contract Documents, **excluding** the scope of work for Bid Alternate #2 and Bid Alternate #3, as described below. Bid Alternate #1 is the Project Base Bid.

**BID ALTERNATE #2:** Requires a Total Lump Sum Price for the following: (1) all required work for Bid Alternate #1 (Project Base Bid), **plus** (2) all required work for the scope of Alternate #2 work. The scope of work for Alternate #2 is to provide Landscape site work, plants, and irrigation system as described in the following Contract Documents: A005.00, A006.00, A007.00, A008.00, A009.00, A101.00, A401.00, A802.00 and Specification Sections 311000, 312000, 315000, 321316, 321373, 328400, 329300, and 329600.

**BID ALTERNATE #3:** Requires a Total Lump Sum Price for the following: (1) all required work for Bid Alternate Bid #1 (Project Base Bid), **plus** (2) all required work for the scope of Alternate #2 work, **plus** (3) all required work for the scope of Alternate #3 work. The scope of work for Alternate #3 is to provide electrical floodlights, bench, and wood screen as described in the following Contract Documents: A010.00, A101.00, A201.00, A402.00, A801.00, A802.00, A805.00, E201.00 and Specification Sections 064013 and 265600.

Bidders are requested to submit prices on the Bid Forms for alternate Bids described above. Following the receipt of Bids, the Department of Design and Construction will determine, in the best interest of the City, whether to award a contract based upon the Total Bid Price for **Bid Alternate #1, Bid Alternate #2, or Bid Alternate #3.**

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**BID FORM - BID ALTERNATE 1**

**PROJECT ID: PV467NOG4-R**

**TOTAL BID PRICE:** In the space provided below, the Bidder shall indicate the total bid price in figures.

- A. **LUMP SUM PRICE** - Total price for all labor and material for all required work, excluding items (B) set forth below. Total Price shall include all costs and expenses, i.e. labor, material overhead and profit for all the Work, described and shown in the drawings and specifications.

Total Price For Labor	Total Price for Material Sold and	
894,000 (\$)	622,000 (\$)	1,506,000 (\$)
\$ <del>787,000</del>	\$ <del>522,000</del>	Total Price for Item A \$ <del>1,306,000</del>

- B. **ALLOWANCE for Incidental Asbestos Abatement**  
(Section 028013 of the Specifications)

**\$15,000.00**  
\$ 1,521,000 (\$)  
\$ ~~1,321,000~~  
8/1/13 P.S

**TOTAL BID PRICE (Add A + B)**  
( a/k/a BID PROPOSAL)

**BIDDER'S SIGNATURE AND AFFIDAVIT**

**WARNING!! Failure to comply with item below will result in the rejection of your bid.**

- \* **MWBE GOALS:** You MUST complete and submit the Affirmations contained in the Subcontractor Utilization Plan (See Page 7-R), or a pre-approved waiver (See Page 9-R), at the time you submit your bid. You must submit the Affirmations (or a pre-approved waiver) in **BID ENVELOPE #1**.

Bidder: NSP ENTERPRISES, INC

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

Attest: [Signature] Secretary of Corporate Bidder  
(Corporate Seal)

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

**BID FORM - BID ALTERNATE 2**

**PROJECT ID: PV467NOG4-R**

**TOTAL BID PRICE:** In the space provided below, the Bidder shall indicate the total bid price in figures.

A. LUMP SUM PRICE - Total price for all labor and material for all required work, excluding items (B) set forth below. Total Price shall include all costs and expenses, i.e. labor, material overhead and profit for all the Work, described and shown in the drawings and specifications.

Total Price For Labor	Total Price for Material Sold and	
\$ 1,006,000	\$ 704,000	
<del>\$ 904,000</del>	<del>\$ 604,000</del> (SP)	Total Price for Item A
		\$ 1,710,000
		<del>\$ 1,510,000</del>

B. ALLOWANCE for Incidental Asbestos Abatement (Section 028013 of the Specifications)

\$15,000.00

TOTAL BID PRICE (Add A + B)  
( a/k/a BID PROPOSAL)

\$ 1,725,000  
~~\$ 1,525,000~~

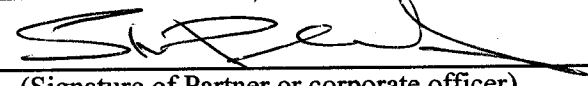
8/1/13 P.8


**BIDDER'S SIGNATURE AND AFFIDAVIT**

**WARNING!! Failure to comply with item below will result in the rejection of your bid.**

**\* MWBE GOALS:** You MUST complete and submit the Affirmations contained in the Subcontractor Utilization Plan (See Page 7-R), or a pre-approved waiver (See Page 9-R), at the time you submit your bid. You must submit the Affirmations (or a pre-approved waiver) in BID ENVELOPE #1.

Bidder: NSP ENTERPRISES, INC.

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 - BID ALTERNATE 3**

**PROJECT ID: PV467NOG4-R**

**TOTAL BID PRICE:** In the space provided below, the Bidder shall indicate the total bid price in figures.

A. **LUMP SUM PRICE** - Total price for all labor and material for all required work, excluding items (B) set forth below. Total Price shall include all costs and expenses, i.e. labor, material overhead and profit for all the Work, described and shown in the drawings and specifications.

Total Price For Labor	Total Price for Material Sold and	
\$ 1,021,000	+ 747,000	\$ 1,818,000
\$ <u>971,000</u>	+ \$ <u>647,000</u>	Total Price for Item A \$ <u>1,618,000</u>

B. **ALLOWANCE** for Incidental Asbestos Abatement  
(Section 028013 of the Specifications)

\$15,000.00  
\$ 1,833,000  
~~\$ 1,633,000~~

TOTAL BID PRICE (Add A + B)  
( a/k/a BID PROPOSAL)

**BIDDER'S SIGNATURE AND AFFIDAVIT**

8/1/13 P.S

**WARNING!! Failure to comply with item below will result in the rejection of your bid.**

\* **MWBE GOALS:** You MUST complete and submit the Affirmations contained in the Subcontractor Utilization Plan (See Page 7-R), or a pre-approved waiver (See Page 9-R), at the time you submit your bid. You must submit the Affirmations (or a pre-approved waiver) in **BID ENVELOPE #1**.

Bidder: NSP ENTERPRISES, INC

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

Attest: [Signature] Secretary of Corporate Bidder  
(Corporate Seal)

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

**BID FORM (TO BE NOTARIZED)**

\*\*\*\*\*

**AFFIDAVIT WHERE BIDDERS 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 BIDDERS 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. 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

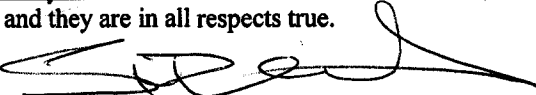
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**AFFIDAVIT WHERE BIDDERS IS A CORPORATION**

STATE OF NEW YORK, COUNTY OF QUEENS ss:

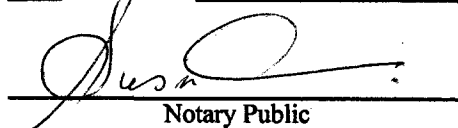
SOTIRIOS PLAKOUDAS being duly sworn says:

I am the TREASURER of the above named corporation whose name is subscribed to and which executed the foregoing bid. I reside at 91 SCHOOL ROAD WEST MARLBORO NJ 07746. I have knowledge of the several matters therein stated, and they are in all respects true.



\_\_\_\_\_  
(Signature of Corporate Officer who signed the Bid)

Subscribed and sworn to before me this  
30TH day of JULY, 2013

  
Notary Public

SUSAN RAM  
NOTARY PUBLIC, STATE OF NEW YORK  
No.01RA6220030  
QUALIFIED IN QUEENS COUNTY  
COMMISSION EXPIRES APRIL 5, 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: NSP ENTERPRISES INC  
Address: 247 52ND STREET  
City: BROOKLYN State: NEW YORK Zip Code: 11220

**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

112698746  
-----

By:   
Signature:

Title: TREASURER

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.

aw 4/7/08

**BIDDER'S IDENTIFICATION OF SUBCONTRACTORS**

**Project ID: PV467NOG4-R**

**SUBMISSION:** In addition to its Bid (Bid Envelope # 1), the Bidder must, at the time of the bid, complete and submit this form in a separate, sealed envelope (Bid Envelope # 2). To complete this form, the Bidder must identify the subcontractors it intends to use for the work listed below, as well as the dollar amount to be paid to each subcontractor. Failure to complete this form and submit it in a separate, sealed envelope will result in the disqualification of the bid as non-responsive.

The Bidder intends to use the following subcontractors. If the Bidder intends to do any of the work referenced below with its own forces, the Bidder should complete this form using its own name. If multiple subcontractors for any trade are proposed, Bidder may submit multiple copies of this form.

**1. PLUMBING AND GAS FITTING CONTRACTOR:**

Varsity Plumbing & Heating, Inc  
(Print Name)

Agreed Amount To Be Paid To Subcontractor: \$ 20,548<sup>00</sup>

**2. HVAC CONTRACTOR:**

N/A  
(Print Name)

Agreed Amount To Be Paid To Subcontractor: \$ \_\_\_\_\_

**3. ELECTRICAL CONTRACTOR:**

Epsom Electrical Inc  
(Print Name)

Agreed Amount To Be Paid To Subcontractor: \$ 191,000<sup>00</sup>

**BIDDER'S SIGNATURE:** The Bidder must sign this form in the space provided below:

Name of Bidder: NSP Enterprises, Inc

By: [Signature]  
Signature of Partner or Corporate Officer

Print Name: Steve Reakowsky

Title: Treasurer

# **BIDDER'S IDENTIFICATION OF SUBCONTRACTORS**

## **NOTICE TO BIDDERS**

**SUBMISSION:** The Bidder must, at the time of the bid, submit the form on the next page ("BIDDER'S IDENTIFICATION OF SUBCONTRACTORS"). This form must be submitted in a separate, sealed envelope (BID ENVELOPE #2). Failure to do so will result in the disqualification of the bid as non-responsive.

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Please be advised that pursuant to GML § 101(5) the Bidder is required to submit with its bid the names of subcontractors it intends to use to perform the following work on this contract, as well as the agreed-upon amount to be paid to each:

- plumbing and gas fitting;
- steam heating, hot water heating, ventilating and air conditioning apparatus; and
- electric wiring and standard illuminating fixtures.

**NOTE:** This project may not involve all of the above listed subcontractors. Please see the form on the next page which indicates the subcontractors required for this Project.

The list of subcontractors is to be submitted in a separate sealed envelope by completing the form on the next page entitled "Bidder's Identification of Subcontractors". This form provides for the identification of any subcontractors intended to be used in any of the three trades listed above. If bidder intends to use its own forces for any of the above listed work, bidder should so indicate on the form.

**Failure to submit the completed form on the next page ("Bidder's Identification of Subcontractors") that includes the names of subcontractors and the agreed upon amounts to be paid to such subcontractors will render the bid non-responsive.**

**PLEASE NOTE:** for any contract that is subject to M/WBE participation goals under Local Law 129, if the bidder's intention to use its own forces to do any of the above-referenced work would result in Bidder's failure to attain the Target Subcontracting Percentage identified in the Subcontractor Utilization Plan, the bid will be non-responsive unless the bidder requests and obtains a Waiver of Target Subcontracting Percentage (Subcontractor Utilization Plan, Part III) in advance of bid submission.

After the low bid is announced, the sealed list submitted by the low bidder will be opened and the names of the subcontractors will be announced. The sealed lists of subcontractors submitted by all other bidders shall be maintained by the Agency unopened unless such bidder shall become the low bidder (e.g., the initial low bidder is found non-responsive). All unopened lists of subcontractors shall be returned to the bidders unopened after contract award, unless the bidder has given the agency permission to

After bid submission, any change of subcontractor or agreed-upon amount to be paid to each shall require approval of the Agency upon a showing of a legitimate construction need which shall include, but not be limited to, a change in project specifications, a change in project material costs, a change to subcontractor status as determined pursuant to §222 (2)(e) of the Labor Law, or if the subcontractor has become otherwise unwilling, unable or unavailable to perform the subcontract.

Please note that the Agency will not award this contract for an amount greater than \$3 million.

Project: Noguchi Masterplan Phase IC.2  
 Location: 32-37 Vernon Boulevard, Long Island City  
 Bidder: N.S.P. Enterprises, Inc

DDC ID: PV467NOG4-R  
 Sponsor Agency: Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
<b>CONTRACT 1 - GENERAL CONSTRUCTION WORK</b>								
<b>BID ALTERNATE #1 (BASE BID)</b>								
<b><u>DIVISION 1 - GENERAL REQUIREMENTS</u></b>								
	MOBILIZATION	1	LS	\$ 30,680.00	\$ 30,680.00	\$ 46,020.00	\$ 46,020.00	\$ 76,700.00
	<b>Subtotal</b>							<b>76,700.00</b>
<b><u>TEMPORARY FACILITIES &amp; CONTROLS</u></b>								
015000	12' High Chain Link Fence for Garden Protection	200	LF	\$ 165.20	\$ 33,040.00	\$ 247.80	\$ 49,560.00	\$ 82,600.00
	8' High Temporary Chain Link Fence at Street Side	220	LF	\$ 56.85	\$ 12,508.00	\$ 85.28	\$ 18,762.00	\$ 31,270.00
	Temporary Secure Gates	2	PR	\$ 4,720.00	\$ 9,440.00	\$ 7,080.00	\$ 14,160.00	\$ 23,600.00
	<b>Subtotal</b>							<b>137,470.00</b>
<b><u>TEMPORARY TREE &amp; PLANT PROTECTION</u></b>								
015639	Protect Sidewalk Trees	7	EA	\$ 552.91	\$ 3,870.40	\$ 829.37	\$ 5,805.60	\$ 9,676.00
	Plant Protection Zone Fence	300	LF	\$ 15.73	\$ 4,720.00	\$ 23.60	\$ 7,080.00	\$ 11,800.00
	Full Time Arborist	15	Days	\$ 472.00	\$ 7,080.00	\$ 708.00	\$ 10,620.00	\$ 17,700.00
	<b>Subtotal</b>							<b>39,176.00</b>
<b><u>TEMPORARY SCULPTURE PROTECTION &amp; REMOVALS</u></b>								
015700	Crate, Load, Remove, Store & Replace at completion of sitework	10	PCS	\$ 944.00	\$ 9,440.00	\$ 1,416.00	\$ 14,160.00	\$ 23,600.00
	Protect Concrete Walkway	1300	SF	\$ 3.70	\$ 4,814.40	\$ 5.56	\$ 7,221.60	\$ 12,036.00
	Remove Wooden Hose Bib Enclosure	1	LS	\$ 472.00	\$ 472.00	\$ 708.00	\$ 708.00	\$ 1,180.00
	Protect PVC Pipe Below Concrete Walkway	1	LS	\$ 472.00	\$ 472.00	\$ 708.00	\$ 708.00	\$ 1,180.00
	Protect Extg Gate	1	LS	\$ 1,180.00	\$ 1,180.00	\$ 1,770.00	\$ 1,770.00	\$ 2,950.00
	Remove & Salvage Bike Racks	6	EA	\$ 141.60	\$ 849.60	\$ 212.40	\$ 1,274.40	\$ 2,124.00
	Protect Tel Pole	1	LS	\$ 472.00	\$ 472.00	\$ 708.00	\$ 708.00	\$ 1,180.00
	Rem Masonry & Prep to Install Access Panels	1	LOC	\$ 2,360.00	\$ 2,360.00	\$ 3,540.00	\$ 3,540.00	\$ 5,900.00
	<b>Subtotal</b>							<b>50,150.00</b>

Project: Noguchi Masterplan Phase IC.2  
 Location: 32-37 Vernon Boulevard, Long Island City  
 Bidder: N.S.P. Enterprises, Inc

DDC ID: PV467NOG4-R  
 Sponsor Agency: Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
<b>017300</b>	<b>EXECUTION</b>							
	Interior Painting	100	SF	\$ 23.60	\$ 2,360.00	\$ 35.40	\$ 3,540.00	\$ 5,900.00
	Exterior Painting & Touch Up at Metal Gates	1	LOC	\$ 2,360.00	\$ 2,360.00	\$ 3,540.00	\$ 3,540.00	\$ 5,900.00
	Patch & Repair Sheetrock Distributed for Installation of Conduit &/or Water Supply Pipe	30	SF	\$ 39.33	\$ 1,180.00	\$ 59.00	\$ 1,770.00	\$ 2,950.00
	Construction Layout	24	HRS	\$ 196.67	\$ 4,720.00	\$ 295.00	\$ 7,080.00	\$ 11,800.00
	Field Engineering & Surveying	16	HRS	\$ 295.00	\$ 4,720.00	\$ 442.50	\$ 7,080.00	\$ 11,800.00
	Coordination of the City of New York installed products	16	HRS	\$ 177.00	\$ 2,832.00	\$ 265.50	\$ 4,248.00	\$ 7,080.00
	Progress Cleanings	3	EA	\$ 1,573.33	\$ 4,720.00	\$ 2,360.00	\$ 7,080.00	\$ 11,800.00
	Starting & Adjusting	1	LS	\$ 4,720.00	\$ 4,720.00	\$ 7,080.00	\$ 7,080.00	\$ 11,800.00
	Protection of Installed Construction	8000	SF	\$ 0.59	\$ 4,720.00	\$ 0.89	\$ 7,080.00	\$ 11,800.00
	Correction of the Work	1	LS	\$ 2,360.00	\$ 2,360.00	\$ 3,540.00	\$ 3,540.00	\$ 5,900.00
	<b>Subtotal</b>							<b>86,730.00</b>
	<b>DIVISION 2 - EXISTING CONDITIONS</b>							
<b>024119</b>	<b>SELECTIVE DEMOLITION</b>							
	Remove Trap Rock at New Wall Excavation Zone, Bag & Salvage	1000	CF	\$ 4.72	\$ 4,720.00	\$ 7.08	\$ 7,080.00	\$ 11,800.00
	Remove Ivy From CMU wall	4600	SF	\$ 1.03	\$ 4,720.00	\$ 1.54	\$ 7,080.00	\$ 11,800.00
	Remove & Dispose of Fence From Top of Wall	203	LF	\$ 23.95	\$ 4,861.60	\$ 35.92	\$ 7,292.40	\$ 12,154.00
	Remove CMU Wall	1860	SF	\$ 5.15	\$ 9,581.60	\$ 7.73	\$ 14,372.40	\$ 23,954.00
	Remove Reinforced Foundation Wall	651	SF	\$ 7.08	\$ 4,609.08	\$ 10.62	\$ 6,913.62	\$ 11,522.70
	Remove Reinforced Concrete Footing	465	SF	\$ 7.08	\$ 3,292.20	\$ 10.62	\$ 4,938.30	\$ 8,230.50
	Remove Stockpile Brick Edging	105	LF	\$ 13.71	\$ 1,439.60	\$ 20.57	\$ 2,159.40	\$ 3,599.00
	Sawcut Sidewalk	222	LF	\$ 4.72	\$ 1,047.84	\$ 7.08	\$ 1,571.76	\$ 2,619.60
	Demo & Dispose of Extg Sidewalk	980	SF	\$ 3.78	\$ 3,700.48	\$ 5.66	\$ 5,550.72	\$ 9,251.20
	Demo & Dispose of Area Way CMU Wall	150	SF	\$ 18.88	\$ 2,832.00	\$ 28.32	\$ 4,248.00	\$ 7,080.00
	Demo & Dispose of Areaway Footing	25	LF	\$ 113.28	\$ 2,832.00	\$ 169.92	\$ 4,248.00	\$ 7,080.00
	<b>Subtotal</b>							<b>109,091.00</b>

Project: Noguchi Masterplan Phase IC.2  
 Location: 32-37 Vernon Boulevard, Long Island City  
 Bidder: N.S.P. Enterprises, Inc

DDC ID: PV467NOG4-R  
 Sponsor Agency: Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
033000	<b>DIVISION 3 - CONCRETE</b>							
	<b>CAST-IN-PLACE CONCRETE</b>							
	Footings for Masonry Wall							
	Concrete	17.5	CY	\$ 165.20	\$ 2,891.00	\$ 247.80	\$ 4,336.50	\$ 7,227.50
	Forms	372	SF	\$ 2.83	\$ 1,053.50	\$ 4.25	\$ 1,580.26	\$ 2,633.76
	Rebar	2702	LBS	\$ 2.36	\$ 6,376.72	\$ 3.54	\$ 9,565.08	\$ 15,941.80
	Foundation Wall for Masonry Wall							
	Concrete	19	CY	\$ 165.20	\$ 3,138.80	\$ 247.80	\$ 4,708.20	\$ 7,847.00
	Forms	1023	SF	\$ 3.78	\$ 3,862.85	\$ 5.66	\$ 5,794.27	\$ 9,657.12
	Rebar	6882	LBS	\$ 2.36	\$ 16,241.52	\$ 3.54	\$ 24,362.28	\$ 40,603.80
Footings for Retaining Wall								
Concrete	1.85	CY	\$ 165.33	\$ 305.86	\$ 247.99	\$ 458.78	\$ 764.64	
Forms	50	SF	\$ 3.78	\$ 188.80	\$ 5.66	\$ 283.20	\$ 472.00	
Rebar	87	LBS	\$ 10.85	\$ 944.00	\$ 16.28	\$ 1,416.00	\$ 2,360.00	
Retaining wall								
Concrete	5	CY	\$ 165.20	\$ 826.00	\$ 247.80	\$ 1,239.00	\$ 2,065.00	
Forms	275	SF	\$ 3.78	\$ 1,038.40	\$ 5.66	\$ 1,557.60	\$ 2,596.00	
Rebar	453	LBS	\$ 3.78	\$ 1,710.53	\$ 5.66	\$ 2,565.79	\$ 4,276.32	
Areaway Slab on Grade	112	SF	\$ 7.08	\$ 792.96	\$ 10.62	\$ 1,189.44	\$ 1,982.40	
Restore Concrete Curb at Ramp	3	LF	\$ 236.00	\$ 708.00	\$ 354.00	\$ 1,062.00	\$ 1,770.00	
Sculpture Footings	2	EA	\$ 118.00	\$ 236.00	\$ 177.00	\$ 354.00	\$ 590.00	
	<b>Subtotal</b>							<b>100,787.34</b>
040120	<b>DIVISION 4 - MASONRY</b>							
	<b>MAINTENANCE OF UNIT MASONRY</b>							
	Rework/Restore Brick Masonry at New Wall Connection to Extg	20	LF	\$47.20	\$944.00	\$70.80	\$1,416.00	\$ 2,360.00
		<b>Subtotal</b>						<b>2,360.00</b>
	<b>CONCRETE UNIT MASONRY</b>							
	12" CMU Wall	1116	SF	\$ 13.22	\$ 14,749.06	\$ 19.82	\$ 22,123.58	\$ 36,872.64
	4" CMU Wall	136	SF	\$ 23.88	\$ 3,247.36	\$ 35.82	\$ 4,871.04	\$ 8,118.40

Project: Noguchi Masterplan Phase IC.2

Location: 32-37 Vernon Boulevard, Long Island City

Bidder: N.S.P. Enterprises, Inc

DDC ID: PV467NOG4-R

Sponsor Agency: Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
	8" CMU Wall	883	SF	\$ 14.16	\$ 12,503.28	\$ 21.24	\$ 18,754.92	\$ 31,258.20
	Decorative Stone Treatment - Bluestone Cap on CMU Wall	186	LF	\$ 44.84	\$ 8,340.24	\$ 67.26	\$ 12,510.36	\$ 20,850.60
	Flexible Flashing at wall Penetrations	6	EA	\$ 157.33	\$ 944.00	\$ 236.00	\$ 1,416.00	\$ 2,360.00
	Expansion Control - At Walls	75	LF	\$ 9.44	\$ 708.00	\$ 14.16	\$ 1,062.00	\$ 1,770.00
	<b>Subtotal</b>							<b>101,229.84</b>
	<b>DIVISION 5 - METALS</b>							
	<b>METAL FABRICATIONS</b>							
	Provide New Steel Tube to Match Extg at Exig Gates	4	LF	\$ 118.00	\$ 472.00	\$ 177.00	\$ 708.00	\$ 1,180.00
	Access Panels at Areaway	1	EA	\$ 1,888.00	\$ 1,888.00	\$ 2,832.00	\$ 2,832.00	\$ 4,720.00
	Galv'd Metal Supports for Metal Fence at Expansion Joints	7	EA	\$ 236.00	\$ 1,652.00	\$ 354.00	\$ 2,478.00	\$ 4,130.00
	Clean Rust Form & Paint Extg Ramp & Stair Rails	119	LF	\$ 7.93	\$ 944.00	\$ 11.90	\$ 1,416.00	\$ 2,360.00
	Misc 3/8" Bent Plate Steel Shelf	10	LF	\$ 236.00	\$ 2,360.00	\$ 354.00	\$ 3,540.00	\$ 5,900.00
	<b>Subtotal</b>							<b>18,290.00</b>
	<b>DIVISION 7 - THERMAL AND MOISTURE PROTECTION</b>							
071900	<b>ELASTOMERIC SHEET WATERPROOFING</b>							
	Elastometric Sheet Waterproofing	1675	SF	\$ 7.08	\$ 11,859.00	\$ 10.62	\$ 17,788.50	\$ 29,647.50
	Sealant & Backer Rod	50	LF	\$ 9.44	\$ 472.00	\$ 14.16	\$ 708.00	\$ 1,180.00
	<b>Subtotal</b>							<b>30,827.50</b>
	<b>WATER REPELLENTS</b>							
	Water Repellants at CMU Wall	3906	SF	\$ 1.89	\$ 7,374.53	\$ 2.83	\$ 11,061.79	\$ 18,436.32
	<b>Subtotal</b>							<b>18,436.32</b>
078446	<b>FIRE RESISTIVE JOINT SYSTEMS</b>							
	Fire Resistive Joint Sealants at Fire Wall Penetrations	6	LOC	\$ 157.33	\$ 944.00	\$ 236.00	\$ 1,416.00	\$ 2,360.00
	<b>Subtotal</b>							<b>2,360.00</b>

**Project:** Noguchi Masterplan Phase IC.2

**DDC ID:** PV467NOC4-R

**Location:** 32-37 Vernon Boulevard, Long Island City

**Sponsor Agency:** Dept of Cultural Affairs

**Bidder:** N.S.P. Enterprises, Inc

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
<b>079200</b>	<b>JOINT SEALANTS</b>							
	Joint Sealers at Sidewalks	256	LF	\$ 7.11	\$ 1,819.56	\$ 10.66	\$ 2,729.34	\$ 4,548.90
	Joint Sealers at Walls	90	LF	\$ 9.44	\$ 849.60	\$ 14.16	\$ 1,274.40	\$ 2,124.00
	Subtotal							\$ 6,672.90
<b>220514</b>	<b>DIVISION 22 - PLUMBING</b>							
	<b>COMMON WORK RESULTS FOR PLUMBING</b>							
	Floor Sleeves	3	EA	\$ 125.08	\$ 375.24	\$ 187.62	\$ 562.86	\$ 938.10
	Temp Heat	0	N/A	#DIV/0!	\$ -	\$ -	\$ -	\$ -
	Subtotal							\$ 938.10
<b>220523</b>	<b>GENERAL DUTY VALVES FOR PLUMBING PIPING</b>							
	1" RPZ Valve	1	EA	\$ 1,735.54	\$ 1,735.54	\$ 2,603.32	\$ 2,603.32	\$ 4,338.86
	125# Cast Iron Gate Valves	5	EA	\$ 150.10	\$ 750.48	\$ 225.14	\$ 1,125.72	\$ 1,876.20
	Subtotal							\$ 6,215.06
<b>220529</b>	<b>HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT</b>							
	Hangers & Supports	1	LS	\$ 750.48	\$ 750.48	\$ 1,125.72	\$ 1,125.72	\$ 1,876.20
	Subtotal							\$ 1,876.20
<b>220553</b>	<b>IDENTIFICATION AND PAINTING FOR PLUMBING PIPING AND EQUIPMENT</b>							
	Identification & Painting for Plumbing & Equipment	1	LS	\$ 350.22	\$ 350.22	\$ 525.34	\$ 525.34	\$ 875.56
	Subtotal							\$ 875.56
<b>220577</b>	<b>PLUMBING SYSTEM TESTS</b>							
	Plumbing System tests	1	LS	\$ 1,193.22	\$ 1,193.22	\$ 1,789.82	\$ 1,789.82	\$ 2,983.04
	Subtotal							\$ 2,983.04



Project: Noguichi Masterplan Phase IC.2

Location: 32-37 Vernon Boulevard, Long Island City

Bidder: N.S.P. Enterprises, Inc

DDC ID: PV467NOG4-R

Sponsor Agency: Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
220700	<b>PLUMBING INSULATION</b> 1" Fiberglass Insulation (Domestic Water Piping)	100	FT	\$ 11.80	\$ 1,180.00	\$ 17.70	\$ 1,770.00	\$ 2,950.00
	Subtotal							2,950.00
221000	<b>PLUMBING PIPING AND FITTINGS</b> 1 In Dia L Copper Tubing Wrought Cooper Fittings	80 25	FT EA	\$ 28.79 \$ 10.38	\$ 2,303.56 \$ 259.60	\$ 43.19 \$ 1.50	\$ 3,455.04 \$ 389.40	\$ 5,758.40 \$ 649.00
	Subtotal							6,407.40
221100	<b>FACILITY WATER DISTRIBUTION</b> Connect 1" Line to Extg	1	EA	\$ 300.19	\$ 300.19	\$ 1.50	\$ 450.29	\$ 750.48
	Subtotal							750.48
223000	<b>PLUMBING EQUIPMENT, SPECIALTIES, AND ACCESSORIES</b> Protect & Support Siamese Connection During Masonry Wall Removal & Replacement	1	LS	\$ 500.32	\$ 500.32	\$ 750.48	\$ 750.48	\$ 1,250.80
	Subtotal							1,250.80
260500	<b>DIVISION 26 - ELECTRICAL</b> <b>COMMON WORK RESULTS FOR ELECTRICAL</b> Temp Power Core Drill for Conduit Remove & Salvage Extg Emergency Lights	1 10 7	LS EA EA	\$ 3,020.80 \$ 251.10 \$ 155.09	\$ 3,020.80 \$ 2,511.04 \$ 1,085.60	\$ 4,531.20 \$ 376.66 \$ 232.63	\$ 4,531.20 \$ 3,766.56 \$ 1,628.40	\$ 7,552.00 \$ 6,277.60 \$ 2,714.00
	Subtotal							16,543.60
260519	<b>BASIC MATERIALS AND METHODS</b> Underground Concut WP Recessed Junction Boxes in New Wall Relocate Extg Fire Alam Conduit	250 7 300	LF EA LF	\$ 13.78 \$ 269.71 \$ 8.75	\$ 3,445.60 \$ 1,888.00 \$ 2,624.32	\$ 20.67 \$ 404.57 \$ 13.12	\$ 5,168.40 \$ 2,832.00 \$ 3,936.48	\$ 8,614.00 \$ 4,720.00 \$ 6,560.80
	Subtotal							19,894.80

Project: Noguichi Masterplan Phase IC.2

DDC ID: PV467NOG4-R

Location: 32-37 Vernon Boulevard, Long Island City

Sponsor Agency: Dept of Cultural Affairs

Bidder: N.S.P. Enterprises, Inc

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
263353	EMERGENCY LIGHTING CENTRAL INVERTER Emergency Lighting Central Inverter	2	EA	\$11,894.40	\$23,788.80	\$17,841.60	\$35,683.20	\$ 59,472.00
	Subtotal							59,472.00
263400	10KW UNINTERRUPTIBLE POWER SUPPLY 10Kw Uninterruptible Power Supply	NIC	EA	#VALUE!	\$0.00	#VALUE!	\$0.00	\$ -
	Subtotal							0.00
265600	EXTERIOR LIGHTING Fixture Type NOG 2	7	EA	1557.6	\$10,903.20	\$2,336.40	\$16,354.80	\$ 27,258.00
	Garden Lighting Dimming Module	4	EA	755.2	\$3,020.80	\$1,132.80	\$4,531.20	\$ 7,552.00
	Battery Back-Up	1	LS	2643.2	\$2,643.20	\$3,964.80	\$3,964.80	\$ 6,608.00
	Heat Trace	300	LF	8.496	\$2,548.80	\$12.74	\$3,823.20	\$ 6,372.00
	Subtotal							47,790.00
311000	DIVISION 31 - EARTHWORK SITE CLEARING							
	Site Clearing	8000	SF	0.472	\$3,776.00	\$0.71	\$5,664.00	\$ 9,440.00
	Remove & Stockpile Topsoil for Planting	2000	SF	\$0.94	\$1,888.00	\$1.42	\$2,832.00	\$ 4,720.00
	Clean & Reinstall Trap-Rock	1000	CF	\$3.78	\$3,776.00	\$5.66	\$5,664.00	\$ 9,440.00
	Subtotal							23,600.00
312000	EARTH MOVING Decompaction of Soils - Air Spade Excavation							
	At New Masonry Wall Foundation	275	CY	\$18.88	\$5,192.00	\$28.32	\$7,788.00	\$ 12,980.00
	At Retaining Wall Foundation	28	CY	\$28.32	\$792.96	\$42.48	\$1,189.44	\$ 1,982.40

**Project:** Noguchi Masterplan Phase IC.2

**Location:** 32-37 Vernon Boulevard, Long Island City

**Bidder:** N.S.P. Enterprises, Inc

**DDC ID:** PV467NOG4-R

**Sponsor Agency:** Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
	At Buried Conduit Trench	109	CY	\$23.60	\$2,572.40	\$35.40	\$3,858.60	\$ 6,431.00
	Backfill with Imported Clean Material at Foundations	310	CY	33.04	\$10,242.40	\$49.56	\$15,363.60	\$ 25,606.00
	Backfill with Imported Clean Material at Buried Conduit Trenches	109	CY	33.04	\$3,601.36	\$49.56	\$5,402.04	\$ 9,003.40
	Dispose of Excess Material	345	CY	9.44	\$3,256.80	\$14.16	\$4,885.20	\$ 8,142.00
	Geotextile Fabric	1216	SY	1.416	\$1,721.86	\$2.12	\$2,582.78	\$ 4,304.64
	<b>Subtotal</b>							<b>68,449.44</b>
<b>315000</b>	<b>EXCAVATION</b>							
	Excavation Support & Protection at Retaining Wall	25	LF	\$ 56.64	\$ 1,416.00	\$ 84.96	\$ 2,124.00	\$ 3,540.00
	<b>Subtotal</b>							<b>3,540.00</b>
	<b>DIVISION 32 - EXTERIOR IMPROVEMENTS</b>							
<b>321316</b>	<b>CONCRETE WALKS AND CURBS</b>							
	Concrete Walks & Curbs	1057	SF	11.80893094	\$ 12,482.04	\$ 17.71	\$ 18,723.06	\$ 31,205.10
	Expansion Control - At Sidewalks	160	LF	\$ 7.08	\$ 1,132.80	\$ 10.62	\$ 1,699.20	\$ 2,832.00
	<b>Subtotal</b>							<b>34,037.10</b>
<b>321373</b>	<b>CONCRETE PAVING JOINT SEALANTS</b>							
	Concrete Paving Joint Sealants	257	LF	\$ 7.08	\$ 1,819.56	\$ 10.62	\$ 2,729.34	\$ 4,548.90
	<b>Subtotal</b>							<b>4,548.90</b>
<b>323119</b>	<b>METAL FENCES</b>							
	Metal Fences - Wall Top	1302	SF	\$ 21.75	\$ 28,320.00	\$ 32.63	\$ 42,480.00	\$ 70,800.00
	Metal Fences - Gate Top	112	SF	\$ 37.76	\$ 4,229.12	\$ 56.64	\$ 6,343.68	\$ 10,572.80
	<b>Subtotals</b>							<b>81,372.80</b>

Project: Noguchi Masterplan Phase IC.2  
 Location: 32-37 Vernon Boulevard, Long Island City  
 Bidder: N.S.P. Enterprises, Inc

DDC ID: PV467NOG4-R  
 Sponsor Agency: Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
329300	PLANTS							
	White Azalea	3	EA	141.6 \$	424.80 \$	212.40 \$	637.20 \$	1,062.00
	Glossy Abelia	9	EA	141.60 \$	1,274.40 \$	212.40 \$	1,911.60 \$	3,186.00
	Golden Bamboo	7	BALLS	472 \$	3,304.00 \$	708.00 \$	4,956.00 \$	8,260.00
	English Ivy - 2.25"	782	EA	4.71 \$	3,681.60 \$	7.06 \$	5,522.40 \$	9,204.00
	English Ivy - 1 Gal Containers	23	EA	11.8 \$	271.40 \$	17.70 \$	407.10 \$	678.50
	New Mulch	226	SY	6.39 \$	1,443.38 \$	9.58 \$	2,165.06 \$	3,608.44
	New Concrete Enclosure at Hose Bib	1	EA	944.00 \$	944.00 \$	1,416.00 \$	1,416.00 \$	2,360.00
	Clean & Restore Street Tree Pits	7	EA	141.60 \$	991.20 \$	212.40 \$	1,486.80 \$	2,478.00
	<b>Subtotal</b>							<b>30,836.94</b>
329600	TRANSPLANTING							
	Crown & Roof Pruning	1	ls	1416 \$	1,416.00 \$	2,124.00 \$	2,124.00 \$	3,540.00
	Plants & Pest Control	2039	SF	2.83 \$	5,774.45 \$	4.25 \$	8,661.67 \$	14,436.12
	<b>Subtotal</b>							<b>17,976.12</b>
	Items not listed in breakdown sheets	1	LS	37,288.00 \$	37,288.00 \$	55,932.00 \$	55,932.00 \$	93,220.00
	<b>Subtotal</b>				<b>1109,000</b>		<b>1100,000</b>	<b>93,220.00</b>
	<b>TOTAL BID ALTERNATE #1 (BASE BID)</b>							
					\$ <del>522,323.70</del>		\$ 783,485.54	1,305,809.24
					<b>622,000</b>		<b>884,000</b>	

Project: Noguchi Masterplan Phase IC.2  
 Location: 32-37 Vernon Boulevard, Long Island City  
 Bidder: N.S.P. Enterprises, Inc

DDC ID: PV467NOG4-R  
 Sponsor Agency: Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
<b>CONTRACT 1 - GENERAL CONSTRUCTION WORK</b>								
<b>BID ALTERNATE #2</b>								
<b>DIVISION 31 - EARTHWORK</b>								
312000	<b>EARTH MOVING</b>							
	Decompaction of Soils - Air Spade Excavation							
	At Irrigation Piping	130	CY	\$ 21.24	\$ 2,761.20	\$ 31.86	\$ 4,141.80	\$ 6,903.00
	Backfill with Imported Clean Material at Irrigation Trenches	130	CY	\$ 37.76	\$ 4,908.80	\$ 56.64	\$ 7,363.20	\$ 12,272.00
	<b>Subtotal</b>							<b>19,175.00</b>
<b>DIVISION 32 - EXTERIOR IMPROVEMENTS</b>								
328400	<b>PLANTING IRRIGATION</b>							
	Performace Irrigation at Grade							
	Drip Stakes							
	Drip Stakes	40	EA	\$ 23.60	\$ 944.00	\$ 35.40	\$ 1,416.00	\$ 2,360.00
	Multi-outlet Manifold	8	EA	\$ 188.80	\$ 1,510.40	\$ 283.20	\$ 2,265.60	\$ 3,776.00
	Econobox for Manifold	8	EA	\$ 94.40	\$ 755.20	\$ 141.60	\$ 1,132.80	\$ 1,888.00
	<b>Drip</b>							
	0.9 GPH 12" Spacing In-Line Emmitter Tubing	1440	LF	\$ 1.42	\$ 2,039.04	\$ 2.12	\$ 3,058.56	\$ 5,097.60
	Air Relief Valve Assembly	8	EA	\$ 283.20	\$ 2,265.60	\$ 424.80	\$ 3,398.40	\$ 5,664.00
	Automatic Flushing Valve	11	EA	\$ 330.40	\$ 3,634.40	\$ 495.60	\$ 5,451.60	\$ 9,086.00
	1" Drip Valve Assembly	2	EA	\$ 472.00	\$ 944.00	\$ 708.00	\$ 1,416.00	\$ 2,360.00
	<b>Controller</b>							
	Controller (6-24 Station	6	EA	\$ 708.00	\$ 4,248.00	\$ 1,062.00	\$ 6,372.00	\$ 10,620.00
	Controller - Moisture Setting	2	EA	\$ 472.00	\$ 944.00	\$ 708.00	\$ 1,416.00	\$ 2,360.00
	Moisture Sensor	4	EA	\$ 236.00	\$ 944.00	\$ 354.00	\$ 1,416.00	\$ 2,360.00
	18" Jumbo Valve Box	4	EA	\$ 236.00	\$ 944.00	\$ 354.00	\$ 1,416.00	\$ 2,360.00
	1" Isolation Valves	2	EA	\$ 472.00	\$ 944.00	\$ 708.00	\$ 1,416.00	\$ 2,360.00
	1" Quick Coupling Valve w/Sw. Jt	2	EA	\$ 188.80	\$ 377.60	\$ 283.20	\$ 566.40	\$ 944.00
	10" Round Valve Box	4	EA	\$ 188.80	\$ 755.20	\$ 283.20	\$ 1,132.80	\$ 1,888.00
	DBY Wire Splice (Zone Valves x 2)	13	EA	\$ 188.80	\$ 2,454.40	\$ 283.20	\$ 3,681.60	\$ 6,136.00

Project: Noguchi Masterplan Phase IC.2

Location: 32-37 Vernon Boulevard, Long Island City

Bidder: N.S.P. Enterprises, Inc

DDC ID: PV467NOG4-R

Sponsor Agency: Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
	1" Type K Copper	25	LF	\$ 51.92	\$ 1,298.00	\$ 77.88	\$ 1,947.00	\$ 3,245.00
	1/2" Schd 40 PVC	550	LF	\$ 4.72	\$ 2,596.00	\$ 7.08	\$ 3,894.00	\$ 6,490.00
	3/4 Schd 40 PVC	900	LF	\$ 3.78	\$ 3,398.40	\$ 5.66	\$ 5,097.60	\$ 8,496.00
	Fittings	1	LS	\$ 2,360.00	\$ 2,360.00	\$ 3,540.00	\$ 3,540.00	\$ 5,900.00
	Pipe Sleeve 2" Class 160 PVC	40	LF	\$ 23.60	\$ 944.00	\$ 35.40	\$ 1,416.00	\$ 2,360.00
	Sleeve - Wire							
	2" Schd 40 PVC Electric Conduit	300	LF	\$ -	\$ -	\$ -	\$ -	\$ -
	Electric Wire							
	14-2 red Wire	300	LF	\$ 1.94	\$ 580.56	\$ 2.90	\$ 870.84	\$ 1,451.40
	14-1 White Wire	300	LF	\$ 1.65	\$ 495.60	\$ 2.48	\$ 743.40	\$ 1,239.00
	Grounding							
	4" x 96" Copper Plate w/#6 Bare Copper Wire	1	EA	\$ 670.24	\$ 670.24	\$ 1,005.36	\$ 1,005.36	\$ 1,675.60
	5/8" x 8' Ground Rod	1	EA	\$ 703.28	\$ 703.28	\$ 1,054.92	\$ 1,054.92	\$ 1,758.20
	GEM Material - 50lb	1	EA	\$ 3,115.20	\$ 3,115.20	\$ 4,672.80	\$ 4,672.80	\$ 7,788.00
	Cadweld One Shot	1	EA	\$ 1,888.00	\$ 1,888.00	\$ 2,832.00	\$ 2,832.00	\$ 4,720.00
	#6 Bare Copper Wire	50	LF	\$ 47.20	\$ 2,360.00	\$ 70.80	\$ 3,540.00	\$ 5,900.00
	Backflow Prevention							
	3/4 Reduced Pressure Principle	1	EA	\$ 2,360.00	\$ 2,360.00	\$ 3,540.00	\$ 3,540.00	\$ 5,900.00
	Subtotal							116,182.80
329300	PLANTS							
	Liorope	115	EA	\$ 11.80	\$ 1,357.00	\$ 17.70	\$ 2,035.50	\$ 3,392.50
	Hand Grind Tree Stump	8	HRS	\$ 118.00	\$ 944.00	\$ 177.00	\$ 1,416.00	\$ 2,360.00
	Ajuga Reptans	145	EA	\$ 11.80	\$ 1,711.00	\$ 17.70	\$ 2,566.50	\$ 4,277.50
	Reinstall Salvaged Brick Edging	86	LF	\$ 9.44	\$ 811.84	\$ 14.16	\$ 1,217.76	\$ 2,029.60
	Subtotal							12,059.60
	Plants not included in breakdown sheets	1	LS	\$ 2,265.60	\$ 2,265.60	\$ 3,398.40	\$ 3,398.40	\$ 5,664.00
								5,664.00

**Project:** Noguichi Masterplan Phase IC.2

**Location:** 32-37 Vernon Boulevard, Long Island City

**Bidder:** N.S.P. Enterprises, Inc

**DDC ID:** PV467NOG4-R

**Sponsor Agency:** Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
329600	<b>TRANSPLANTING</b>							
	General Protection & Care of All Extg Trees & Plants							
	Shrubs - Remove, Ball & Burlap	19	EA	\$ 236.00	\$ 4,484.00	\$ 354.00	\$ 6,726.00	\$ 11,210.00
	Ground Plants - Remove	1	ls	\$ 2,360.00	\$ 2,360.00	\$ 3,540.00	\$ 3,540.00	\$ 5,900.00
	<b>Subtotal</b>							<b>17,110.00</b>
	Items not listed in breakdown sheets	1	ls	\$ 13,825.82	\$ 13,825.82	\$ 20,738.74	\$ 20,738.74	\$ 34,564.56
	<b>Subtotal</b>							<b>34,564.56</b>
	<b>TOTAL ALTERNATE 2 WORK</b>							
					\$ 81,902.38		\$ 122,853.58	\$ 204,755.96
	<b>TOTAL BID ALTERNATE #2 (BASE BID + ALTERNATE 2 WORK</b>				\$ 604,226.08		\$ 906,339.12	\$ 1,510,565.20

Project: Noguchi Masterplan Phase IC.2  
 Location: 32-37 Vernon Boulevard, Long Island City  
 Bidder: N.S.P. Enterprises, Inc

DDC ID: PV467NOG4-R  
 Sponsor Agency: Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
<b>CONTRACT 1 - GENERAL CONSTRUCTION WORK</b>								
<b>BID ALTERNATE #3</b>								
<b>DIVISION 6 - WOODS AND PALSTICS</b>								
64013	<b>EXTERIOR ARCHITECTURAL WOODWORK</b>							
	Wood Screen	1	EA	\$ 2,360.00	\$ 2,360.00	\$ 3,540.00	\$ 3,540.00	\$ 5,900.00
	Replace 2 x 8 Reclaimed Black Locust Plank on Extg Wood Bench	1	LF	4366	\$ 4,366.00	\$ 6,549.00	\$ 6,549.00	\$ 10,915.00
	<b>Subtotal</b>							<b>16,815.00</b>
<b>DIVISION 26 - ELECTRICAL</b>								
<b>BASIC MATERIALS AND METHODS</b>								
260519	Underground Conduit	250	LF	\$ 13.78	\$ 3,445.60	\$ 20.67	\$ 5,168.40	\$ 8,614.00
	<b>Subtotal</b>							<b>8,614.00</b>
<b>EXTERIOR LIGHTING</b>								
265600	Fixture Type NOG 1	23	LF	\$ 1,272.35	\$ 29,264.00	\$ 1,908.52	\$ 43,896.00	\$ 73,160.00
	<b>Subtotal</b>							<b>73,160.00</b>
	Items not listed in breakdown sheets	1	LS	\$ 3,776.00	\$ 3,776.00	\$ 5,664.00	\$ 5,664.00	\$ 9,440.00
	<b>Subtotal</b>							<b>9,440.00</b>
	<b>TOTAL ALTERNATE 3 WORK</b>			\$ 43,211.60		\$ 64,817.40		\$ 108,029.00
<b>TOTAL BID ALTERNATE #3 (BASE BID + ALTERNATE 2 WORK + ALTERNATE 3 WORK)</b>								
			2113	\$ 647,437.68		\$ 971,156.52		\$ 1,618,594.20
								NSP ENTERPRISES, INC.



Tax ID #: 112698476

APT E-  
PIN#: 85013B0114

Contract # 1 - General Construction Work

### SCHEDULE B - M/WBE Utilization Plan

#### Part I: M/WBE Participation Goals

Part I to be completed by contracting agency

#### Contract Overview

APT E-Pin # 85013B0114 FMS Project ID#: PV467NOG4-R

Project Title/Agency Noguchi Masterplan Phase IC.2

PIN # 8502013PV0021C

Bid/Proposal Response Date: \_\_\_\_\_

Contracting Agency Department of Design and Construction

Agency Address 30-30 Thomson Avenue City Long Island City State NY Zip Code 11101

Contact Person Norma Negrón Title MWBE Liaison & Compliance Analyst

Telephone # (718) 391-1502 Email negronn@ddc.nyc.gov

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

This Project consists of the selective renovation of the Noguchi Museum Sculpture Garden to rebuild the perimeter garden fence, introduce outdoor exhibit lighting and irrigation systems.

#### M/WBE Participation Goals for Services

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

Prime Contract Industry: Construction

Group	Percentage
<u>Unspecified</u>	<u>15 %</u>
or	
<u>Black American</u>	<u>Unspecified %</u>
<u>Hispanic American</u>	<u>Unspecified %</u>
<u>Asian American</u>	<u>Unspecified %</u>
<u>Women</u>	<u>Unspecified %</u>
<b>Total Participation Goals</b>	<b>15 %</b>

Line 1

Tax ID #: 11 2698476

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

to be completed by the bidder/proposer:

Please note: For Non-M/WBE Prime Contractors who will NOT subcontract any services and will self-perform the entire contract, you must obtain a FULL waiver by completing the Waiver Application on pages 9 and 9a and timely submitting it to the contracting agency pursuant to the Notice to Prospective Contractors. Once a FULL WAIVER is granted, it must be included with your bid or proposal and you do not have to complete or submit this form with your bid or proposal.

**Section I: Prime Contractor Contact Information**

Tax ID # 11 2698476 FMS Vendor ID # \_\_\_\_\_

Business Name NSP ENTERPRISES, INC Contact Person Steve Plakopoulos

Address 247 52ND ST BROOKLYN NY 11220

Telephone # 718 492 7990 Email info@NSPenterprises.com

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

**PRIME CONTRACTOR ADOPTING AGENCY M/WBE PARTICIPATION GOALS**

<input checked="" type="checkbox"/> For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Agency M/WBE Participation Goals.	Total Bid/Proposal Value	Agency Total Participation Goals (Line 1, Page 1)		Calculated M/WBE Participation Amount
Calculate the total dollar value of your total bid that you agree will be awarded to M/WBE subcontractors for services and/or credited to an M/WBE prime contractor or Qualified Joint Venture.  Please review the Notice to Prospective Contractors for more information on how to obtain credit for M/WBE participation.	1,833,000 \$	15% X	=	274,950 <sup>00</sup> \$ Line 2

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

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

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

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

**Section IV: General Contract Information**

What is the expected percentage of the total contract dollar value that you expect to award in subcontracts for services, regardless of M/WBE status? % 16

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

1	Electrician	100,000	M/WBE
2	Plumbing	20,000	M/WBE
3	Masonry/Concrete	63,700	M/WBE
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			

✓ **Scopes of Subcontract Work**

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

I hereby:

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

Signature [Signature]  
Print Name SOTIRIOS PLAKOUDAS

Date 7/31/2013  
Title TREASURER

**BID BOND 1  
FORM OF BID BOND**

**KNOW ALL MEN BY THESE PRESENTS.** That we, \_\_\_\_\_

N.S.P. Enterprises, Inc. \_\_\_\_\_

247 52nd Street \_\_\_\_\_ Brooklyn NY 11220 \_\_\_\_\_

hereinafter referred to as the "Principal", and \_\_\_\_\_

Berkley Regional Insurance Company \_\_\_\_\_

60 East 42nd St., Suite 1800 \_\_\_\_\_ New York NY 10165 \_\_\_\_\_

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

Ten Percent of Amount Bid \_\_\_\_\_

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

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

Noguchi Masterplan - Phase IC.2 Renovation, Proj. #PV467NOG4-R/8502013PV0021C, Queens, \_\_\_\_\_

NY \_\_\_\_\_

**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.

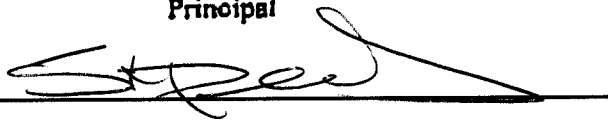
IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers the 11th day of July, 2013.

(Seal)

N.S.P. Enterprises, Inc. (L.S.)

Principal

By:



(Seal)

Berkley Regional Insurance Company

Surety

By:



Rosanne Callahan

Attorney-in-Fact

BID BOND 3

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of QUEENS ss.

On this 29TH day of JULY, 2013, before me personally came

SOTIRIOS PLAKOUAS to me known, who, being by me duly sworn, did depose and say that he resides at 91 SCHOOL ROAD WEST

that he is the TREASURER of N.S.P. Enterprises, Inc. the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.

SUSAN RAM  
NOTARY PUBLIC, STATE OF NEW YORK  
No. 01RA6220030  
QUALIFIED IN QUEENS COUNTY  
COMMISSION EXPIRES APRIL 5, 2014

  
\_\_\_\_\_  
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

## ACKNOWLEDGMENT OF SURETY

STATE OF NEW YORK }  
COUNTY OF NASSAU } <sup>ss:</sup>

On July 11, 2013 before me personally came Rosanne Callahan to me known who, being by me duly sworn, did depose and say that he/she resides at 255 Executive Drive, Plainview, New York 11803, that he/she is the Attorney-In-Fact of Berkley Regional Insurance Company the corporation described in and which executed the foregoing instrument; and that he/she signed his/her name thereto by order of the Board of Directors of said corporation.



---

**Notary Public**  
Peter Henry  
Notary Public State of NY  
No. 01HE4784829  
Qualified in Nassau County  
Commission Expires January 31, 2014

## Inquiry and Notification Rider

Berkley Surety Group, LLC is the affiliated underwriting manager for all of the surety business of the following affiliated companies: Acadia Insurance Company, Berkley Regional Insurance Company, Carolina Casualty Insurance Company, Union Standard Insurance Company, Union Insurance Company and Continental Western Group Insurance Company.

To verify the authenticity of this bond please call:  
(973) 775-5021 or Telefax (973) 775-5024

Any written notices, inquiries, claims or demands to the surety on the bond to which this Rider is attached should be directed to:

**Berkley Surety Group, LLC**  
412 Mt. Kemble Ave.  
Suite 310N  
Morristown, NJ 07960  
Attention: Surety Claims Department

Or

Telefax: (866) 403-2121

Please include with all notices the bond number and the name of the principal on the bond. Where a claim is being asserted please set forth generally the basis of the claim. In the case of a payment or performance bond please identify the project to which the bond pertains.



**BERKLEY SURETY GROUP**



POWER OF ATTORNEY
BERKLEY REGIONAL INSURANCE COMPANY
WILMINGTON, DELAWARE

NOTICE: The warning found elsewhere in this Power of Attorney affects the validity thereof. Please review carefully.

KNOW ALL MEN BY THESE PRESENTS, that BERKLEY REGIONAL INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Delaware, having its principal office in Urbandale, Iowa, has made, constituted and appointed, and does by these presents make, constitute and appoint: Peter T. Henry, Rosanne Callahan, Robert Finnell, Janice R. Fiscina, Jennifer L. Johnston-Ogeka, Deborah L. Severin or Fern Perry of Surre, Goldberg & Henry Associates, Inc. of Plainview, NY its true and lawful Attorney-in-Fact, to sign its name as surety only as delineated below and to execute, seal, acknowledge and deliver any and all bonds and undertakings, with the exception of Financial Guaranty Insurance, providing that no single obligation shall exceed Fifty Million and 00/100 U.S. Dollars (U.S.\$50,000,000.00), to the same extent as if such bonds had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office in their own proper persons.

This Power of Attorney shall be construed and enforced in accordance with, and governed by, the laws of the State of Delaware, without giving effect to the principles of conflicts of laws thereof. This Power of Attorney is granted pursuant to the following resolutions which were duly and validly adopted at a meeting of the Board of Directors of the Company held on August 21, 2000:

"RESOLVED, that the proper officers of the Company are hereby authorized to execute powers of attorney authorizing and qualifying the attorney-in-fact named therein to execute bonds, undertakings, recognizances, or other suretyship obligations on behalf of the Company, and to affix the corporate seal of the Company to powers of attorney executed pursuant hereto; and further

RESOLVED, that such power of attorney limits the acts of those named therein to the bonds, undertakings, recognizances, or other suretyship obligations specifically named therein, and they have no authority to bind the Company except in the manner and to the extent therein stated; and further

RESOLVED, that such power of attorney revokes all previous powers issued on behalf of the attorney-in-fact named; and further

RESOLVED, that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any power of attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligation of the Company; and such signature and seal when so used shall have the same force and effect as though manually affixed. The Company may continue to use for the purposes herein stated the facsimile signature of any person or persons who shall have been such officer or officers of the Company, notwithstanding the fact that they may have ceased to be such at the time when such instruments shall be issued."

IN WITNESS WHEREOF, the Company has caused these presents to be signed and attested by its appropriate officers and its corporate seal hereunto affixed this 16 day of November, 2012.

Attest:

Berkley Regional Insurance Company

(Seal)

By

Ira S. Lederman
Senior Vice President & Secretary

By

Jeffrey M. Hafter
Senior Vice President

WARNING: THIS POWER INVALID IF NOT PRINTED ON BLUE "BERKLEY" SECURITY PAPER.

STATE OF CONNECTICUT )

) ss:

COUNTY OF FAIRFIELD )

Sworn to before me, a Notary Public in the State of Connecticut, this 16 day of November, 2012, by Jeffrey M. Hafter and Ira S. Lederman who are sworn to me to be the Senior Vice President, and the Senior Vice President and Secretary, respectively, of Berkley Regional Insurance Company.

EILEEN KILLEEN
NOTARY PUBLIC, STATE OF CONNECTICUT
MY COMMISSION EXPIRES JUNE 30, 2017

Eileen Killeen
Notary Public, State of Connecticut

CERTIFICATE

I, the undersigned, Assistant Secretary of BERKLEY REGIONAL INSURANCE COMPANY, DO HEREBY CERTIFY that the foregoing is a true, correct and complete copy of the original Power of Attorney; that said Power of Attorney has not been revoked or rescinded and that the authority of the Attorney-in-Fact set forth therein, who executed the bond or undertaking to which this Power of Attorney is attached, is in full force and effect as of this date.

Given under my hand and seal of the Company, this JUL 11 2013 day of

(Seal)

Andrew M. Tuma

WARNING - Any unauthorized reproduction or alteration of this document is prohibited. This power of attorney is void unless seals are readable and the certification seal at the bottom is embossed. The background imprinting and confirmation (on reverse) must be in blue ink.

## **Instructions for Inquiries and Notices Under the Bond Attached to This Power**

**Berkley Surety Group, LLC is the affiliated underwriting manager for the surety business of: Acadia Insurance Company, Berkley Insurance Company, Berkley Regional Insurance Company, Carolina Casualty Insurance Company, Union Standard Insurance Company, Continental Western Insurance Company, and Union Insurance Company.**

**To verify the authenticity of the bond, please call (866) 768-3534 or email [BSGInquiry@berkleysurety.com](mailto:BSGInquiry@berkleysurety.com)**

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**Any written notices, inquiries, claims or demands to the surety on the bond to which this Rider is attached should be directed to:**

**Berkley Surety Group, LLC  
412 Mount Kemble Avenue  
Suite 310N  
Morristown, NJ 07960  
Attention: Surety Claims Department**

**Or**

**email [BSGClaim@berkleysurety.com](mailto:BSGClaim@berkleysurety.com)**

**Please include with all notices the bond number and the name of the principal on the bond. Where a claim is being asserted, please set forth generally the basis of the claim. In the case of a payment or performance bond, please identify the project to which the bond pertains.**

# BERKLEY REGIONAL INSURANCE COMPANY

## STATUTORY BALANCE SHEET

DECEMBER 31, 2012

(AMOUNTS IN THOUSANDS)

### Admitted Assets

Bonds	\$	1,422,891
Common & Preferred Stocks		408,971
Cash & Short Term Investments		120,417
Premiums Receivable		289,243
Other Assets		<u>464,772</u>

Total Admitted Assets \$ 2,706,294

### Liabilities & Surplus

Loss & LAE Reserves	\$	1,385,769
Unearned Premium Reserves		547,414
Other Liabilities		<u>50,299</u>

Total Liabilities \$ 1,983,482

Capital Stock	\$	4,000
Additional Paid In Capital		347,938
Unassigned Surplus		<u>365,376</u>

Total Policyholders' Surplus \$ 717,313

Total Liabilities & Surplus \$ 2,700,795

### Officers:

President: William Robert Berkley, Jr.  
Secretary: Ira Seth Lederman  
Treasurer: Ann Marie Collins  
Sr. Vice President & CFO: Eugene George Ballard  
Sr. Vice President: William Mims Rohde, Jr.  
Vice President: Clement Patrick Patafio

### Directors:

Eugene George Ballard  
William Robert Berkley  
William Robert Berkley, Jr.  
Paul James Hancock  
Robert Carruthers Hewitt  
Ira Seth Lederman  
Clement Patrick Patafio  
William Mims Rohde, Jr.  
James Gerald Shiel

## 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: NSP ENTERPRISES, INC

DDC Project Number: PV467NOG4-R

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	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Residential Building Construction	<input type="checkbox"/>	<input type="checkbox"/>
Nonresidential Building Construction	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Construction, except building	<input type="checkbox"/>	<input type="checkbox"/>
Highway and Street Construction	<input type="checkbox"/>	<input type="checkbox"/>
Heavy Construction, except highways	<input type="checkbox"/>	<input type="checkbox"/>
Plumbing, Heating, HVAC	<input type="checkbox"/>	<input type="checkbox"/>
Painting and Paper Hanging	<input type="checkbox"/>	<input type="checkbox"/>
Electrical Work	<input type="checkbox"/>	<input type="checkbox"/>
Masonry, Stonework and Plastering	<input type="checkbox"/>	<input type="checkbox"/>
Carpentry and Floor Work	<input type="checkbox"/>	<input type="checkbox"/>
Roofing, Siding, and Sheet Metal	<input type="checkbox"/>	<input type="checkbox"/>
Concrete Work	<input type="checkbox"/>	<input type="checkbox"/>
Specialty Trade Contracting	<input type="checkbox"/>	<input type="checkbox"/>
Asbestos Abatement	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>

### 3. Experience Modification Rate:

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

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

YEAR	INTRASTATE RATE	INTERSTATE RATE
<u>2012</u>	<u>0.89</u>	_____
<u>2011</u>	<u>0.87</u>	_____
<u>2010</u>	<u>0.87</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:**

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

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

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

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

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

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

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

YEAR	TOTAL NUMBERS OF HOURS WORKED BY EMPLOYEES	INCIDENT RATE
<u>2012</u>	<u>5,000</u>	<u>0</u>
<u>2011</u>	<u>9,000</u>	<u>0</u>
<u>2010</u>	<u>8,000</u>	<u>0</u>

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

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

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

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

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

NO Accident on previous DDC Project(s).

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

Date: 7/30/2013

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

Title: TREASURER

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PHONE (718) 492-7990

FAX (718) 921-0935



## **N.S.P. ENTERPRISES, INC.**

**247 - 52<sup>ND</sup> STREET**

**Brooklyn, NY 11220**

Please find below a list of references for completed city contracts in which NSP Enterprises, Inc. was the Prime contractor.

- A. Department of Design and Construction, EC #73 / L #42, \$ 1,923,332.00. Renovation and Rehabilitation of Engine Company No. 73 – NYC Fire Commissioners Fire House. Complete interior and exterior renovation. Contact: Samir Shah (718) 391-1430, DDC. Start 10/00. Completed 9/01.
- B. STV Construction Services, Richmond Hill Group Home, \$1,436,000.00. Extension and renovation of group home. Contact: Palmina Teta-Wheelan (212) 505-4904, STV. Started 9/01. Completed 9/02.
- C. Department of Design and Construction, Louis Armstrong House Museum, Interior and exterior renovation of landmark building. Contact: Gus Kritharis (718) 391-1002, DDC. \$1,138,150.00. Start 5/02. Completed 7/03.
- D. Department of Design and Construction, Various Libraries, Queens, Bronx \$2,000,000.00 Roof Replacement and Asbestos Abatement. Requirements Contract. Contact: Mike Minuto (718) 391-1358, DDC. Start 10/02. Completed 10/04.
- E. Department of Design and Construction, The Library for the Performing Arts at Lincoln Center, \$1,700,000.00 Roof Replacement, railing and steel installation and asbestos abatement. Contact: Mike Minuto (718) 391-1358, DDC. Start 06/04. Completed 12/05.
- F. Department of Citywide Administrative Services, Roof Replacement and Related Repair Work. Requirements Contract, Bronx, Queens \$2,500,000.00. Contact: Mario Ciarletta (212) 669-7168, DCAS. Start date: 7/03. Completed 7/05.
- G. Department of Citywide Administrative Services, Roof Replacement and Related Repair Work. Requirements Contract, Brooklyn, Staten Island \$2,500,000.00. Contact: Mario Ciarletta (212) 669-7168, DCAS. Start date: 8/03. Completed 8/05.
- H. Department of Citywide Administrative Services, Staten Island Borough Hall, Complete Exterior Restoration and Roof Replacement. \$4,125,000.00. Contact: Bruno Romeo (917) 337-6278, DCAS. Start date: 7/02. Completed 2/07.
- I. Department of Design and Construction, 104<sup>th</sup> Police Precinct, Queens. PO79-PRR2 \$930,000.00. Roof and Exterior Renovation. Contact: Kevin Arcsott (718) 391-1513. Start 8/05. Completed 6/06.
- J. Department of Design and Construction, Various Libraries, Brooklyn. \$3,000,000.00. Roof Replacement and Related Work. Requirements Contract. Contact: Sergio Silveira (718) 391-1041. Start 12/04. Completed 12/06.

**“AN EQUAL OPPORTUNITY EMPLOYER”**



- K. Department of Design and Construction, Various Libraries, Queens. \$3,000,000.00 Roof Replacement and Asbestos Abatement. Requirements Contract. Contact: Mike Minuto (718) 391-1358. Start 12/04. Completed 12/06.
- L. New York City Housing Authority, New Maintenance Garage at Queensbridge South Houses, \$1,458,050. Contact: Hitander Patel, NYCHA (212) 306-4203. Start 9/02 Completed 12/07.
- M. New York Police Department, Roof Replacement and Masonry work at 67<sup>th</sup>, 68<sup>th</sup>, 101<sup>st</sup>, 113<sup>th</sup>, and 115<sup>th</sup> Police Precinct. Contract: \$1,775,275.00. Contact: PO Kris DiDonna (347) 386-9248 / Chima Ogbonnaya (917) 517-4449, NYPD Architect. Start 9/06. Completed 12/07.
- N. Department of Design and Construction, Various Libraries, Brooklyn. \$3,000,000.00. Requirements Contract - Roof Replacement and Related Work. Contact: Mike Giltenane (718) 391-1349. Start 12/06. Completed 12/14/08.
- O. Department of Design and Construction, Various Libraries, Queens. \$3,000,000.00. Requirements Contract - Roof Replacement and Related Work. Contact: Patrick Moakley (718) 391-1389. Start 12/06. Completed 12/14/08.
- P. Brooklyn Navy Yard Development Corporation, Roof Rehabilitation, Window Replacement & Exterior Wall Restoration at Building 121. Contract Amount: \$856,000. Contact: Dilip Khale (631)753-3200, Architect. Start 12/08. Completed 12/09.
- Q. Department of Design and Construction, Various Libraries, Brooklyn. \$3,883,000.00. Requirements Contract - Roof Replacement and Related Work. Contact: Mohammad Azam (718) 391-1193. Start 12/06. Completed 12/14/08.
- R. New York Police Department, Structural Repairs of existing floor slabs and installation of new traffic coating with minor masonry wall and sidewalk repairs at Fleet Services Shop #1. Contract: \$1,416,460.00. Contact: Okey Oreadu (718) 476-7519, NYPD Architect. Start 9/09. Completed 03/11.
- S. New York City Housing Authority, Roof replacement and Asbestos Abatement at Frederick Samuels Houses, \$1,244, 000. Contact: Dwight Providence, NYCHA (212) 306-2983. Start 9/09. Completed 04/11.
- T. New York City Housing Authority, Roof replacement and Asbestos Abatement at Rangel Houses Supermarket, Building #1. \$660,000. Contact: Tina Karmanskaya, NYCHA (212) 306-4185. Start 9/09. Completed 02/11.

**PHONE (718) 492-7990**

**FAX (718) 921-0935**



**N.S.P. ENTERPRISES, INC.**

**247 - 52<sup>ND</sup> STREET**

**Brooklyn, NY 11220**

Please find below a list of all current uncompleted contracts:

- A. Department of Design and Construction, Various Libraries, Brooklyn. \$4,664,253.00. Requirements Contract - Roof Replacement and Related Work. Contact: Mike Giltenane (718) 391-1349. Start 12/10. Completed 12/14/12. Two work orders open.
- B. Department of Design and Construction, Douglaston and North Hills Library, Queens. \$534,000.00. Roof Replacement and Related Work. Contact: Mark LaBate (718) 391-1287. Start 08/13. Expected Completion 12/13.
- C. Department of Design and Construction, Delancey Essex Street Garage Modernization, Manhattan. \$4,864,000.00. Contact: Errol Sylva (718) 391-1247. Start 5/13. Expected Completion 11/14.

**PHONE (718) 492-7990**

**FAX (718) 921-0935**



**N.S.P. ENTERPRISES, INC.**

**247 - 52<sup>ND</sup> STREET**

**Brooklyn, NY 11220**

Please find below a list of all pending contracts not yet started:

A. None

PHONE (718) 492-7990

FAX (718) 921-0935



## **N.S.P. ENTERPRISES, INC.**

**247 - 52<sup>ND</sup> STREET**

**Brooklyn, NY 11220**

Monday, August 12, 2013

Ms. Lorraine Holley, Director  
Department of Design & Construction  
Contract Unit, 1<sup>st</sup> Floor  
30-30 Thomson Avenue  
Long Island City, NY 11101

Re: Bid Date: 08/01/13  
Contract Pin Number: 8502013PV0021C  
Project Number: PV467NOG4  
Noguchi Masterplan Phase IC.2 Renovation – Borough of Queens

Dear Ms. Holley,

Please find enclosed requested qualification information for above referenced project.

(A) Project Reference Form – please see attached.

(C) Financial Information – please see financial package

(D) Project Specific Information

1. Our company has been in business since 1984, providing general construction services (new construction, interior and exterior renovations / restorations, roofing, masonry, waterproofing, etc.) to the city of New York.
2. Resumes – please see attached.
3. We own a full line of equipment required to complete this scope of work, including sidewalk bridging and scaffolding, chain link fences and gates, safety traffic barriers, material hoists and handling equipment, waterproofing installation equipment, garbage chutes, power tools for all types of work such as carpentry, demolition, masonry restoration, finished painting including spray application equipment. We also own vehicles required for transporting such equipment to and from job sites, as well as the warehouse in which everything is stored
4. Trades to be subcontracted:
  - Electrical – Epoch Electrical Inc.
  - Plumbing – Varsity Plumbing
  - Masonry – Subcontractor to be determined
  - Landscaping/ Arborist – To be determined

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5. Material Suppliers

ABC Supply / H. Verby Building Materials  
Allied Building Products  
Certified Carting  
LITSCO  
Kings Materials  
Park Ave Building Supply

6. Preliminary bar chart schedule – please see attached.

7. Capable of financing 2x average monthly billings throughout the contract period with cash on hand and /or open line of credit (see financial package).

8. None.

Sincerely,  
NSP Enterprises, Inc.



 Nick Plakoudas  
President

Cc: file, SP/NP

## 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: NSP ENTERPRISES, INC  
Bidder's Address: 247 52ND STREET  
Bidder's Telephone Number: (718) 492-7990  
Bidder's Fax Number: (718) 921-0935  
Date of Bid Opening: AUG 15 2013  
Project ID: PV467N094-R

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

(1) **Submission of Vendex Questionnaires to MOCS:** By signing in the space provided below, the Bidder certifies that as of the date specified below, the Bidder has submitted Vendex Questionnaires to the Mayor's Office of Contract Services, Attn: VENDEX, 253 Broadway, 9<sup>th</sup> 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: SOTIRIOS PLAKOUKAS

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**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: Brooklyn, New York  
30 July, 2013

  
\_\_\_\_\_  
SIGNATURE

SOTIRIOS PLAKOUDAS  
\_\_\_\_\_  
PRINTED NAME

TREASURER  
\_\_\_\_\_  
TITLE

Sworn to before me this  
30th day of July, 2013

SUSAN RAM  
NOTARY PUBLIC, STATE OF NEW YORK  
No. 01RA6220030  
QUALIFIED IN QUEENS COUNTY  
COMMISSION EXPIRES APRIL 5, 2014

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

Dated:



## 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.

# 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, Sotiros Plakoudis, 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: HSP Enterprises Inc.

Vendor's Address: 207 62nd Street, Brooklyn NY 11220

Vendor's EIN or TIN: 11-2698476 Requesting Agency: DPE

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: 5/9/2012

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	Nick Plakoudas	10/26/2011	
2	Sotirios Plakoudas	05/09/2012	
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:

Sotirios Plakoudas  
Name (Print)

Treasurer  
Title

NSP Enterprises Inc.  
Name of Submitting Entity

[Signature] 4/2/14  
Signature Date

SUSAN RAM  
NOTARY PUBLIC, STATE OF NEW YORK  
No. 01RA6220030  
QUALIFIED IN QUEENS COUNTY  
COMMISSION EXPIRES APRIL 5, 2014

[Signature] QUEENS 01RA6220030  
Notary Public County License Issued License Number

Sworn to before me on: APRIL 2ND 2014  
Date

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

7/12/13

**ADDENDUM No. # 1**

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

**PV467NOG4-R**

**Noguchi Masterplan Phase IC.2**

---

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

---

The bidder is advised that the items listed below apply to the project:

**1. Revisions to the Bid Booklet:**

See Attachment A.

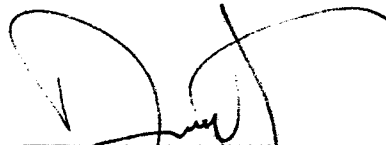
**2. Revisions to Volume 2:**

See Attachment B.

---

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

If additional information is required, please contact the Department of Design and Construction, Contract Section at (718) 391-2200, (718) 391-1727, or by fax at (718) 391-2615.



---

David Resnick, R.A.  
Deputy Commissioner

**NSP ENTERPRISES, INC.**

---

Name of Bidder

By:



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

7/17/13

**ADDENDUM No. # 2**

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

**PV467NOG4-R**

**Noguchi Masterplan Phase IC.2**

---

This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

---

The bidder is advised that the items listed below apply to the project:

**1. Revised Bid Opening Date:**

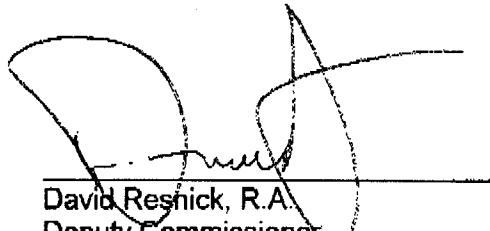
The Bid Opening for the Contract described below scheduled for July 25<sup>th</sup>, 2013, at 2:00pm is rescheduled to August 1<sup>st</sup>, 2013 at 2:00pm.

Contract 1 – General Construction Work.

---

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

If additional information is required, please contact the Department of Design and Construction, Contract Section at (718) 391-2200, (718) 391-1727, or by fax at (718) 391-2615.



David Resnick, R.A.  
Deputy Commissioner

**NSP ENTERPRISES, INC.**

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

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

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. 11-2698476 \_\_\_\_\_  
Employer Identification Number or Federal Tax I.D./ \_\_\_\_\_ Email Address
6. NSP ENTERPRISES, INC. \_\_\_\_\_  
Company Name
7. 247 52ND STREET BROOKLYN NY 11220 \_\_\_\_\_  
Company Address and Zip Code
8. NICK PLAKOUNAS (718) 492-7990 \_\_\_\_\_  
Chief Operating Officer Telephone Number
9. SAME \_\_\_\_\_  
Designated Equal Opportunity Compliance Officer Telephone Number  
(If same as Item #7, write "same")
10. SAME \_\_\_\_\_  
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) DDC  
Contracting Agency (City Agency)
- (b) 1,633,000  
Contract Amount
- (d) PV467NOG4-R  
Procurement Identification Number (PIN)
- (e) 8502013PV0021C  
Contract Registration Number (CT#)
- (f) TBD  
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 *yes*
- \_\_\_ (d) Personnel Policy/Manual *not at this time*
- \_\_\_ (e) Supervisor's Policy/Manual *not at this time*
- \_\_\_ (f) Pension plan or 401k coverage/description for all management, nonunion and union employees, whether company or union administered *not at this time*
- \_\_\_ (g) Collective bargaining agreement(s).
- \_\_\_ (h) Employment Application(s) *n/a*
- \_\_\_ (i) Employee evaluation policy/form(s). *not at this time*
- \_\_\_ (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 <input checked="" type="checkbox"/> 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 <input type="checkbox"/> | No <input type="checkbox"/> |
| (b) After a conditional job offer | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (c) After a job offer             | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (d) To all applicants             | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (e) Only to some applicants       | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

If yes, list for which applicants below and attach copies of all medical examination or questionnaire forms and instructions utilized for these examinations.

\_\_\_\_\_

\_\_\_\_\_

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.

*See attached*

\_\_\_\_\_

\_\_\_\_\_

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).

---

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SIGNATURE PAGE

I, (print name of authorized official signing) SOTIRIOS PLAKOUDAS 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.

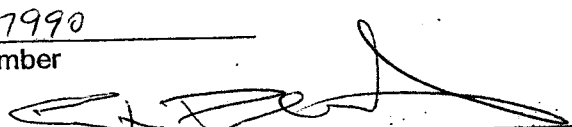
I also agree on behalf of the company to submit a certified copy of payroll records to the Division of Labor Services on a monthly basis.

NSP ENTERPRISES, INC  
Contractor's Name

STEVE PLAKOUDAS TREASURER  
Name of person who prepared this Employment Report Title

SOTIRIOS PLAKOUDAS TREASURER  
Name of official authorized to sign on behalf of the contractor Title

(718) 492-7990  
Telephone Number

 7/30/2013  
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.

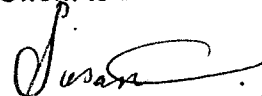
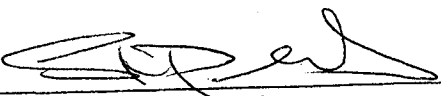
Willful or fraudulent falsifications of any data or information submitted herewith may result in the termination of the contract between the City and the bidder or contractor and in disapproval of future contracts for a period of up to five years. Further, such falsification may result in civil and/or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

SUSAN RAM  
NOTARY PUBLIC, STATE OF NEW YORK  
No. 01RA6220030  
QUALIFIED IN QUEENS COUNTY  
COMMISSION EXPIRES APRIL 5, 2014

Only original signatures accepted.

Sworn to before me this 30TH day of JULY 2013

  7/30/2013  
Notary Public Authorized Signature Date

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**BID BOOKLET  
PART A**

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**PROJECT ID: PV467NOG4-R**

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

**BID BOOKLET**

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

**SPECIAL NOTICE TO BIDDERS**

**BID SUBMISSION REQUIREMENTS**

**THE BID SHALL CONSIST OF TWO (2) SEPARATE, SEALED ENVELOPES. THE DOCUMENTS THAT MUST BE COMPLETED AND INCLUDED IN EACH SEPARATE ENVELOPE ARE LISTED BELOW.**

**BID ENVELOPE #1:** Bid Envelope #1 shall contain the following items:

- Bid Form, including Affirmation
- Bid Security (if required, see page 24)
- MWBE Subcontractor Utilization Plan (if participation goals have been established)

**BID ENVELOPE #2:** Bid Envelope #2 shall contain **ONLY** the following item:

- Bidder's Identification of Subcontractors (see pages 18 & 19)

**FAILURE TO SUBMIT THE FOUR ITEMS LISTED ABOVE WILL RESULT IN THE DISQUALIFICATION OF THE BID**

**BID ENVELOPE #1:** In addition to the items listed above, Bid Envelope #1 shall also contain the following items: **DO NOT** Include the items listed below in Bid Envelope #2.

- Bid Breakdown (if required, see page 23)
- Safety Questionnaire
- Construction Employment Report (if bid is \$1,000,000 or more)
- Contract Certificate (if bid is less than \$1,000,000)
- Confirmation of Vendex Compliance
- Special Experience Requirements Qualification Form (if required, see pages 3, 4)
- Apprenticeship Program Requirements (if applicable)

**FAILURE TO SUBMIT THE SEVEN ITEMS LISTED ABOVE 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 DDC at 718-391-2601.
  - (3) **VENDEX QUESTIONNAIRES:** Vendex Questionnaires, as well as detailed instructions, may be obtained at [www.nyc.gov/vendex](http://www.nyc.gov/vendex). The bidder may also obtain Vendex forms and instructions by contacting the Agency Chief Contracting Officer or the contact person for this contract.
  - (4) **SPECIAL EXPERIENCE REQUIREMENTS:** The Bidder is advised that Special Experience Requirements may apply to this contract. Such requirements are set forth on pages 3 and 4 of this Bid Booklet.
  - (5) **SPECIAL EXPERIENCE REQUIREMENTS FOR ASBESTOS:** The Bidder is advised that this contract contains strict requirements regarding the prior experience and licensing of the subcontractor who will perform any required asbestos abatement work. These special experience requirements are set forth in the section of the specifications which describes any required asbestos abatement work.

## SPECIAL EXPERIENCE REQUIREMENTS

Bidders are advised that the special experience requirements set forth below apply to the General Construction Contractor if a check mark is indicated before the word "Yes". Compliance with these special experience requirements will be determined solely by the City. Failure to meet these special experience requirements will result in the rejection of the bid as non-responsive.

General Construction Contractor                      X      YES                              NO

- (A) **EXPERIENCE REQUIREMENTS FOR THE BIDDER (PRIME CONTRACTOR):** The special experience requirements set forth below apply to the bidder. Compliance with such special experience requirements will be evaluated at the time of the bid.
- 1) The bidder must, with the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work.
- (B) **QUALIFICATION FORM:** For each project submitted to meet the experience requirements set forth above, the bidder must complete and submit with its bid the Qualification Form set forth in this Bid Booklet. All information on the Qualification Form must be provided.
- (C) **CONDITIONS:** The City may, in determining compliance with the special experience requirements set forth above, 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 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.
- (D) **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.
- (E) **COMPLIANCE:** Compliance with the experience requirements set forth herein will be determined solely by the City. The bidder is advised that failure to meet the above described experience will result in the rejection of the bid as non-responsive.

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**Qualification Form**

Project ID: PV467NOG4-R

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 work completed: \_\_\_\_\_

\_\_\_\_\_

Was the work performed as a prime or a subcontractor: \_\_\_\_\_

Amount of Contract: \_\_\_\_\_

Date of Completion: \_\_\_\_\_

\*\*\*\*\*

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 work completed: \_\_\_\_\_

\_\_\_\_\_

Was the work performed as a prime or a subcontractor: \_\_\_\_\_

Amount of Contract: \_\_\_\_\_

Date of Completion: \_\_\_\_\_

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## MWBE PROGRAM

### SUBCONTRACTOR UTILIZATION PLAN

**Schedule B: Subcontractor Utilization Plan:** Schedule B: Subcontractor Utilization Plan for this Contract is set forth on the following pages of this Bid Booklet. Schedule B: 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 Schedule B: Subcontractor Utilization Plan (Part II) with its bid.

**Contract Provisions:** Contract provisions regarding the participation of the 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 Schedule B: Subcontractor Utilization Plan (Part III).

**Rejection of the Bid:** The bidder must complete Schedule B: Subcontractor Utilization Plan (Part II) set forth on the following pages. Subcontractor Utilization Plans which do not include the required affirmations (on Page 7) will be deemed to be non-responsive, unless a full waiver of the Target Subcontracting Percentage is granted (Schedule B: Subcontractor Utilization Plan, Part III). In the event that the City determines that the bidder has submitted a Schedule B: 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/WBE's, 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.

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Tax ID #: \_\_\_\_\_

PIN#: 8502013PV0021C



Contract # 1 - General Construction Work

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 # 8502013PV0021C FMS Project ID#: PV467NOG4-R

Project Title Noguchi Masterplan Phase IC.2

Contracting Agency Department of Design and Construction

Agency Address 30-30 Thomson Avenue City Long Island City State NY Zip Code 11101

Contact Person Norma Negron Title MWBE Liaison & Compliance Analyst

Telephone # (718) 391-1502 Email NegronN@ddc.nyc.gov

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

This Project consists of the selective renovation of the Noguchi Museum Sculpture Garden to rebuild the perimeter garden fence, introduce outdoor exhibit lighting and irrigation systems.

**(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.

20 %

**Subcontractor Participation Goals\***

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

Group	Construction	Professional Services
Black American	Unspecified %	%
Hispanic American	Unspecified %	%
Asian American	Unspecified %	No Goal
Caucasian Female	No Goal	%
<b>Total Participation Goals</b>	<b>(2) 30 %</b>	<b>(3) %</b>

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.



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Tax ID #: \_\_\_\_\_

PIN#: \_\_\_\_\_

### 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 1); 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 # \_\_\_\_\_ Email \_\_\_\_\_

#### 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.
- **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):

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

- Construction     Professional Services     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:	Subcontracts under \$1M (4) (construction/professional services)	Total Bid/Proposal Value	Calculated Target Subcontracting Percentage
Calculate the percentage (of your total bid) that will go towards subcontracts under \$1M for construction and/or professional services	\$ _____	\$ _____	_____ %
		÷	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 1, 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).**

Tax ID #: \_\_\_\_\_

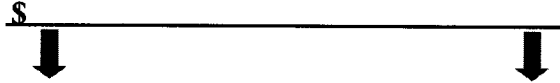
PIN#: \_\_\_\_\_

**SCHEDULE B - cont.**

**Step 2:**  
Calculate value of subcontractor participation goals

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

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



b. \* From line a. above, allocate the dollar value of "Subcontracts under \$1M" by Construction and Professional Services,

**Construction**

**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** \$ \_\_\_\_\_

\$ \_\_\_\_\_

\* 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 \_\_\_\_\_ %

x \_\_\_\_\_ %

d. **Value of Total Participation Goals** \$ \_\_\_\_\_

\$ \_\_\_\_\_

**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 meet the modified Target Subcontracting Percentage, if any, and the Vendor intends 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 \_\_\_\_\_

Tax ID #: \_\_\_\_\_

PIN#: \_\_\_\_\_

### 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

Professional Services

Construction

Professional Services

Other

**SUBCONTRACTING as described in bid/solicitation documents (Copy this % figure from Subcontractor Utilization Plan, Part I, line**

\_\_\_\_\_ % 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 CONTACTING OFFICER APPROVAL

Signature: \_\_\_\_\_

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

#### CITY CHIEF PROCUREMENT OFFICER APPROVAL

Signature: \_\_\_\_\_

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

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## 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.

General Construction

\_\_\_\_\_  
YES

  X    
NO

NO

\* Note: Even if Yes is marked, the Exemption set forth below may apply.

### 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 journeymen 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, unless it qualifies for the exemption set forth below. The Questionnaire is set forth on the following page of the Bid Booklet.

### 3) Exemption

Bidders for the General Construction Contract are advised that the exemption set forth below applies if an "X" is indicated before the word "Yes".

\_\_\_\_\_  
YES

\_\_\_\_\_  
NO

**Exemption:** If the bidder intends to subcontract 100% of the construction work, it is not required to demonstrate that it has an Apprenticeship Agreement(s), nor is it required to submit an Apprenticeship Program Questionnaire. If the bidder qualifies for this exemption, it shall submit a letter stating that it intends to subcontract 100% of the construction work. As indicated above, the Apprenticeship Program Requirements apply to subcontracts worth one million dollars or more.

**APPRENTICESHIP PROGRAM QUESTIONNAIRE**

**PROJECT ID: PV467NOG4-R**

The bidder must submit a completed and signed Apprenticeship Program Questionnaire unless it qualifies for the exemption set forth on the previous page.

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

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

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

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

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

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

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

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

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

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

By: \_\_\_\_\_  
(Signature of Partner or Corporate Officer)

Title: \_\_\_\_\_

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

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

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

**PROJECT ID: PV467NOG4-R**

**Noguchi Masterplan Phase IC.2  
32-37 Vernon Blvd  
Long Island City, 11101**

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: \_\_\_\_\_ Bidder's Fax Number: \_\_\_\_\_

Bidder's Email 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: \_\_\_\_\_



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## 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 17 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 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:

## Alternate Bids

Bidder is advised that the City is requesting the submission of three (3) alternate bids for **Contract #1 – General Construction Work** (Bid Alternate #1, Bid Alternate #2, and Bid Alternate #3). Each of these Bid Alternates addresses a different specific Scope of Work, as described below. Bid prices for these three (3) different Scopes of Work for General Construction Work shall be submitted on BID FORM - Bid Alternate 1, BID FORM - Bid Alternate 2, and BID FORM - Bid Alternate 3, in this Bid Booklet.

**BID ALTERNATE #1:** Requires a Total Lump Sum Price for all labor and material necessary to perform all required work described in the Contract Documents, **excluding** the scope of work for Bid Alternate #2 and Bid Alternate #3, as described below. Bid Alternate #1 is the Project Base Bid.

**BID ALTERNATE #2:** Requires a Total Lump Sum Price for the following: (1) all required work for Bid Alternate #1 (Project Base Bid), **plus** (2) all required work for the scope of Alternate #2 work. The scope of work for Alternate #2 is to provide Landscape site work, plants, and irrigation system as described in the following Contract Documents: A005.00, A006.00, A007.00, A008.00, A009.00, A101.00, A401.00, A802.00 and Specification Sections 311000, 312000, 315000, 321316, 321373, 328400, 329300, and 329600.

**BID ALTERNATE #3:** Requires a Total Lump Sum Price for the following: (1) all required work for Bid Alternate Bid #1 (Project Base Bid), **plus** (2) all required work for the scope of Alternate #2 work, **plus** (3) all required work for the scope of Alternate #3 work. The scope of work for Alternate #3 is to provide electrical floodlights, bench, and wood screen as described in the following Contract Documents: A010.00, A101.00, A201.00, A402.00, A801.00, A802.00, A805.00, E201.00 and Specification Sections 064013 and 265600.

Bidders are requested to submit prices on the Bid Forms for alternate Bids described above. Following the receipt of Bids, the Department of Design and Construction will determine, in the best interest of the City, whether to award a contract based upon the Total Bid Price for **Bid Alternate #1, Bid Alternate #2, or Bid Alternate #3.**

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**BID FORM - BID ALTERNATE 1**

**PROJECT ID: PV467NOG4-R**

**TOTAL BID PRICE:** In the space provided below, the Bidder shall indicate the total bid price in figures.

A. **LUMP SUM PRICE** - Total price for all labor and material for all required work, excluding items (B) set forth below. Total Price shall include all costs and expenses, i.e. labor, material overhead and profit for all the Work, described and shown in the drawings and specifications.

Total Price For Labor	Total Price for Material Sold and		
\$ _____	\$ _____	Total Price for Item A	\$ _____

B. ALLOWANCE for Incidental Asbestos Abatement (Section 028013 of the Specifications)	<u>\$15,000.00</u>
--	--------------------

TOTAL BID PRICE (Add A + B) ( a/k/a BID PROPOSAL)	\$ _____
--	----------

**BIDDER'S SIGNATURE AND AFFIDAVIT**

**WARNING!! Failure to comply with items below will result in the rejection of your bid.**

\* **SUBCONTRACTORS:** You MUST complete and submit the form entitled "Bidder's Identification of Subcontractors" (See Page 19) at the time you submit your bid. You must submit this form in a separate, sealed envelope (BID ENVELOPE #2). In the event an award of contract is not made to the Bidder, the Bidder hereby authorizes the Agency to shred the form entitled "Bidder's Identification of Subcontractors". \_\_\_\_\_ Yes  
\_\_\_\_\_ No

\* **MWBE GOALS:** You MUST complete and submit the Affirmations contained in the Subcontractor Utilization Plan (See Page 7), or a pre-approved waiver (See Page 9), at the time you submit your bid. You must submit the Affirmations (or a pre-approved waiver) in BID ENVELOPE #1.

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

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**BID FORM - BID ALTERNATE 2**

**PROJECT ID: PV467NOG4-R**

**TOTAL BID PRICE:** In the space provided below, the Bidder shall indicate the total bid price in figures.

A. **LUMP SUM PRICE** - Total price for all labor and material for all required work, excluding items (B) set forth below. Total Price shall include all costs and expenses, i.e. labor, material overhead and profit for all the Work, described and shown in the drawings and specifications.

Total Price For Labor	Total Price for Material Sold and		
\$ _____	\$ _____	Total Price for Item A	\$ _____

B. **ALLOWANCE for Incidental Asbestos Abatement** \$15,000.00  
(Section 028013 of the Specifications)

TOTAL BID PRICE (Add A + B) \$ \_\_\_\_\_  
( a/k/a BID PROPOSAL)

**BIDDER'S SIGNATURE AND AFFIDAVIT**

**WARNING!! Failure to comply with items below will result in the rejection of your bid.**

\* **SUBCONTRACTORS:** You MUST complete and submit the form entitled "Bidder's Identification of Subcontractors" (See Page 19) at the time you submit your bid. You must submit this form in a separate, sealed envelope (BID ENVELOPE #2). In the event an award of contract is not made to the Bidder, the Bidder hereby authorizes the Agency to shred the form entitled "Bidder's Identification of Subcontractors".  Yes  
 No

\* **MWBE GOALS:** You MUST complete and submit the Affirmations contained in the Subcontractor Utilization Plan (See Page 7), or a pre-approved waiver (See Page 9), at the time you submit your bid. You must submit the Affirmations (or a pre-approved waiver) in BID ENVELOPE #1.

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

By: \_\_\_\_\_  
(Signature of Partner or corporate officer)

Attest: \_\_\_\_\_ Secretary of Corporate Bidder  
(Corporate Seal)

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



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**BID FORM - BID ALTERNATE 3**

**PROJECT ID: PV467NOG4-R**

**TOTAL BID PRICE:** In the space provided below, the Bidder shall indicate the total bid price in figures.

A. **LUMP SUM PRICE** - Total price for all labor and material for all required work, excluding items (B) set forth below. Total Price shall include all costs and expenses, i.e. labor, material overhead and profit for all the Work, described and shown in the drawings and specifications.

Total Price For Labor	Total Price for Material Sold and		
\$ _____	\$ _____	Total Price for Item A	\$ _____

B. **ALLOWANCE for Incidental Asbestos Abatement** \$15,000.00  
(Section 028013 of the Specifications)

TOTAL BID PRICE (Add A + B) \$ \_\_\_\_\_  
( a/k/a BID PROPOSAL)

**BIDDER'S SIGNATURE AND AFFIDAVIT**

**WARNING!! Failure to comply with items below will result in the rejection of your bid.**

\* **SUBCONTRACTORS:** You MUST complete and submit the form entitled "Bidder's Identification of Subcontractors" (See Page 19) at the time you submit your bid. You must submit this form in a separate, sealed envelope (BID ENVELOPE #2). In the event an award of contract is not made to the Bidder, the Bidder hereby authorizes the Agency to shred the form entitled "Bidder's Identification of Subcontractors". \_\_\_\_\_ Yes  
\_\_\_\_\_ No

\* **MWBE GOALS:** You MUST complete and submit the Affirmations contained in the Subcontractor Utilization Plan (See Page 7), or a pre-approved waiver (See Page 9), at the time you submit your bid. You must submit the Affirmations (or a pre-approved waiver) in BID ENVELOPE #1.

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

By: \_\_\_\_\_  
(Signature of Partner or corporate officer)

Attest: \_\_\_\_\_ Secretary of Corporate Bidder  
(Corporate Seal)

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

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**BID FORM (TO BE NOTARIZED)**

\*\*\*\*\*

**AFFIDAVIT WHERE BIDDERS 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 BIDDERS 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 BIDDERS IS A CORPORATION**

STATE OF NEW YORK, COUNTY OF \_\_\_\_\_ ss:

\_\_\_\_\_ being duly sworn says:

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

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

\_\_\_\_\_  
(Signature of Corporate Officer who signed the Bid)

Subscribed and sworn to before me this  
\_\_\_\_\_ day of \_\_\_\_\_,

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

## 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.

## **BIDDER'S IDENTIFICATION OF SUBCONTRACTORS**

### **NOTICE TO BIDDERS**

**SUBMISSION:** The Bidder must, at the time of the bid, submit the form on the next page ("BIDDER'S IDENTIFICATION OF SUBCONTRACTORS"). This form must be submitted in a separate, sealed envelope (BID ENVELOPE #2). Failure to do so will result in the disqualification of the bid as non-responsive.

\*\*\*\*\*

Please be advised that pursuant to GML § 101(5) the Bidder is required to submit with its bid the names of subcontractors it intends to use to perform the following work on this contract, as well as the agreed-upon amount to be paid to each:

- plumbing and gas fitting;
- steam heating, hot water heating, ventilating and air conditioning apparatus; and
- electric wiring and standard illuminating fixtures.

**NOTE:** This project may not involve all of the above listed subcontractors. Please see the form on the next page which indicates the subcontractors required for this Project.

The list of subcontractors is to be submitted in a separate sealed envelope by completing the form on the next page entitled "Bidder's Identification of Subcontractors". This form provides for the identification of any subcontractors intended to be used in any of the three trades listed above. If bidder intends to use its own forces for any of the above listed work, bidder should so indicate on the form.

**Failure to submit the completed form on the next page ("Bidder's Identification of Subcontractors") that includes the names of subcontractors and the agreed upon amounts to be paid to such subcontractors will render the bid non-responsive.**

**PLEASE NOTE:** for any contract that is subject to M/WBE participation goals under Local Law 129, if the bidder's intention to use its own forces to do any of the above-referenced work would result in Bidder's failure to attain the Target Subcontracting Percentage identified in the Subcontractor Utilization Plan, the bid will be non-responsive unless the bidder requests and obtains a Waiver of Target Subcontracting Percentage (Subcontractor Utilization Plan, Part III) in advance of bid submission.

After the low bid is announced, the sealed list submitted by the low bidder will be opened and the names of the subcontractors will be announced. The sealed lists of subcontractors submitted by all other bidders shall be maintained by the Agency unopened unless such bidder shall become the low bidder (e.g., the initial low bidder is found non-responsive). All unopened lists of subcontractors shall be returned to the bidders unopened after contract award, unless the bidder has given the agency permission to

After bid submission, any change of subcontractor or agreed-upon amount to be paid to each shall require approval of the Agency upon a showing of a legitimate construction need which shall include, but not be limited to, a change in project specifications, a change in project material costs, a change to subcontractor status as determined pursuant to §222 (2)(e) of the Labor Law, or if the subcontractor has become otherwise unwilling, unable or unavailable to perform the subcontract.

Please note that the Agency will not award this contract for an amount greater than \$3 million.

**BIDDER'S IDENTIFICATION OF SUBCONTRACTORS**

**Project ID: PV467NOG4-R**

**SUBMISSION:** In addition to its Bid (Bid Envelope # 1), the Bidder must, at the time of the bid, complete and submit this form in a separate, sealed envelope (Bid Envelope # 2). To complete this form, the Bidder must identify the subcontractors it intends to use for the work listed below, as well as the dollar amount to be paid to each subcontractor. Failure to complete this form and submit it in a separate, sealed envelope will result in the disqualification of the bid as non-responsive.

The Bidder intends to use the following subcontractors. If the Bidder intends to do any of the work referenced below with its own forces, the Bidder should complete this form using its own name. If multiple subcontractors for any trade are proposed, Bidder may submit multiple copies of this form.

**1. PLUMBING AND GAS FITTING CONTRACTOR:**

\_\_\_\_\_  
(Print Name)

Agreed Amount To Be Paid To Subcontractor: \$ \_\_\_\_\_

**2. HVAC CONTRACTOR:**

\_\_\_\_\_  
(Print Name)

Agreed Amount To Be Paid To Subcontractor: \$ \_\_\_\_\_

**3. ELECTRICAL CONTRACTOR:**

\_\_\_\_\_  
(Print Name)

Agreed Amount To Be Paid To Subcontractor: \$ \_\_\_\_\_

**BIDDER'S SIGNATURE:** The Bidder must sign this form in the space provided below:

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

By: \_\_\_\_\_  
Signature of Partner or Corporate Officer

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

Title: \_\_\_\_\_

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 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

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

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

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

ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP

State of \_\_\_\_\_ 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

ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

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

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

AFFIX ACKNOWLEDGEMENTS AND JUSTIFICATION OF SURETIES

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## BID BREAKDOWN

**Submission:** Bidders are advised that the requirement to submit a Bid Breakdown applies to each contract for which an "X" is indicated before the word "Yes". If required, the bidder must submit, with its bid, a completed Bid Breakdown. Failure to provide a completed Bid Breakdown may result in rejection of the bid as non-responsive.

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

### Limitations on Use of Bid Breakdown:

Bidders are advised that the Bid Breakdown shall be used for bid analysis purposes only and shall not be binding for any other purposes under the Contract, including, without limitation, for payment purposes or in connection with a contractor claim for extra work. If the form for the Bid Breakdown does not include an item of work required by the Contract Documents, such omission shall have no effect whatsoever, nor shall it be used by the contractor in connection with a claim for extra work (i.e., work for which the contractor is entitled to a change order).

### Instructions for Preparing Bid Breakdown:

- (A) The Bid Breakdown is set forth on the following pages of this Bid Booklet and is in accordance with the Construction Specification Institute (CSI) format. For all items of work listed in the Bid Breakdown, the bidder must indicate the price for labor and the price for material, as well as the estimated quantities required.
- (B) In preparing its Bid Breakdown, the bidder shall submit prices that include all costs for overhead and profit. Overhead shall include, without limitation, all costs in connection with the following: administration, management, superintendence, small tools, insurance, bonds, and provision of services or items required by the General Conditions [except for Security/Fire Guard Services and Temporary Heat]. If the Project requires Security/Fire Guard Services and/or Temporary Heat, such service(s) will be included as separate line items in the Bid Breakdown.
- (C) If an item is set forth in the Bid Breakdown, but is not included in the Contract Documents (Drawings, Specifications, General Conditions, and/or Addenda), the bidder is advised to leave the item blank and exclude the cost of the item from its grand total. In an attachment to its Bid Breakdown, the bidder shall provide a list of all items left blank.
- (D) If an item is not set forth in the Bid Breakdown, but is included in the Contract Documents (Drawings, Specifications, General Conditions, and/or Addenda), the bidder is advised to add the item to its Bid Breakdown and include the cost of the item in its grand total. In an attachment to its Bid Breakdown, the bidder shall provide a list of all items added.

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NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION

Project: Noguchi Masterplan Phase IC.2  
Location: 32-37 Vernon Boulevard, Long Island City, NY 11106  
Bidder:

DDC ID: PV467NOG4-R  
Sponsor Agency: Dept of Cultural Affairs

CONTRACTOR'S BID BREAKDOWN FORM

CONTRACT 1 - GENERAL CONSTRUCTION

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
<b>CONTRACT 1 - GENERAL CONSTRUCTION WORK</b>								
<b>BID ALTERNATE #1 (BASE BID)</b>								
<b>DIVISION 1 - GENERAL REQUIREMENTS</b>								
	MOBILIZATION		LS					
	Subtotal							
<b>TEMPORARY FACILITIES &amp; CONTROLS</b>								
015000	12' High Chain Link Fence for Garden Protection		LF					
	8' High Temporary Chain Link Fence at Street Side		LF					
	Temporary Secure Gates		PR					
	Subtotal							
<b>TEMPORARY TREE &amp; PLANT PROTECTION</b>								
015639	Protect Sidewalk Trees		EA					
	Plant Protection Zone Fence		LF					
	Full Time Arborist		Days					
	Subtotal							
<b>TEMPORARY SCULPTURE PROTECTION &amp; REMOVALS</b>								
015700	Crate, Load, Remove, Store & Replace at completion of sitework		PCS					
	Protect Concrete Walkway		SF					
	Remove Wooden Hose Bib Enclosure		LS					
	Protect PVC Pipe Below Concrete Walkway		LS					
	Protect Extg Gate		LS					
	Remove & Salvage Bike Racks		EA					
	Protect Tel Pole		LS					
	Rem Masonry & Prep to Install Access Panels		LOC					
	Subtotal							

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CONTRACTOR'S BID BREAKDOWN FORM

CONTRACT 1 - GENERAL CONSTRUCTION

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
017300	<b>EXECUTION</b>							
	Interior Painting		SF					
	Exterior Painting & Touch Up at Metal Gates		LOC					
	Patch & Repair Sheetrock Disturbed for installation of Conduit &/or Water Supply Pipe		SF					
	Construction Layout		Hrs					
	Field Engineering & Surveying		HRS					
	Coordination of the City of New York installed products		HRS					
	Progress Cleanings		EA					
	Starting & Adjusting		LS					
	Protection of Installed Construction		SF					
	Correction of the Work		LS					
	<b>Subtotal</b>							
	<b>DIVISION 2 - EXISTING CONDITIONS</b>							
024119	<b>SELECTIVE DEMOLITION</b>							
	Remove Trap Rock at New Wall Excavation Zone, Bag & Salvage		CF					
	Remove Ivy From CMU wall		SF					
	Remove & Dispose of Fence From Top of Wall		LF					
	Remove CMU Wall		SF					
	Remove Reinforced Foundation Wall		SF					
	Remove Reinforced Concrete Footing		SF					
	Remove & Stockpile Brick Edging		LF					
	Sawcut Sidewalk		LF					
	Demo & Dispose of Extg Sidewalk		SF					
	Demo & Dispose of Area Way CMU Wall		SF					
	Demo & Dispose of Areaway Footing		LF					
	<b>Subtotal</b>							



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CONTRACTOR'S BID BREAKDOWN FORM  
CONTRACT 1 - GENERAL CONSTRUCTION

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
	<b>DIVISION 3 - CONCRETE</b>							
033000	<b>CAST-IN-PLACE CONCRETE</b>							
	Footings for Masonry Wall							
	Concrete		CY					
	Forms		SF					
	Rebar		LBS					
	Foundation Wall for Masonry Wall							
	Concrete		CY					
	Forms		SF					
	Rebar		LBS					
	Footings for Retaining Wall							
	Concrete		CY					
	Forms		SF					
	Rebar		LBS					
	Retaining Wall							
	Concrete		CY					
	Forms		SF					
	Rebar		LBS					
	Areaway Slab on Grade		SF					
	Restore Concrete Curb at Ramp		LF					
	Sculpture Footings		EA					
	<b>Subtotal</b>							
	<b>DIVISION 4 - MASONRY</b>							
040120	<b>MAINTENANCE OF UNIT MASONRY</b>							
	Rework/Restore Brick Masonry at New Wall Connection to Extg		LF					
	<b>Subtotal</b>							
042200	<b>CONCRETE UNIT MASONRY</b>							
	12" CMU Wall		SF					
	4" CMU Wall		SF					

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CONTRACT 1 - GENERAL CONSTRUCTION  
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CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
	8" CMU Wall		SF					
	Decorative Stone Treatment - Bluestone Cap on CMU Wall		LF					
	Flexible Flashing at Wall Penetrations		EA					
	Expansion Control - At Walls		LF					
	<b>Subtotal</b>							
	<b>DIVISION 5 - METALS</b>							
055000	<b>METAL FABRICATIONS</b>							
	Provide New Steel Tube to Match Extg at Extg Gates		LF					
	Access Panels at Areaway		EA					
	Galvd Metal Supports for Metal Fence at Expansion Joints		EA					
	Clean Rust From & Paint Extg Ramp & Stair Rails		LF					
	Misc 3/8" Bent Plate Steel Shelf		LF					
	<b>Subtotal</b>							
	<b>DIVISION 7 - THERMAL AND MOISTURE PROTECTION</b>							
071900	<b>ELASTOMERIC SHEET WATERPROOFING</b>							
	Elastomeric Sheet Waterproofing		SF					
	Sealant & Backer Rod		LF					
	<b>Subtotal</b>							
071990	<b>WATER REPELLENTS</b>							
	Water Repellants at CMU Wall		SF					
	<b>Subtotal</b>							
078446	<b>FIRE RESISTIVE JOINT SYSTEMS</b>							
	Fire Resistive Joint Sealants at Fire Wall Penetrations		LOC					
	<b>Subtotal</b>							

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CONTRACTORS BID BREAKDOWN FORM

CONTRACT 1 - GENERAL CONSTRUCTION

DDC ID: PV467NOG4-R  
Sponsor Agency: Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
079200	<b>JOINT SEALANTS</b>							
	Joint Sealers at Sidewalks		LF					
	Joint Sealers at Walls		LF					
	<b>Subtotal</b>							
	<b>DIVISION 22 - PLUMBING</b>							
220514	<b>COMMON WORK RESULTS FOR PLUMBING</b>							
	Floor Sleeves		EA					
	Temp Heat		LS					
	<b>Subtotal</b>							
220523	<b>GENERAL DUTY VALVES FOR PLUMBING PIPING</b>							
	1" RPZ Valve		EA					
	125# Cast Iron Gate Valves		EA					
	<b>Subtotal</b>							
220529	<b>HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT</b>							
	Hangers & Supports		EA					
	<b>Subtotal</b>							
220553	<b>IDENTIFICATION AND PAINTING FOR PLUMBING PIPING AND EQUIPMENT</b>							
	Identification & Painting for Plumbing Piping & Equipment		LS					
	<b>Subtotal</b>							
220577	<b>PLUMBING SYSTEM TESTS</b>							
	Plumbing System Tests		LS					
	<b>Subtotal</b>							

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CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
220700	PLUMBING INSULATION 1" Fiberglass Insulation (Domestic Water Piping)		FT					
	Subtotal							
221000	PLUMBING PIPING AND FITTINGS 1 In Dia L Copper Tubing Wrought Copper Fittings		FT EA					
	Subtotal							
221100	FACILITY WATER DISTRIBUTION Connect 1" Line to Extg		EA					
	Subtotal							
223000	PLUMBING EQUIPMENT, SPECIALTIES, AND ACCESSORIES Protect & Support Siamese Connection During Masonry Wall Removal & Replacement		LS					
	Subtotal							
260500	DIVISION 26 - ELECTRICAL COMMON WORK RESULTS FOR ELECTRICAL Temp Power Core Drill for Conduit Remove & Salvage Extg Emergency Lights		LS EA EA					
	Subtotal							
260519	BASIC MATERIALS AND METHODS Underground Conduit WP Recessed Junction Boxes in New Wall Relocate Extg Fire Alarm Conduit		LF EA LF					
	Subtotal							



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CONTRACTOR'S BID BREAKDOWN FORM

CONTRACT 1 - GENERAL CONSTRUCTION

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
263353	EMERGENCY LIGHTING CENTRAL INVERTER Emergency Lighting Central Inverter		EA					
	Subtotal							
263400	10KW UNINTERRUPTIBLE POWER SUPPLY 10Kw Uninterruptible Power Supply		EA					
	Subtotal							
265600	EXTERIOR LIGHTING Fixture Type NOG 2 Garden Lighting Dimming Module Battery Back-Up Heat Trace		EA EA LS LF					
	Subtotal							
311000	DIVISION 31 - EARTHWORK SITE CLEARING Site Clearing Remove & Stockpile Topsoil for Planting Clean & Reinstall Trap-Rock		SF SF CF					
	Subtotal							
312000	EARTH MOVING Decompaction of Soils - Air Spade Excavation At New Masonry Wall Foundation At Retaining Wall Foundation		CY CY					

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CONTRACTORS BID BREAKDOWN FORM

CONTRACT 1 - GENERAL CONSTRUCTION

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Sponsor Agency: Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
	At Buried Conduit Trench		CY					
	Backfill with Imported Clean Material at Foundations		CY					
	Backfill with Imported Clean Material at Buried Conduit Trenches		CY					
	Dispose of Excess Material		CY					
	Geotextile Fabric		SY					
	Subtotal							
315000	<b>EXCAVATION</b>							
	Excavation Support & Protection at Retaining Wall		LF					
	Subtotal							
	<b>DIVISION 32 - EXTERIOR IMPROVEMENTS</b>							
321316	<b>CONCRETE WALKS AND CURBS</b>							
	Concrete Walks & Curbs		SF					
	Expansion Control - At Sidewalks		LF					
	Subtotal							
321373	<b>CONCRETE PAVING JOINT SEALANTS</b>							
	Concrete Paving Joint Sealants		LF					
	Subtotal							
323119	<b>METAL FENCES</b>							
	Metal Fences - Wall Top		SF					
	Metal Fences - Gate Top		SF					
	Subtotal							

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CONTRACTOR'S BID BREAKDOWN FORM

CONTRACT 1 - GENERAL CONSTRUCTION

DDC ID: PV467NOG4-R  
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CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
329300	<b>PLANTS</b>							
	White Azalea		EA					
	Glossy Abelia		EA					
	Golden Bamboo		BALLS					
	English Ivy - 2.25"		EA					
	English Ivy - 1 Gal Containers		EA					
	New Mulch		SY					
	New Concrete Enclosure at Hose Bib		EA					
	Clean & Restore Street Tree Pits		EA					
	Subtotal							
329600	<b>TRANSPLANTING</b>							
	Crown & Root Pruning		Trees					
	Plant & Pest Control		SF					
	Subtotal							
	<b>TOTAL BID ALTERNATE #1 (Base Bid)</b>							

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CONTRACT 1 - GENERAL CONSTRUCTION

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
<b>CONTRACT 1 - GENERAL CONSTRUCTION WORK</b>								
<b>BID ALTERNATE #2</b>								
<b>DIVISION 31 - EARTHWORK</b>								
312000	<b>EARTH MOVING</b>							
	Decompaction of Soils - Air Spade Excavation							
	At Irrigation Piping		CY					
	Backfill with Imported Clean Material at Irrigation Trenches		CY					
	<b>Subtotal</b>							
<b>DIVISION 32 - EXTERIOR IMPROVEMENTS</b>								
328400	<b>PLANTING IRRIGATION</b>							
	Performace Irrigation at Grade							
	<b>Drip Stakes</b>							
	Drip Stakes		EA					
	Multi-outlet Manifold		EA					
	Econobox for Manifold		EA					
	<b>Drip</b>							
	0.9 GPH 12" Spacing in-Line Emmitter Tubing		LF					
	Air Relief Valve		EA					
	Automatic Flushing Valve		EA					
	1" Drip Valve Assembly		EA					
	<b>Controller</b>							
	Controller (6 - 24 Station)		EA					
	Controller - Moisture Setting		EA					
	Moisture Sensor		EA					
	18" Jumbo Valve Box		EA					
	1" Isolation Valves		EA					
	1" Quick Coupling Valve w/Sw. Jt		EA					
	10" Round Valve Box		EA					
	DBY Wire Splice (Zone Valves x 2)		EA					



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NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION

Project: Noguchi Masterplan Phase IC.2  
Location: 32-37 Vernon Boulevard, Long Island City, NY 11106  
Bidder:

CONTRACTOR'S BID BREAKDOWN FORM

CONTRACT 1 - GENERAL CONSTRUCTION

DDC ID: PV467NOG4-R  
Sponsor Agency: Dept of Cultural Affairs

CSI Number	Description	Quantity	Unit	Material		Labor	Total Cost of Material & Labor
				Unit Cost of Material	Total Cost of Material		
	1" Type K Copper		LF				
	1/2" Schd 40 PVC		LF				
	3/4" Schd 40 PVC		LF				
	Fittings		LS				
	Pipe Sleeve 2" Class 160 PVC		LF				
	Sleeve - Wire						
	2" Schd 40 PVC Electric Conduit		LF				
	Electric Wire						
	14-2 red Wire		LF				
	14-1 White Wire		LF				
	Grounding						
	4" x 96" Copper Plate w/#6 Bare Copper Wire		EA				
	5/8" x 8' Ground Rod		EA				
	GEM Material - 50lb		EA				
	Cadweld One Shot		EA				
	#6 Bare Copper Wire		LF				
	Backflow Prevention						
	3/4" Reduced Pressure Principle		EA				
	<b>Subtotal</b>						
329300	<b>PLANTS</b>						
	Liorope		EA				
	Hand Grind Tree Stump		HRS				
	Ajuga Reptans		EA				
	Reinstall Salvaged Brick Edging		LF				
	<b>Subtotal</b>						

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NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION

Project: Noguchi Masterplan Phase IC.2  
Location: 32-37 Vernon Boulevard, Long Island City, NY 11106  
Bidder:

DDC ID: PV467NOG4-R  
Sponsor Agency: Dept of Cultural Affairs

**CONTRACTOR'S BID BREAKDOWN FORM**  
CONTRACT 1 - GENERAL CONSTRUCTION

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
329600	<b>TRANSPLANTING</b>							
	General Protection & Care of All Extg Trees & Plants							
	Shrubs - Remove, Ball & Burlap		EA					
	Ground Plants - Remove		SF					
	Subtotal							
	<b>TOTAL ALTERNATE 2 WORK</b>							
	<b>TOTAL BID ALTERNATE #2 (Base Bid + Alternate 2 Work)</b>							

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NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION

Project: Noguchi Masterplan Phase IC.2  
 Location: 32-37 Vernon Boulevard, Long Island City, NY 11106  
 Bidder:

CONTRACT 1 - GENERAL CONSTRUCTION  
 DDC ID: PV467NOG4-R  
 Sponsor Agency: Dept of Cultural Affairs

CONTRACTOR'S BID BREAKDOWN FORM

CSI Number	Description	Quantity	Unit	Material		Labor		Total Cost: Material & Labor
				Unit Cost of Material	Total Cost of Material	Unit Cost of Labor	Total Cost of Labor	
<b>CONTRACT 1 - GENERAL CONSTRUCTION WORK</b>								
<b>BID ALTERNATE #3</b>								
DIVISION 6 - WOODS AND PLASTICS								
064013	EXTERIOR ARCHITECTURAL WOODWORK		EA					
	Wood Screen							
	Replace 2 x 8 Reclaimed Black Locust Plank on Extg Wood Bench		LF					
	Subtotal							
DIVISION 26 - ELECTRICAL								
260519	BASIC MATERIALS AND METHODS		LF					
	Underground Conduit							
	Subtotal							
265600	EXTERIOR LIGHTING		EA					
	Fixture Type NOG 1							
	Subtotal							
<b>TOTAL ALTERNATE 3 WORK</b>								
<b>TOTAL BID ALTERNATE #3 (Base Bid + Alternate 2 Work + Alternate 3 Work)</b>								

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**NON-PLA PROJECT**

**ATTACHMENT 1 - BID INFORMATION  
PROJECT ID: LBCA07CEN**

**DESCRIPTION AND LOCATION OF WORK:**

**Noguchi Masterplan Phase 1C.2 Renovation  
32-37 Vernon Blvd.  
Long Island City, NY 11101  
E-PIN: 85013B0114 / DDC PIN: 8502013PV0021C**

**DOCUMENTS AVAILABLE AT:**

Department of Design and Construction, Contract Section  
30-30 Thomson Avenue - First Floor, Long Island City, NY 11101

**SUBMISSION OF BIDS BEFORE BID OPENING:**

**TIME TO SUBMIT:**

On or Before: **THURSDAY, JULY 25, 2013**  
**BIDS MUST BE CLOCKED IN PRIOR TO BID OPENING**

**PLACE TO SUBMIT:**

Department of Design and Construction, Contract Section (located behind Security Desk)  
30-30 Thomson Avenue - First Floor, Long Island City, NY 11101

**BID OPENING:**

<b>PLACE OF BID OPENING:</b>	<b>Department of Design and Construction Contract Section 30-30 Thomson Avenue – First Floor Long Island City, NY 11101</b>
<b>DATE AND HOUR:</b>	<b>THURSDAY, JULY 25, 2013 @ 2:00 PM</b>
	<b>LATE BIDS WILL NOT BE ACCEPTED</b>

**PRE-BID CONFERENCE**

<b>PLACE</b>	<b>Noguchi Sculpture Garden 32-37 Vernon Blvd. Long Island City, NY 11101</b>
<b>DATE AND HOUR</b>	<b>THURSDAY, JULY 11, 2013 AT 10:00AM</b>
<b>MANDATORY OR OPTIONAL</b>	<b>MANDATORY</b>

**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.

- (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 excess of \$1,000,000.00. Performance and Payment Security shall each be in an amount equal to 100% of the Contract Price

**AGENCY CONTACT PERSON:**

Lorraine Holley, 30-30 Thomson Avenue - First Floor, Long Island City, Queens, NY 11101  
Telephone (718) 391-2200 or (718) 391-2601 Fax: (718) 391-2615



**BID BOOKLET  
PART B**

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# 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.

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.**

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

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

**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: \_\_\_\_\_

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## 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, the bidder must submit such information 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 which must be submitted.

**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 28 through 30 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

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**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.**

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## VENDEX COMPLIANCE

(A) **Vendex Fees:** Pursuant to Procurement Policy Board Rule 2-08(f)(2), the contractor will be charged a fee for 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, 9<sup>th</sup> 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: \_\_\_\_\_

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# 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: \_\_\_\_\_

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# 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*

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# 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: \_\_\_\_\_

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# 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*

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**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:

**CITY OF NEW YORK**

**DIVISION OF LABOR SERVICES**

**CONSTRUCTION EMPLOYMENT REPORT**

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### 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).

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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).

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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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FMS ID: PV467NOG4-R



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**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF PUBLIC BUILDINGS**

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

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**Contract for Furnishing all Labor and Material Necessary and Required for:**

**CONTRACT NO. 1            GENERAL CONSTRUCTION**

# **Noguchi Masterplan Phase IC.2 Renovation**

**LOCATION:                      32-37 Vernon Blvd  
BOROUGH:                    Long Island City, 11101  
CITY OF NEW YORK**

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Contractor

Dated \_\_\_\_\_, 20\_\_\_\_

---

Entered in the Comptroller's Office

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First Assistant Bookkeeper

Dated \_\_\_\_\_, 20\_\_\_\_





PROJECT ID: PV467NOG4-R

**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF PUBLIC BUILDINGS**

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

**LAW**

**VOLUME 2 OF 3**

**INFORMATION FOR BIDDERS  
CONTRACT  
PERFORMANCE AND PAYMENT BONDS  
SCHEDULE OF PREVAILING WAGES  
GENERAL CONDITIONS**

FOR FURNISHING ALL LABOR AND MATERIALS  
NECESSARY AND REQUIRED FOR THE PROJECT

**Noguchi Masterplan Phase IC.2  
Renovation**

LOCATION: 32-37 Vernon Blvd  
BOROUGH: Long Island City, 11101  
CITY OF NEW YORK

CONTRACT NO. 1 GENERAL CONSTRUCTION

DCA

Sage & Coombe Architects

Date: April 26, 2013



13-060



**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF PUBLIC BUILDINGS**

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

**VOLUME 2 OF 3**

**INFORMATION FOR BIDDERS  
CONTRACT  
PERFORMANCE AND PAYMENT BONDS  
SCHEDULE OF PREVAILING WAGES  
GENERAL CONDITIONS**

FOR FURNISHING ALL LABOR AND MATERIALS  
NECESSARY AND REQUIRED FOR THE PROJECT



# 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 do not exceed \$5 million. The form of bond required for contracts that are greater than \$5 million has not changed. The City now has two approved forms. One form is to be used for contracts that do not exceed \$5 million and one form is to be used for contracts above \$5 million. The City's payment bond remains unchanged.

**The new 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. 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.



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## **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 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:

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 received. 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.

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**CITY OF NEW YORK**

**DEPARTMENT OF  
DESIGN AND CONSTRUCTION  
DIVISION OF STRUCTURES**

**INFORMATION FOR BIDDERS**

**September 2008**

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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 in 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 reasonably have been 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, 9<sup>th</sup> Floor, New York, New York 10007. In addition, the bidder must submit a Confirmation of Vendex Compliance to the agency. A form for this confirmation is set forth in the Bid Booklet.

(C) Obtaining Forms: Vendex Questionnaires, as well as detailed instructions, may be obtained at [www.nyc.gov/vendex](http://www.nyc.gov/vendex). The bidder may also obtain Vendex forms and instructions by contacting the Agency Chief Contracting Officer or the contact 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. 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. 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 Form, 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 to 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**

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**THE DDC SAFETY REQUIREMENTS INCLUDE THE FOLLOWING SECTIONS:**

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

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## 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).

## I. 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

#### IV. RESPONSIBILITIES

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

##### A. Resident Engineer / Construction Project Manager / Construction Manager

- Monitors the issuance of safety-related permits, approvals and drawings and maintains copies on site.
- Monitors construction-related work activities to confirm that they are conducted in accordance with DDC policies and all applicable regulations that pertain to construction safety.
- Maintains documentation and periodically attends weekly safety meeting.
- Notifies the Construction Safety Unit and the ACCO's Insurance and Risk Management Unit of project-related accidents and emergencies, as per DDC's Construction Safety Emergency Protocol.
- Gathers facts related to all accidents and prepares DDC Accident Reports.
- Notifies the Construction Safety Unit of outside regulatory agency inspections and forwards a copy of the inspection report within three days of its receipt.
- Monitors the conditions at the site for conformance with the Site Safety Plan and DDC construction documents.
- Notifies the contractor and DDC in the event that any condition or activity exists that is not in compliance with the Site Safety Plan, applicable federal, state or local codes or any condition that presents a potential risk of injury to the public or workers or possible damage to property.
- Notifies DDC of any emergency condition and directs the contractor to provide such labor, materials, equipment and supervision to abate such conditions.
- Reports gross safety violations to the Construction Safety Unit immediately.

##### A. 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.
- 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.
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
- 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.
- 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.

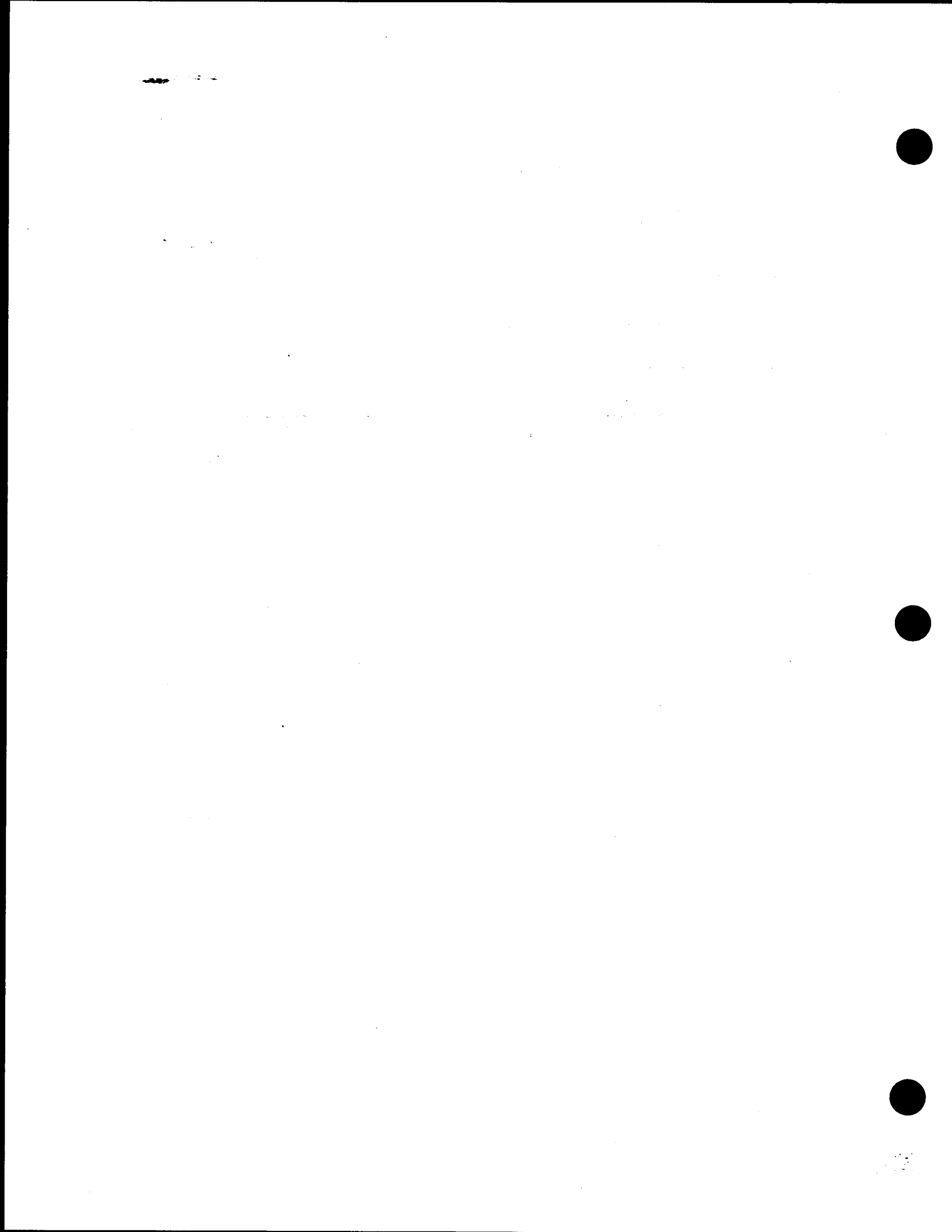
## **IX. SAFETY PERFORMANCE EVALUATION**

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**



**CITY OF NEW YORK  
STANDARD CONSTRUCTION CONTRACT**

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CITY OF NEW YORK

STANDARD CONSTRUCTION CONTRACT (September 2008)

The Standard Construction Contract dated September 2008 (the "Contract") is amended as set forth below.

- Article 77: Article 77, Part A, Section 5 is deleted in its entirety and replaced with the following:

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 a contract that is subject to a Project Labor Agreement] where the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades [i.e., 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 of the Wicks trades, regardless of what point in the life of the contract such subcontracts will occur, at the time of bid submission. In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.**

- Article 77: Article 77, Part A, Section 11 is deleted in its entirety and replaced with the following:

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 a contract that is subject to a Project Labor Agreement] where the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades [i.e., 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:**

Sub-paragraphs (a) through (h) remain unchanged.

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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](http://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.

## 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 do 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 2.

**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: One Million Dollars, (\$ 1,833,000.00), 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. Eight Hundred Thirty-Three Thousand and 00/100

**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](mailto: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](http://www.nyc.gov/buycertified), by emailing DSBS at [buyer@sbs.nyc.gov](mailto:buyer@sbs.nyc.gov), by calling (212) 513-6356, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7<sup>th</sup> floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting [www.nyc.gov/getcertified](http://www.nyc.gov/getcertified), emailing [MWBE@sbs.nyc.gov](mailto:MWBE@sbs.nyc.gov), or calling the DSBS certification helpline at (212) 513-6311.

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.

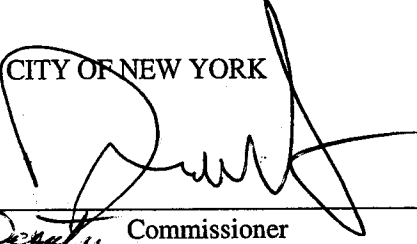
5. Whenever Agency has reason to believe that an MBE or WBE is not qualified for certification, or is participating in a contract in a manner that does not serve a commercially useful function (as defined in Section 6-129), or has violated any provision of Section 6-129, Agency shall notify the commissioner 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

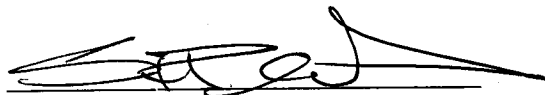
By:   
*Deputy* Commissioner

CONTRACTOR:

By:   
(Member of Firm or Officer of Corporation)

Title: *Treasurer*

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

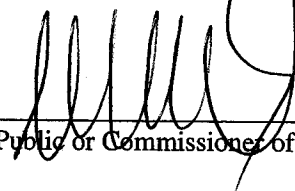
  
Secretary

(Seal)

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Queens ss:

On this 9th day of May 2014, before me personally came SOUDIS PLAKOUDAS to me known, who, being by me duly sworn did depose and say that he resides at 91 SCHOOL AVENUE, MANHATTAN, NY 10016 that he is the TREASURER of the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.

  
\_\_\_\_\_  
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

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

ACKNOWLEDGMENT BY COMMISSIONER

State of New York County of Queens ss:

On this 12<sup>th</sup> day of May 2014, before me personally came David Pennach 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 he acknowledged to me that he executed the same as Deputy Commissioner for the purposes therein mentioned.

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

  
\_\_\_\_\_  
Notary Public or Commissioner of Deeds

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

*One Million Eight Hundred  
Sixty-Three Thousand*

Dollars (\$ 1,833,000.00 )

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

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

Department of Design and Construction

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

*[Signature]*  
\_\_\_\_\_  
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



**MAYOR'S CERTIFICATE OR  
CERTIFICATE OF THE DIRECTOR  
OF THE BUDGET**



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
12/18/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

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

PRODUCER Capacity Group of New York LLC 1983 Marcus Avenue Suite 140 Lake Success NY 11042	CONTACT NAME: Jennifer Loffredo	FAX (A/C, No.): 516-280-7677	
	PHONE (A/C, No, Ext): 516-280-7676	E-MAIL ADDRESS: J.Loffredo@CapacityNY.com	
INSURED 263 NSP Enterprises Inc 247 52nd Street Brooklyn NY 11220	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: American Empire Surplus Lines Insur		35351
	INSURER B: Allmerica Financial Benefit Insuran		41840
	INSURER C: Merchants Mutual Insurance Company		23329
	INSURER D:		
	INSURER E:		
INSURER F:			

COVERAGES CERTIFICATE NUMBER: 758685312 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	ADD'L INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC	Y	Y	13CG0180306	12/1/2013	12/1/2014	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$50,000 MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 Policy Aggregate \$5,000,000
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS	N	Y	AWYA04649600	7/7/2013	7/7/2014	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$10,000	Y	Y	CUP0000872	12/1/2013	12/1/2014	EACH OCCURRENCE \$1,000,000 AGGREGATE \$1,000,000 \$ WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A				

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Subject to Policy Terms and Conditions...  
The New York City Department of Design & Construction, The City of New York including its officials and employees, The New York City Department of Cultural Affairs, and The Noguchi Foundation and Garden Museum are included as Additional Insureds where required by written contract or agreement with regards to work being done by the Insured on their behalf.

## CERTIFICATE HOLDER

## CANCELLATION

New York City Department of Design & Construction  
30-30 Thomson Avenue  
Long Island City NY 11101

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

*Michael Demi*

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# New York State Insurance Fund

Workers' Compensation & Disability Benefits Specialists Since 1914

199 CHURCH STREET, NEW YORK, N.Y. 10007-1100  
Phone: (888) 997-3863

## CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

\*\*\*\*\* 112698476  
HAMOND SAFETY MANAGEMENT LLC  
6800 JERICHO TURNPIKE  
SUITE 105W  
SYOSSET NY 11791

POLICYHOLDER  
NSP ENTERPRISES INC  
247 52ND STREET  
BROOKLYN NY 11220

CERTIFICATE HOLDER  
CITY OF NEW YORK DEPARTMENT OF  
DESIGN & CONSTRUCTION  
3030 THOMPSON AVENUE  
LONG ISLAND CITY NY 11011

POLICY NUMBER Z 1317 828-0	CERTIFICATE NUMBER 867682	PERIOD COVERED BY THIS CERTIFICATE 01/01/2012 TO 01/01/2015	DATE 12/18/2013
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THIS IS TO CERTIFY THAT THE POLICYHOLDER NAMED ABOVE IS INSURED WITH THE NEW YORK STATE INSURANCE FUND UNDER POLICY NO. 1317 828-0 UNTIL 01/01/2015, COVERING THE ENTIRE OBLIGATION OF THIS POLICYHOLDER FOR WORKERS' COMPENSATION UNDER THE NEW YORK WORKERS' COMPENSATION LAW WITH RESPECT TO ALL OPERATIONS IN THE STATE OF NEW YORK, EXCEPT AS INDICATED BELOW.

IF SAID POLICY IS CANCELLED, OR CHANGED PRIOR TO 01/01/2015 IN SUCH MANNER AS TO AFFECT THIS CERTIFICATE, 10 DAYS WRITTEN NOTICE OF SUCH CANCELLATION WILL BE GIVEN TO THE CERTIFICATE HOLDER ABOVE. NOTICE BY REGULAR MAIL SO ADDRESSED SHALL BE SUFFICIENT COMPLIANCE WITH THIS PROVISION. THE NEW YORK STATE INSURANCE FUND DOES NOT ASSUME ANY LIABILITY IN THE EVENT OF FAILURE TO GIVE SUCH NOTICE.

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

NEW YORK STATE INSURANCE FUND

DIRECTOR, INSURANCE FUND UNDERWRITING

This certificate can be validated on our web site at <https://www.nysif.com/cert/certval.asp> or by calling (888) 875-5790  
VALIDATION NUMBER: 505652043

STATE OF NEW YORK  
WORKERS' COMPENSATION BOARD  
CERTIFICATE OF INSURANCE COVERAGE UNDER THE NYS DISABILITY BENEFITS LAW

**PART 1. To be completed by Disability Benefits Carrier or Licensed Insurance Agent of that Carrier**

<p>1a. Legal Name and Address of Insured (Use street address only)</p> <p>NSP Enterprises, Inc. 247 52nd Street Brooklyn, NY 11220</p>	<p>1b. Business Telephone Number of Insured 718-492-7900</p> <p>1c. NYS Unemployment Insurance Employer Registration Number of Insured 17-224117</p> <p>1d. Federal Employer Identification Number of Insured or Social Security Number 11-2698476</p>
<p>2. Name and Address of the Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)</p> <p>New York City Department of Design and Construction 30-30 Thomson Ave. Long Island City, NY 11101</p>	<p>3a. Name of Insurance Carrier Liberty Life Assurance Company of Boston</p> <p>3b. Policy Number of entity listed in box "1a": GS3-821-080363-01-NY</p> <p>3c. Policy effective period: 1/1/2014 to 12/31/2014</p>

4. Policy covers:

a.  All of the employer's employees eligible under the New York Disability Benefits Law

b.  Only the following class or classes of the employer's employees:

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has NYS Disability Benefits insurance coverage as described above.

Date Signed 5/6/2014 By Cheryl Szulewski  
Digitally signed by Cheryl Szulewski  
 DN: cn=Cheryl Szulewski, o=LibertyMutual.com, c=US  
 Date: 2014.05.06 14:20:24 -0400  
 (Signature of insurance carrier's authorized representative or NYS Licensed Insurance Agent of that insurance carrier)

Telephone Number 781-891-8900 x37618 Title Contract Analyst

**IMPORTANT:** If box "4a" is checked, and this form is signed by the insurance carrier's authorized representative or NYS Licensed Insurance Agent of that carrier, this certificate is COMPLETE. Mail it directly to the certificate holder.  
 If box "4b" is checked, this certificate is NOT COMPLETE for purposes of Section 220, Subd. 8 of the Disability Benefits Law. It must be mailed for completion to the Workers' Compensation Board, DB Plans Acceptance Unit, 20 Park Street, Albany, New York 12207.

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

**State Of New York  
Workers' Compensation Board**

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

Date Signed \_\_\_\_\_ By \_\_\_\_\_  
 (Signature of NYS Workers' Compensation Board Employee)

Telephone Number \_\_\_\_\_ Title \_\_\_\_\_

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

## Additional Instructions for Form DB-120.1

By signing this form, the insurance carrier identified in box "3" on this form is certifying that it is insuring the business referenced in box "1a" for disability benefits under the New York State Disability Benefits Law. The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed as the certificate holder in box "2". *This Certificate is valid for the earlier of one year after this form is approved by the insurance carrier or its licensed agent, or the policy expiration date listed in box "3c".*

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

### DISABILITY BENEFITS LAW

#### §220. Subd. 8

(a) The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in employment as defined in this article, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that the payment of disability benefits for all employees has been secured as provided by this article. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any disability benefits to any such employee if so employed.

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

**SCHEDULE A (FOR PUBLICLY BID PROJECTS)**

**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.

Capacity Group of New York LLC

[Name of broker (typewritten)]

1983 Marcus Avenue, Suite 140, Lake Success, NY 11042

[Address of broker (typewritten)]

*Michael Duni*

[Signature of authorized official or broker]

Michael Duni, President

[Name and title of authorized official (typewritten)]

Sworn to before me this  
18th day of December, 2013

*[Signature]*  
NOTARY PUBLIC

JOSEPH G FESTA  
Notary Public - State of New York  
NO. 01FE6201887  
Qualified in Nassau County  
My Commission Expires 3/2/17



111



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

Bond  
No. 0160458

PERFORMANCE BOND

KNOW ALL PEOPLE BY THESE PRESENTS:,

That we, N.S.P. Enterprises, Inc.

247 52nd Street Brooklyn NY 11220

hereinafter referred to as the "Principal,"

and, Berkley Regional Insurance Company

60 East 42nd St., Suite 1800 New York NY 10165

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 \_\_\_\_\_

One Million Eight Hundred Thirty Three Thousand Dollars and 00/100

(\$ 1,833,000.00 ) Dollars, lawful money of the United States for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

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

ID:PV467NOG4, DDC PIN: 8502013PV0021C, Noguchi Masterplan Phase IC.2 Renovation. Borough of

Queens, NY

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

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



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

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

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

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

IN WITNESS WHEREOF, The Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this

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

(Seal) \_\_\_\_\_ 18th day of \_\_\_\_\_ December, \_\_\_\_\_ 2013

N.S.P. Enterprises, Inc. (L.S.)

Principal

By \_\_\_\_\_

(Seal)

Surety

Berkley Regional Insurance Company

By \_\_\_\_\_

Deborah L. Severin Attorney-in-Fact

(Seal)

Surety

By \_\_\_\_\_

(Seal)

Surety

By \_\_\_\_\_

(Seal)

Surety

By \_\_\_\_\_

(Seal)

Surety

By \_\_\_\_\_

Bond Premium Rate \_\_\_\_\_

Bond Premium Cost \_\_\_\_\_

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

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

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

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

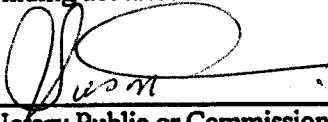
ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

State of NEW YORK County of QUEENS ss:

On this 16<sup>TH</sup> day of DECEMBER 2013 before me personally came SOTIRIOS PLAKOLIDAKIS,

to me known, who, being by me duly sworn did depose and say that he/she resides at 91 SCHOOL ROAD WEST

MARLBORO NJ 07746; that he/she is the <sup>NSP</sup> ~~(TREASURER)~~ ENTERPRISES INC of the corporation described in and which executed the foregoing instrument; and that he signed his name to the foregoing instrument by order of the directors of said corporation as the duly authorized and binding act thereof.



NOTARY PUBLIC, STATE OF NEW YORK  
No. 01RA6220030  
QUALIFIED IN QUEENS COUNTY  
COMMISSION EXPIRES APRIL 5, 2014  
18

Notary Public or Commissioner of Deeds.

ACKNOWLEDGMENT OF PRINCIPAL IF A PARTNERSHIP

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_ before me personally came \_\_\_\_\_

to me known, who, being by me duly sworn did depose and say that he/she resides at \_\_\_\_\_

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

Notary Public or Commissioner of Deeds.

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

**ACKNOWLEDGMENT OF PRINCIPAL IF AN INDIVIDUAL**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

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

\_\_\_\_\_  
Notary Public or Commissioner of Deeds.

Affix Acknowledgments and justification of Sureties

## ACKNOWLEDGMENT OF SURETY

STATE OF NEW YORK }  
COUNTY OF NASSAU } ss:

On December 18, 2013 before me personally came Deborah L. Severin to me known who, being by me duly sworn, did depose and say that he/she resides at 255 Executive Drive, Plainview, New York 11803, that he/she is the Attorney-In-Fact of Berkley Regional Insurance Company the corporation described in and which executed the foregoing instrument; and that he/she signed his/her name thereto by order of the Board of Directors of said corporation.



---

**Notary Public**  
Peter Henry  
Notary Public State of NY  
No. 01HE4784829  
Qualified in Nassau County  
Commission Expires January 31, 2014

POWER OF ATTORNEY  
BERKLEY REGIONAL INSURANCE COMPANY  
WILMINGTON, DELAWARE

NOTICE: The warning found elsewhere in this Power of Attorney affects the validity thereof. Please review carefully.

KNOW ALL MEN BY THESE PRESENTS, that BERKLEY REGIONAL INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Delaware, having its principal office in Urbandale, Iowa, has made, constituted and appointed, and does by these presents make, constitute and appoint: *Peter T. Henry, Rosanne Callahan, Robert Finnell, Janice R. Fiscina, Jennifer L. Johnston-Ogeka, Deborah L. Severin or Fern Perry of Surre, Goldberg & Henry Associates, Inc. of Plainview, NY* its true and lawful Attorney-in-Fact, to sign its name as surety only as delineated below and to execute, seal, acknowledge and deliver any and all bonds and undertakings, with the exception of Financial Guaranty Insurance, providing that no single obligation shall exceed **Fifty Million and 00/100 U.S. Dollars (U.S.\$50,000,000.00)**, to the same extent as if such bonds had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office in their own proper persons.

This Power of Attorney shall be construed and enforced in accordance with, and governed by, the laws of the State of Delaware, without giving effect to the principles of conflicts of laws thereof. This Power of Attorney is granted pursuant to the following resolutions which were duly and validly adopted at a meeting of the Board of Directors of the Company held on August 21, 2000:

**"RESOLVED**, that the proper officers of the Company are hereby authorized to execute powers of attorney authorizing and qualifying the attorney-in-fact named therein to execute bonds, undertakings, recognizances, or other suretyship obligations on behalf of the Company, and to affix the corporate seal of the Company to powers of attorney executed pursuant hereto; and further

**RESOLVED**, that such power of attorney limits the acts of those named therein to the bonds, undertakings, recognizances, or other suretyship obligations specifically named therein, and they have no authority to bind the Company except in the manner and to the extent therein stated; and further

**RESOLVED**, that such power of attorney revokes all previous powers issued on behalf of the attorney-in-fact named; and further

**RESOLVED**, that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any power of attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligation of the Company; and such signature and seal when so used shall have the same force and effect as though manually affixed. The Company may continue to use for the purposes herein stated the facsimile signature of any person or persons who shall have been such officer or officers of the Company, notwithstanding the fact that they may have ceased to be such at the time when such instruments shall be issued."

IN WITNESS WHEREOF, the Company has caused these presents to be signed and attested by its appropriate officers and its corporate seal hereunto affixed this 16 day of November, 2012.

Attest:

Berkley Regional Insurance Company

(Seal)

By

Ira S. Lederman  
Senior Vice President & Secretary

By

Jeffrey M. Hafter  
Senior Vice President

**WARNING: THIS POWER INVALID IF NOT PRINTED ON BLUE "BERKLEY" SECURITY PAPER.**

STATE OF CONNECTICUT )

) ss:

COUNTY OF FAIRFIELD )

Sworn to before me, a Notary Public in the State of Connecticut, this 16 day of November, 2012, by Jeffrey M. Hafter and Ira S. Lederman who are sworn to me to be the Senior Vice President, and the Senior Vice President and Secretary, respectively, of Berkley Regional Insurance Company.

**EILEEN KILLEEN**  
NOTARY PUBLIC, STATE OF CONNECTICUT  
MY COMMISSION EXPIRES JUNE 30, 2017

Eileen Killeen  
Notary Public, State of Connecticut

**CERTIFICATE**

I, the undersigned, Assistant Secretary of BERKLEY REGIONAL INSURANCE COMPANY, DO HEREBY CERTIFY that the foregoing is a true, correct and complete copy of the original Power of Attorney; that said Power of Attorney has not been revoked or rescinded and that the authority of the Attorney-in-Fact set forth therein, who executed the bond or undertaking to which this Power of Attorney is attached, is in full force and effect as of this date.

Given under my hand and seal of the Company, this 18 day of December, 2013.

(Seal)

Andrew M. Duma

WARNING - Any unauthorized reproduction or alteration of this document is prohibited. This power of attorney is void unless seals are readable and the certification seal at the bottom is embossed. The background imprinting and confirmation (on reverse) must be in blue ink.

## **Instructions for Inquiries and Notices Under the Bond Attached to This Power**

**Berkley Surety Group, LLC is the affiliated underwriting manager for the surety business of: Acadia Insurance Company, Berkley Insurance Company, Berkley Regional Insurance Company, Carolina Casualty Insurance Company, Union Standard Insurance Company, Continental Western Insurance Company, and Union Insurance Company.**

**To verify the authenticity of the bond, please call (866) 768-3534 or email [BSGInquiry@berkleysurety.com](mailto:BSGInquiry@berkleysurety.com)**

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**Any written notices, inquiries, claims or demands to the surety on the bond to which this Rider is attached should be directed to:**

**Berkley Surety Group, LLC  
412 Mount Kemble Avenue  
Suite 310N  
Morristown, NJ 07960  
Attention: Surety Claims Department**

**Or**

**email [BSGClaim@berkleysurety.com](mailto:BSGClaim@berkleysurety.com)**

**Please include with all notices the bond number and the name of the principal on the bond. Where a claim is being asserted, please set forth generally the basis of the claim. In the case of a payment or performance bond, please identify the project to which the bond pertains.**

# BERKLEY REGIONAL INSURANCE COMPANY

## STATUTORY BALANCE SHEET DECEMBER 31, 2012 (AMOUNTS IN THOUSANDS)

### Admitted Assets

Bonds	\$	1,422,891
Common & Preferred Stocks		408,971
Cash & Short Term Investments		120,417
Premiums Receivable		289,243
Other Assets		<u>464,772</u>

Total Admitted Assets \$ 2,706,294

### Liabilities & Surplus

Loss & LAE Reserves	\$	1,385,769
Unearned Premium Reserves		547,414
Other Liabilities		<u>50,299</u>

Total Liabilities \$ 1,983,482

Capital Stock	\$	4,000
Additional Paid In Capital		347,938
Unassigned Surplus		<u>365,376</u>

Total Policyholders' Surplus \$ 717,313

Total Liabilities & Surplus \$ 2,700,795

### Officers:

President: William Robert Berkley, Jr.  
Secretary: Ira Seth Lederman  
Treasurer: Ann Marie Collins  
Sr. Vice President & CFO: Eugene George Ballard  
Sr. Vice President: William Mims Rohde, Jr.  
Vice President: Clement Patrick Patafio

### Directors:

Eugene George Ballard  
William Robert Berkley  
William Robert Berkley, Jr.  
Paul James Hancock  
Robert Carruthers Hewitt  
Ira Seth Lederman  
Clement Patrick Patafio  
William Mims Rohde, Jr.  
James Gerald Shiel



**PAYMENT BOND (Pg.1)**

KNOW ALL MEN BY THESE PRESENTS, That we, \_\_\_\_\_

N.S.P. Enterprises, Inc.

247 52nd Street                      Brooklyn                      NY                      11220

hereinafter referred to as the "Principal" and \_\_\_\_\_

Berkley Regional Insurance Company

60 East 42nd St., Suite 1800    New York                      NY                      10165

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:

One Million Eight Hundred Thirty Three Thousand Dollars and 00/100                      Dollars,

(\$ 1,833,000.00                      ) 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:

ID:PV467NOG4, DDC PIN: 8502013PV0021C, Noguchi Masterplan Phase IC.2 Renovation.

Borough of Queens, NY

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

## PAYMENT BOND (Pg.2)

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns and other Subcontractors to whom Work under this Contract is sublet and his or their successors and assigns shall promptly pay or cause to be paid all lawful claims for:

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

This bond is subject to the following additional conditions, limitations and agreements:

- (a) The Principal and Surety (Sureties) agree that this bond shall be for the benefit of any materialman or laborer having a just claim, as well as the City itself.
- (b) All persons who have performed labor, rendered services or furnished materials and supplies, as aforesaid, shall have a direct right of action against the Principal and his, its or their successors and assigns, and the Surety (Sureties) herein, or against either or both or any of them and their successors and assigns. Such persons may sue in their own name, and may prosecute the suit to judgment and execution without the necessity of joining with any other person as party plaintiff.
- (c) The Principal and Surety (Sureties) agree that neither of them will hold the City liable for any judgment for costs or

### PAYMENT BOND (Pg.3)

otherwise, obtained against either or both of them by a laborer or materialman in a suit brought by either a laborer or materialman under this bond for moneys allegedly due for performing work or furnishing material.

(d) The Surety (Sureties) or its successors and assigns shall not be liable for any compensation recoverable by an employee or laborer under the Workmen's Compensation Law.

(e) In no event shall the Surety (Sureties), or its successors or assigns, be liable for a greater sum than the penalty of this bond or be subject to any suit, action or proceeding hereon that is instituted by any person, firm, or corporation hereunder later than two (2) years after the complete performance of said Contract and final settlement thereof.

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

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

PAYMENT BOND (Pg.4)

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

this 18th day of December, 2013

(SEAL) N.S.P. Enterprises, Inc. (L.S.)

By:

Principal

(SEAL)

Berkley Regional Insurance Company

By:

Surety

Deborah L. Severin

Attorney-in-Fact

(SEAL)

Surety

By:

(SEAL)

Surety

By:

(SEAL)

Surety

By:

BOND PREMIUM RATE: \_\_\_\_\_

BOND PREMIUM COST: \_\_\_\_\_

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 member of counterparts of the bond corresponding to the number of counterparts of the Contract.

PAYMENT BOND (Pg.5)

ACKNOWLEDGMENT OF PRINCIPAL - IF A CORPORATION

State of NEW YORK County of QUEENS ss.:

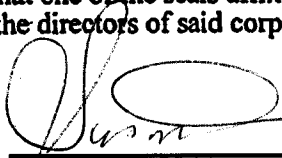
On this 18<sup>TH</sup> day of SEPTEMBER, 2013,

before me personally came SOTIRIOS PLAKOUDAS

to me known, who, being by me duly sworn did depose and say that he resides at 91 SCHOOL ROAD WEST, MARLBORO NJ 07746

that he is the TREASURER of NSP ENTERPRISES, INC

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



Notary Public

SUSAN RAM  
NOTARY PUBLIC, STATE OF NEW YORK  
No.01RA6220030  
QUALIFIED IN QUEENS COUNTY  
COMMISSION EXPIRES APRIL 5, 2014

18

ACKNOWLEDGMENT OF PRINCIPAL - IF A PARTNERSHIP

State of \_\_\_\_\_ County of \_\_\_\_\_ ss.:

On this \_\_\_\_\_ day of \_\_\_\_\_,

before me personally appeared \_\_\_\_\_

to me known and known to me to be one of the members of the firm of:

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

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

**PAYMENT BOND (Pg.6)**

**ACKNOWLEDGMENT OF PRINCIPAL - IF AN INDIVIDUAL**

State of \_\_\_\_\_ County of \_\_\_\_\_ SS.:

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ before me

personally appeared \_\_\_\_\_ known to me to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same.

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

Each executed bond should be accompanied by:

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

\*\*\*\*\*

**AFFIX ACKNOWLEDGMENTS AND JUSTIFICATIONS OF SURETIES**

## ACKNOWLEDGMENT OF SURETY

STATE OF NEW YORK }  
COUNTY OF NASSAU } ss:

On December 18, 2013 before me personally came Deborah L. Severin to me known who, being by me duly sworn, did depose and say that he/she resides at 255 Executive Drive, Plainview, New York 11803, that he/she is the Attorney-In-Fact of Berkley Regional Insurance Company the corporation described in and which executed the foregoing instrument; and that he/she signed his/her name thereto by order of the Board of Directors of said corporation.



---

**Notary Public**  
Peter Henry  
Notary Public State of NY  
No. 01HE4784829  
Qualified in Nassau County  
Commission Expires January 31, 2014

POWER OF ATTORNEY  
BERKLEY REGIONAL INSURANCE COMPANY  
WILMINGTON, DELAWARE

NOTICE: The warning found elsewhere in this Power of Attorney affects the validity thereof. Please review carefully.

KNOW ALL MEN BY THESE PRESENTS, that BERKLEY REGIONAL INSURANCE COMPANY (the "Company"), a corporation duly organized and existing under the laws of the State of Delaware, having its principal office in Urbandale, Iowa, has made, constituted and appointed, and does by these presents make, constitute and appoint: *Peter T. Henry, Rosanne Callahan, Robert Finnell, Janice R. Fiscina, Jennifer L. Johnston-Ogeka, Deborah L. Severin or Fern Perry of Surre, Goldberg & Henry Associates, Inc. of Plainview, NY* its true and lawful Attorney-in-Fact, to sign its name as surety only as delineated below and to execute, seal, acknowledge and deliver any and all bonds and undertakings, with the exception of Financial Guaranty Insurance, providing that no single obligation shall exceed **Fifty Million and 00/100 U.S. Dollars (U.S.\$50,000,000.00)**, to the same extent as if such bonds had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office in their own proper persons.

This Power of Attorney shall be construed and enforced in accordance with, and governed by, the laws of the State of Delaware, without giving effect to the principles of conflicts of laws thereof. This Power of Attorney is granted pursuant to the following resolutions which were duly and validly adopted at a meeting of the Board of Directors of the Company held on August 21, 2000:

"RESOLVED, that the proper officers of the Company are hereby authorized to execute powers of attorney authorizing and qualifying the attorney-in-fact named therein to execute bonds, undertakings, recognizances, or other suretyship obligations on behalf of the Company, and to affix the corporate seal of the Company to powers of attorney executed pursuant hereto; and further

RESOLVED, that such power of attorney limits the acts of those named therein to the bonds, undertakings, recognizances, or other suretyship obligations specifically named therein, and they have no authority to bind the Company except in the manner and to the extent therein stated; and further

RESOLVED, that such power of attorney revokes all previous powers issued on behalf of the attorney-in-fact named; and further

RESOLVED, that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any power of attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligation of the Company; and such signature and seal when so used shall have the same force and effect as though manually affixed. The Company may continue to use for the purposes herein stated the facsimile signature of any person or persons who shall have been such officer or officers of the Company, notwithstanding the fact that they may have ceased to be such at the time when such instruments shall be issued."

IN WITNESS WHEREOF, the Company has caused these presents to be signed and attested by its appropriate officers and its corporate seal hereunto affixed this 16 day of November, 2012.

Attest:

Berkley Regional Insurance Company

(Seal)

By

Ira S. Lederman  
Senior Vice President & Secretary

By

Jeffrey M. Hafter  
Senior Vice President

WARNING: THIS POWER INVALID IF NOT PRINTED ON BLUE "BERKLEY" SECURITY PAPER.

STATE OF CONNECTICUT )

) ss:

COUNTY OF FAIRFIELD )

Sworn to before me, a Notary Public in the State of Connecticut, this 16 day of November, 2012, by Jeffrey M. Hafter and Ira S. Lederman who are sworn to me to be the Senior Vice President, and the Senior Vice President and Secretary, respectively, of Berkley Regional Insurance Company.

EILEEN KILLEEN  
NOTARY PUBLIC, STATE OF CONNECTICUT  
MY COMMISSION EXPIRES JUNE 30, 2017

Eileen Killeen  
Notary Public, State of Connecticut

CERTIFICATE

I, the undersigned, Assistant Secretary of BERKLEY REGIONAL INSURANCE COMPANY, DO HEREBY CERTIFY that the foregoing is a true, correct and complete copy of the original Power of Attorney; that said Power of Attorney has not been revoked or rescinded and that the authority of the Attorney-in-Fact set forth therein, who executed the bond or undertaking to which this Power of Attorney is attached, is in full force and effect as of this date.

Given under my hand and seal of the Company, this 18 day of December, 2013.

(Seal)

Andrew M. Duma

WARNING - Any unauthorized reproduction or alteration of this document is prohibited. This power of attorney is void unless seals are readable and the certification seal at the bottom is embossed. The background imprinting and confirmation (on reverse) must be in blue ink.



## **Instructions for Inquiries and Notices Under the Bond Attached to This Power**

**Berkley Surety Group, LLC is the affiliated underwriting manager for the surety business of: Acadia Insurance Company, Berkley Insurance Company, Berkley Regional Insurance Company, Carolina Casualty Insurance Company, Union Standard Insurance Company, Continental Western Insurance Company, and Union Insurance Company.**

**To verify the authenticity of the bond, please call (866) 768-3534 or email [BSGInquiry@berkleysurety.com](mailto:BSGInquiry@berkleysurety.com)**

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**Any written notices, inquiries, claims or demands to the surety on the bond to which this Rider is attached should be directed to:**

**Berkley Surety Group, LLC  
412 Mount Kemble Avenue  
Suite 310N  
Morristown, NJ 07960  
Attention: Surety Claims Department**

**Or**

**email [BSGClaim@berkleysurety.com](mailto:BSGClaim@berkleysurety.com)**

**Please include with all notices the bond number and the name of the principal on the bond. Where a claim is being asserted, please set forth generally the basis of the claim. In the case of a payment or performance bond, please identify the project to which the bond pertains.**

# BERKLEY REGIONAL INSURANCE COMPANY

## STATUTORY BALANCE SHEET DECEMBER 31, 2012 (AMOUNTS IN THOUSANDS)

### Admitted Assets

Bonds	\$	1,422,891
Common & Preferred Stocks		408,971
Cash & Short Term Investments		120,417
Premiums Receivable		289,243
Other Assets		<u>464,772</u>
<u>Total Admitted Assets</u>	\$	<u>2,706,294</u>

### Liabilities & Surplus

Loss & LAE Reserves	\$	1,385,769
Unearned Premium Reserves		547,414
Other Liabilities		<u>50,299</u>
<u>Total Liabilities</u>	\$	<u>1,983,482</u>
Capital Stock	\$	4,000
Additional Paid In Capital		347,938
Unassigned Surplus		<u>365,376</u>
<u>Total Policyholders' Surplus</u>	\$	<u>717,313</u>
<u>Total Liabilities &amp; Surplus</u>	\$	<u>2,700,795</u>

### Officers:

President: William Robert Berkley, Jr.  
Secretary: Ira Seth Lederman  
Treasurer: Ann Marie Collins  
Sr. Vice President & CFO: Eugene George Ballard  
Sr. Vice President: William Mims Rohde, Jr.  
Vice President: Clement Patrick Patafio

### Directors:

Eugene George Ballard  
William Robert Berkley  
William Robert Berkley, Jr.  
Paul James Hancock  
Robert Carruthers Hewitt  
Ira Seth Lederman  
Clement Patrick Patafio  
William Mims Rohde, Jr.  
James Gerald Shiel

## Inquiry and Notification Rider

Berkley Surety Group, LLC is the affiliated underwriting manager for all of the surety business of the following affiliated companies: Acadia Insurance Company, Berkley Regional Insurance Company, Carolina Casualty Insurance Company, Union Standard Insurance Company, Union Insurance Company and Continental Western Group Insurance Company.

To verify the authenticity of this bond please call:  
(973) 775-5021 or Telefax (973) 775-5024

Any written notices, inquiries, claims or demands to the surety on the bond to which this Rider is attached should be directed to:

**Berkley Surety Group, LLC**  
412 Mt. Kemble Ave.  
Suite 310N  
Morristown, NJ 07960  
Attention: Surety Claims Department

Or

Telefax: (866) 403-2121

Please include with all notices the bond number and the name of the principal on the bond. Where a claim is being asserted please set forth generally the basis of the claim. In the case of a payment or performance bond please identify the project to which the bond pertains.

1  
(37)

BERKLEY SURETY GROUP

**Performance Bond #1 (Pages 77 to 80): Use if the total contract price is \$5 Million Or Less. Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA") for participation in its Bond Guarantee Program.**

PERFORMANCE BOND #1 (Page 1)

PERFORMANCE BOND #1

KNOW ALL PERSONS BY THESE PRESENTS, That we, \_\_\_\_\_

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

hereinafter referred to as the "Principal", and \_\_\_\_\_

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

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

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

(\$ \_\_\_\_\_) 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

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

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

**Performance Bond #1 (Pages 77 to 80): Use if the total contract price is \$5 Million Or Less. Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA") for participation in its Bond Guarantee Program.**

PERFORMANCE BOND #1 (Page 2)

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

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

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

**Performance Bond #1 (Pages 77 to 80): Use if the total contract price is \$5 Million Or Less. Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA") for participation in its Bond Guarantee Program.**

PERFORMANCE BOND #1 (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 \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

(Seal) \_\_\_\_\_ (L.S.)  
Principal

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

(Seal) \_\_\_\_\_  
Surety

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

(Seal) \_\_\_\_\_  
Surety

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

(Seal) \_\_\_\_\_  
Surety

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

Bond Premium Rate \_\_\_\_\_

Bond Premium Cost \_\_\_\_\_

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 #1 (Pages 77 to 80): Use if the total contract price is \$5 Million Or Less. Performance Bond #1 has been approved by the U.S. Small Business Administration ("SBA") for participation in its Bond Guarantee Program.**

PERFORMANCE BOND #1 (Page 4)

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

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

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

State of \_\_\_\_\_ 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.

**Performance Bond #2 (Pages 81 to 84): Use if the total contract price is more than \$5 Million.**

PERFORMANCE BOND #2 (Page 1)

PERFORMANCE BOND #2

KNOW ALL PERSONS BY THESE PRESENTS, That we, \_\_\_\_\_

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

hereinafter referred to as the "Principal", and \_\_\_\_\_

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

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

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

(\$ \_\_\_\_\_) 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

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

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



**Performance Bond #2 (Pages 81 to 84): Use if the total contract price is more than \$5 Million.**

PERFORMANCE BOND #2 (Page2)

**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 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 81 to 84): 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 \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

(Seal) \_\_\_\_\_ (L.S.)  
Principal

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

(Seal) \_\_\_\_\_  
Surety

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

(Seal) \_\_\_\_\_  
Surety

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

(Seal) \_\_\_\_\_  
Surety

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

(Seal) \_\_\_\_\_  
Surety

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

(Seal) \_\_\_\_\_  
Surety

Bond Premium Rate \_\_\_\_\_

Bond Premium Cost \_\_\_\_\_

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 81 to 84): Use if the total contract price is more than \$5 Million.**

PERFORMANCE BOND #2 (Page 4)

**ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION**

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ before me personally came \_\_\_\_\_ to me known, who, being by me duly sworn did depose and say that he/she resides at \_\_\_\_\_; that he/she is the \_\_\_\_\_ of \_\_\_\_\_ the corporation described in and which executed the foregoing instrument; and that he signed his name to the foregoing instrument by order of the directors of said corporation as the duly authorized and binding act thereof.

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

**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 85 to 88): Use for any contract for which a Payment Bond is required.**

PAYMENT BOND (Page 1)

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, That we, \_\_\_\_\_

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

hereinafter referred to as the "Principal", and \_\_\_\_\_

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

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

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

(\$ \_\_\_\_\_) 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

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

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

**Payment Bond (Pages 85 to 88): Use for any contract for which a Payment Bond is required.**

PAYMENT BOND (Page 2)

engaged who perform the work of laborers or mechanics at or in the vicinity of the site of the Project regardless of any contractual relationship between the Principal or such Subcontractors, or his or their successors or assigns, on the one hand and such laborers or mechanics on the other, but not including office employees not regularly stationed at the site of the project; and

(b) Materials and supplies (whether incorporated in the permanent 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 85 to 88): Use for any contract for which a Payment Bond is required.**

PAYMENT BOND (Page 3)

IN WITNESS HEREOF, 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 \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

(Seal) \_\_\_\_\_ (L.S.)  
Principal

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

(Seal) \_\_\_\_\_  
Surety

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

(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 85 to 88): Use for any contract for which a Payment Bond is required.**

PAYMENT BOND (Page 4)

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of \_\_\_\_\_ County of \_\_\_\_\_ ss:

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

\_\_\_\_\_  
Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

State of \_\_\_\_\_ 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

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](http://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 1<sup>st</sup> of each succeeding year. Final schedules are published on or about July 1<sup>st</sup> in the City Record and on our web site at [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov).

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

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

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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

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## **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)

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## **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)

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## 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)

## **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)

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## **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)

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## 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)

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**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)

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**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)

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**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  
§220 PREVAILING WAGE SCHEDULE

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)

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## **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**

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

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)

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

### **Paid Holidays**

None

### **Shift Rates**

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

(Carpenters District Council)

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## **DOCKBUILDER - PILE DRIVER**

### **Dockbuilder - Pile Driver**

Effective Period: 7/1/2012 - 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**

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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)

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## 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

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**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 be 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  
Day after Thanksgiving  
Christmas Day

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(Local #282)

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**ELECTRICIAN**

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

**Electrician "A" (Regular Day)**

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.

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**Electrician "M" (First 8 hours)**

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service,

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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)

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**ELECTRICIAN - ALARM TECHNICIAN**

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

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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)

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## **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)

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## 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)

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## **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

**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, Gunitite 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

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**Engineer - Building Work Maintenance Engineers I**

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

Effective Period: 7/1/2012 - 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

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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.

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**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)

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

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

**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)

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

**Field Engineer - HC Party Chief**

Effective Period: 7/1/2012 - 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)

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## **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)

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## **ENGINEER - OPERATING**

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

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

Effective Period: 7/1/2012 - 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**

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

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**

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

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

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

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

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

**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.



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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

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

**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

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

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**

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

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

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

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**

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

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)

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## **FLOOR COVERER**

(Interior vinyl composition tile, sheath vinyl linoleum and wood parquet tile including site preparation and synthetic turf not including site preparation)

### **Floor Coverer**

Effective Period: 7/1/2012 - 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

### 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)

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## 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)

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## GLAZIER - REPAIR & MAINTENANCE

(For the Installation of Glass - All repair and maintenance work on a particular building, whenever performed, where the total cumulative contract value is under \$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

One 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)

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## **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

Multiple 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)

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## **HOUSE WRECKER (TOTAL DEMOLITION)**

### **House Wrecker - Tier A**

On all work sites the first, second, eleventh and every third House Wrecker thereafter 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)

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## 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)

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## 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)

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## LABORER

(Foundation, Concrete, Excavating, Street Pipe Layer and Common)

### Laborer

Excavation and foundation work for buildings, heavy construction, engineering work, and hazardous waste removal in connection with the above work. Landscaping tasks in connection with heavy construction work, engineering work and building projects. Projects include, but are not limited to pollution plants, sewers, parks, subways, bridges, highways, etc.

Effective Period: 7/1/2012 - 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)

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**LANDSCAPING**

Landscaping tasks, as well as tree pruning, tree removing, spraying and maintenance in connection with the planting of street trees and the planting of trees in city parks but not when such activities are performed as part of, or in connection with, other construction or reconstruction projects.)

**Landscaper (Above 6 years experience)**

Effective Period: 7/1/2012 - 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)

## **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**

one



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

(Local #7)

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## 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)

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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

**Mid Holidays**

None

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

(Local #79)

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## 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)

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

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**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)

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**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)

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**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)

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**PAINTER - SIGN**

**Designer**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate per Hour: **\$36.15**  
Supplemental Benefit Rate per Hour: **\$9.66**

**Journey person**

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)

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## 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)

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## 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)

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**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)

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## **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**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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)

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## 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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 (½) hour to eat with this time being included in the seven (7) hours of work.

(Local #530)

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## 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**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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)

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## 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, hours of labor can be 8 hours per day at the employers option. On Alteration jobs when other mechanical

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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)

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### PLUMBER (MECHANICAL EQUIPMENT AND SERVICE)

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

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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Overtime Holidays**

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

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

(Plumbers Local # 1)

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**PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME  
CONSTRUCTION)**

Effective Period: 7/1/2012 - 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)

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**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 - Waterproofing, 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)

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**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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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)

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## 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)

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**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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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 journey person engaged in fan maintenance shall work in excess of forty (40) hours in any work week.

(Local #28)

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## SHEET METAL WORKER - SPECIALTY (Decking & Siding)

### Sheet Metal Specialty Worker

The first worker to perform this work must be paid at the rate of the Sheet Metal Worker. The second and third workers shall be paid the Specialty Worker Rate. The ratio of One Sheet Metal Worker, then Two Specialty Workers shall be utilized thereafter.

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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

One

(Local #28)

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## 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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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)

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## **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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

## **Paid Holidays**

None

## **Shift Rates**

Work performed between 3:30 P.M. and 7:00 A.M. and on Saturdays, Sundays and Holidays shall be at double time the regular hourly rate and paid at the overtime supplemental benefit rate above.

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## **Steamfitter II**

For heating, ventilation, air conditioning and mechanical public works contracts with a dollar value not to exceed \$15,000,000 and for fire protection/sprinkler public works contracts not to exceed \$1,500,000.

Effective Period: 7/1/2012 - 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

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## 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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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**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Double time the regular rate for work on the following holiday(s).

New Year's Day  
Independence Day  
Labor Day  
Veteran's Day  
Thanksgiving Day  
Christmas Day

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

Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Columbus Day

### **Paid Holidays**

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

(Local #638B)

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## **STONE MASON - SETTER**

### **Stone Mason - 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)

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## **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.

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

## Shift Rates

Time and one half the regular rate outside the regular work hours (8:00 A.M. through 3:30 P.M.)

(Local #1974)

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## 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

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

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.)

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## 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

### Mid 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)

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**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)

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

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**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)

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**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

Emancipation Day

Veteran's Day

Thanksgiving Day

Christmas Day

(Local #147)

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**WELDER**

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

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**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.

APPRENTICESHIP SCHEDULE OF PREVAILING WAGES AND SUPPLEMENTAL BENEFITS  
ADDENDUM  
EFFECTIVE PERIOD JANUARY 1, 2013 THROUGH JUNE 30, 2013

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List of Amended Classifications

1. Boilermaker
2. House Wrecker
3. Iron Worker - Ornamental
4. Iron Worker - Structural
5. Mason Tender
6. Plasterer
7. Plumber

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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)

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## **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 Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$28.91

Effective Period: 1/1/2013 - 3/31/2013  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$30.03

Effective Period: 4/1/2013 - 6/30/2013  
Wage Rate Per Hour: 70% of Journeyperson'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 Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$30.40

Effective Period: 1/1/2013 - 3/31/2013  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$31.61

Effective Period: 4/1/2013 - 6/30/2013  
Wage Rate Per Hour: 75% of Journeyperson'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 Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$31.89

Effective Period: 1/1/2013 - 3/31/2013  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$33.19

Effective Period: 4/1/2013 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyperson'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 Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$33.38

Effective Period: 1/1/2013 - 3/31/2013  
Wage Rate Per Hour: 85% of Journeyperson'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)

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**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 Journeyman'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 Journeyman'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 Journeyman'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 Journeyman'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 Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$16.60

(Bricklayer District Council)

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**CARPENTER**

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

**Carpenter (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

**Carpenter (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

**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)

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**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

(Local #780)

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**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

**Cement & Concrete Worker (501 - 1000 hours)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyperson'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 Journeyperson'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 Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$24.57

(Cement Concrete Workers District Council)

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**DERRICKPERSON & RIGGER (STONE)**  
**(Ratio of Apprentice to Journeyperson: 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 Journeyperson's rate  
Supplemental Benefit Rate Per Hour: 50% of Journeyperson's rate

**Derrickperson & Rigger (stone) - Second Year: 1st Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

**Derrickperson & Rigger (stone) - Second Year: 2nd Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

**Derrickperson & Rigger (stone) - Third Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

(Local #197)

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**DOCKBUILDER/PILE DRIVER**

**(Ratio of Apprentice to 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)

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**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

**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)

(Local #3)

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**ELEVATOR CONSTRUCTOR**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)**

**Elevator (Constructor) - First Year**

Effective Period: 7/1/2012 - 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

**Elevator (Constructor) - Third Year**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 65% of Journeyperson'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 Journeyperson's rate  
Supplemental Rate Per Hour: \$29.25  
Effective 3/17/2013 - Supplemental Benefit Per Hour: \$30.84

(Local #1)

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**ELEVATOR REPAIR & MAINTENANCE**

**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)**

**Elevator Service/Modernization Mechanic (First Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyperson'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 Journeyperson'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 Journeyperson'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 Journeyperson'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)

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**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

(Local #15)

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**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)

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**FLOOR COVERER**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)**

**Floor Coverer (First Year)**

Effective Period: 7/1/2012 - 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)

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## **HEAT & FROST INSULATOR**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)**

**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)

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**HOUSE WRECKER  
(TOTAL DEMOLITION)  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)**

**House Wrecker - First Year**

Effective Period: 7/1/2012 - 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  
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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

(Local #79)

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**IRON WORKER - ORNAMENTAL**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Iron Worker (Ornamental) - 1st Four Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 60% of Journeyman'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 Journeyman'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 Journeyman's rate  
Supplemental Rate Per Hour: \$33.73

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 70% of Journeyperson'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 Journeyperson'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 Journeyperson'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 Journeyperson'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 Journeyperson's rate  
Supplemental Rate Per Hour: \$30.40

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 50% of Journeyperson'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 Journeyperson's rate  
Supplemental Rate Per Hour: \$31.23

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 55% of Journeyperson'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 Journeyperson's rate  
Supplemental Rate Per Hour: \$32.06

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$35.29

**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 Journeyperson's rate  
Supplemental Rate Per Hour: \$33.73

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 70% of Journeyperson'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 Journeyperson's rate  
Supplemental Rate Per Hour: \$35.39

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$39.09

(Local #580)

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**IRON WORKER - STRUCTURAL  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)**

**Iron Worker (Structural) - 1st Six Months**

Effective Period: 7/1/2012 - 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

**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)

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**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**



(Local #731)

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## **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)**

**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)

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**MASON TENDER  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)**

**Mason Tender - First Year**

Effective Period: 7/1/2012 - 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

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)

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**METALLIC LATHER**

(Ratio of Apprentice to Journeyman: 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

**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)

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**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 Journeyman: 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)

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**PAINTER**

**(Ratio of Apprentice to Journeyman: 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**

**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)

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**PAINTER - STRUCTURAL STEEL**  
(Ratio of Apprentice to Journeyperson: 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 Journeyperson's rate

**Painters - Structural Steel (Second Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

**Painters - Structural Steel (Third Year)**

Effective Period: 7/1/2012 - 6/30/2013  
Wage and Supplemental Rate Per Hour: 80% of Journeyperson'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

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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)

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**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



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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)

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**POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING RENOVATION)**  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

**Pointer - Waterproofer, Caulker Mechanic - First Year**

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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

(Brockton District Council)

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**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)

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**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 Journeyperson'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 Journeyperson's rate  
Supplemental Rate Per Hour: \$31.23

(Local #28)

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**SIGN ERECTOR**

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

**Sign Erector - First Year: 1st Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 35% of Journeyperson's rate  
Supplemental Rate Per Hour: \$5.96

**Sign Erector - First Year: 2nd Six Months**

Effective Period: 7/1/2012 - 6/30/2013  
Wage Rate Per Hour: 40% of Journeyperson'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 Journeyperson'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 Journeyperson'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 Journeyperson's rate  
Supplemental Rate Per Hour: \$9.13

**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)

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**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.

**Steamfitter - Third Year**

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

Wage Rate and Supplemental Rate per Hour: 65% of Journeyman's rate.

**Steamfitter - Fourth Year**

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

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

**Steamfitter - Fifth Year**

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

Wage Rate and Supplemental Rate Per Hour: 85% of Journeyman's rate.

(Local #638)

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**STONE MASON - SETTER**

(Ratio Apprentice of Journeyman: 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 Journeyman's rate

**Stone Mason - Setters - Second 750 Hours**

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

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

Supplemental Rate Per Hour: 50% of Journeyman's rate

**Stone Mason - Setters - Third 750 Hours**

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

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Rate Per Hour: 50% of Journeyman's rate

**Stone Mason - Setters - Fourth 750 Hours**

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

Wage Rate Per Hour: 80% of Journeyman's rate

Supplemental Rate Per Hour: 50% of Journeyman'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)

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**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)

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**TILE LAYER - SETTER**

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

**Tile Layer - Setter - First 750 Hours**

Effective Period: 7/1/2012 - 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)

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**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  
§230 PREVAILING WAGE SCHEDULE

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LABOR LAW § 230 AND NYC ADMINISTRATIVE CODE § 6-130  
BUILDING SERVICE EMPLOYEES

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PREVAILING WAGE FOR BUILDING SERVICE EMPLOYEES ON NYC CONTRACTS PURSUANT TO  
LABOR LAW § 230 ET SEQ.

Building service employees on public contracts must receive not less than the prevailing rate of wage and supplements for the classification of work performed. In accordance with Labor Law §230 et seq. the Comptroller of the City of New York has promulgated this schedule of prevailing wages and supplemental benefits for building service employees engaged on New York City public building service contracts in excess of \$1,500.00. Prevailing rates are required to be annexed to and form part of the contract pursuant to §231 (4).

Contracting agencies that anticipate doing work that may require building service trades or classifications not included in this schedule may request the Comptroller to establish a proper classification and wage determination for the work. Contractors using trades and/or classifications for which the Comptroller has not promulgated wages and benefits do so at their own risk.

Contractors are advised to review the applicable Comptroller's Prevailing Wage Schedule before bidding on public work. Any Prevailing Wage Rate error made by the Contracting Agency, whether in a contract document or other communication, will not preclude a finding against the contractor of a prevailing-wage violation.

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PREVAILING WAGE FOR BUILDING SERVICE EMPLOYEES IN NEW YORK CITY LEASED OR  
FINANCIALLY ASSISTED FACILITIES PURSUANT TO NYC ADMINISTRATIVE CODE § 6-130

Covered landlords & covered financial assistance recipients shall ensure that all building service employees performing building service work at the premises to which a lease or financial assistance pertains are paid no less than the prevailing wage listed in the Labor Law §230 Prevailing Wage Schedule.

Covered Landlords include:

Businesses (other than not-for-profit organizations) leasing to New York City agencies commercial office space or commercial office facilities of 10,000 square feet or more where the City leases or rents no less than 51% of the total square footage of the building to which the lease applies (no less than 80% in Staten Island or in an area not defined as an exclusion area pursuant to section 421-a of the real property tax law on the date of enactment of the local law).

Covered Financial Assistance Recipients include:

Businesses (other than not-for-profit organizations) with annual gross revenues of five million dollars or more who have received financial assistance from the City of New York (as defined in New York City Administrative Code §6-130) with a total value of one million dollars or more.

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

**Exemptions: Business Improvement Districts and employers with manufacturing operations at the premises to which the financial assistance pertains.**

The information is intended to assist you in meeting your prevailing wage obligation. You should consult New York City Administrative Code §6-130 to determine whether you are covered by this prevailing wage law. New York City Administrative Code § 6-130 requires the City to maintain an updated list of covered landlords and financial assistance recipients who are subject to the prevailing wage requirement.

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Labor Law § 231 (6) and NYC Administrative Law §6-130 require contractors to post on the site of the work a current copy of this schedule of wages and supplements.

This schedule is applicable to work performed during the effective period, unless otherwise noted. Changes to this schedule are published on our web site [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov). Contractors must pay the wages and supplements in effect when the building service employee performs the work. Preliminary schedules for future one-year periods appear in the City Record on or about June 1 each succeeding year. Final schedules appear on or about July 1 in the City Record and on our web site [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov).

Contractors are solely responsible for maintaining original payroll records delineating, among other things, the hours worked by each employee within a given classification.

Some of the rates in this schedule are based on collective bargaining agreements. 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.

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.

**Benefits are paid for EACH HOUR WORKED unless otherwise noted.**

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



Office of the Comptroller  
BUREAU OF LABOR LAW

CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
JOHN C. LIU

BUREAU OF LABOR LAW

MUNICIPAL BUILDING  
ONE CENTRE STREET, ROOM 1120  
NEW YORK, N.Y. 10007-2341

TEL: (212) 669-4443  
FAX: (212) 669-4002

If you are a Covered Building Service Employee and you have been paid less than the Prevailing Wage and Benefits, please contact us at 212-669-4443 or download our complaint form from our website at [WWW.COMPTROLLER.NYC.GOV](http://WWW.COMPTROLLER.NYC.GOV) (click on the Bureau of Labor Law).

Si es un empleado de servicios a edificios elegible y recibió menos del sueldo prevalente y beneficios, por favor contáctenos en 212-669-4443 o descarga un formulario de reclamo del sitio del Internet [WWW.COMPTROLLER.NYC.GOV](http://WWW.COMPTROLLER.NYC.GOV) (oprime "Oficina de Derecho Laboral").

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

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

§230 SCHEDULE OF PREVAILING WAGES AND SUPPLEMENTAL BENEFITS ADDENDUM  
EFFECTIVE PERIOD JANUARY 1, 2013 THROUGH JUNE 30, 2013

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List of Amended Changes

1. MODIFIED PREAMBLE TO INCORPORATE PROVISIONS OF NYC  
ADMINISTRATIVE CODE §6-130

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

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**BOILER SERVICEPERSON/TANK CLEANER MECHANIC (LOW PRESSURE)**

**Boiler Service Person/Tank Cleaner Mechanic (Low Pressure)**

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

Wage Rate per Hour: \$11.37

Supplemental Benefit Rate per Hour: \$5.57

**Overtime Description**

Work in excess of 8 hours performed on a Sunday or Holiday shall be paid two and one half times the regular rate.

**Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

**Paid Holidays**

- New Year's Day
- Martin Luther King Jr. Day
- President's Day
- Good Friday
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Day
- Employee's Birthday

**Vacation**

- 1 year service.....five (5) days
- 3 years service or more.....ten (10) days
- 8 years service or more.....fifteen (15) days
- 13 years service or more.....twenty (20) days

**SICK LEAVE:**

- 1-2 years employment.....4 days
- 2-3 years employment.....5 days
- 3-4 years employment.....6 days
- 4-5 years employment.....8 days
- 6 years or more employment.....10 days

(Local #32 B/J)

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**BUILDING CLEANER AND MAINTAINER (OFFICE)**

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

**Office Building Class "A" Handyperson (Over 280,000 square feet gross area)**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: **\$24.77**  
Supplemental Benefit Rate per Hour: **\$9.13**

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: **\$25.10**  
Supplemental Benefit Rate per Hour: **\$9.51**

**Office Building Class "A" Foreperson, Starter (Over 280,000 square feet gross area)**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: **\$24.66**  
Supplemental Benefit Rate per Hour: **\$9.13**

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: **\$24.99**  
Supplemental Benefit Rate per Hour: **\$9.51**

**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" Handyperson (Over 120,000 and less than 280,000 square feet gross area)**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: **\$24.74**  
Supplemental Benefit Rate per Hour: **\$9.13**



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

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$25.07  
Supplemental Benefit Rate per Hour: \$9.51

**Office Building Class "B" Foreperson, Starter (Over 120,000 and less than 280,000 square feet gross area)**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: \$24.63  
Supplemental Benefit Rate per Hour: \$9.13

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: \$24.95  
Supplemental Benefit Rate per Hour: \$9.51

**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" Handyperson (Less than 120,000 square feet gross area)**

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: \$25.02  
Supplemental Benefit Rate per Hour: \$9.51

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

**Office Building Class "C" Foreperson, Starter (Less than 120,000 square feet gross area)**

Effective Period: 7/1/2012 - 12/31/2012  
Wage Rate per Hour: **\$24.59**  
Supplemental Benefit Rate per Hour: **\$9.13**

Effective Period: 1/1/2013 - 6/30/2013  
Wage Rate per Hour: **\$24.91**  
Supplemental Benefit Rate per Hour: **\$9.51**

**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  
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**

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

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)

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**BUILDING CLEANER AND MAINTAINER (RESIDENTIAL)**

**Residential Building Class "A" Handyperson**

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: **\$22.94**

Supplemental Benefit Rate per Hour: **\$8.68**

Supplemental Note: Effective 1/1/2013 - \$9.43

Effective Period: 4/21/2013 - 6/30/2013

Wage Rate per Hour: **\$23.57**

Supplemental Benefit Rate per Hour: **\$9.43**

**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

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

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" Handyperson**

**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: **\$22.88**

Supplemental Benefit Rate per Hour: **\$8.68**

Supplemental Note: Effective 1/1/2013 - \$9.43

Effective Period: 4/21/2013 - 6/30/2013

Wage Rate per Hour: **\$23.51**

Supplemental Benefit Rate per Hour: **\$9.43**

**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.

**Residential Building Class "C" Handyperson**

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

**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: \$22.83**

**Supplemental Benefit Rate per Hour: \$8.68**

**Supplemental Note: Effective 1/1/2013 - \$9.43**

**Effective Period: 4/21/2013 - 6/30/2013**

**Wage Rate per Hour: \$23.45**

**Supplemental Benefit Rate per Hour: \$9.43**

**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

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

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.

**SICK LEAVE**

After 1 year of service.....ten (10) days per year

(Local #32 B/J)

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**BUILDING HVAC SERVICES OPERATOR**

**Engineer (Refrigeration)**

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

Wage Rate per Hour: **\$34.15**

Supplemental Benefit Rate per Hour: **\$15.44**

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

Wage Rate per Hour: **\$35.18**

Supplemental Benefit Rate per Hour: **\$15.78**

**Fireperson**

Fireperson (Helper): Assists the Engineer

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

Wage Rate per Hour: **\$26.59**

Supplemental Benefit Rate per Hour: **\$15.09**

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

Wage Rate per Hour: **\$27.39**

Supplemental Benefit Rate per Hour: **\$15.41**

**Overtime Description**

All hours worked on a holiday shall be paid at two and one half times the regular wage rate in lieu of the paid day off.

**Overtime**

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

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

Time and one half the regular rate for Saturday.  
Time and one half the regular rate for Sunday.

**Paid Holidays**

New Year's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day  
Plus six (6) floating Holidays

**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

(Local #94)

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**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)

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**FUEL OIL**

**Fuel Oil, Coal, Fuel Gas, Petroleum Product Chauffeur (5th Year and above)**

Effective Period: 7/1/2012 - 12/15/2012  
Wage Rate per Hour: \$30.11  
Supplemental Benefit Rate per Hour: \$18.80

Effective Period: 12/16/2012 - 6/30/2013

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

Wage Rate per Hour: **\$30.61**

Supplemental Benefit Rate per Hour: **\$19.80**

Supplemental Note: Effective 1/1/2013 - \$20.42

**Fuel Oil, Coal, Fuel Gas, Petroleum Product Chauffeur (4th Year)**

Effective Period: 7/1/2012 - 12/15/2012

Wage Rate per Hour: **\$27.50**

Supplemental Benefit Rate per Hour: **\$18.80**

Effective Period: 12/16/2012 - 6/30/2013

Wage Rate per Hour: **\$28.00**

Supplemental Benefit Rate per Hour: **\$19.80**

Supplemental Note: Effective 1/1/2013 - \$20.42

**Fuel Oil, Coal, Fuel Gas, Petroleum Product Chauffeur (3rd Year)**

Effective Period: 7/1/2012 - 12/15/2012

Wage Rate per Hour: **\$25.50**

Supplemental Benefit Rate per Hour: **\$18.80**

Effective Period: 12/16/2012 - 6/30/2013

Wage Rate per Hour: **\$26.00**

Supplemental Benefit Rate per Hour: **\$19.80**

Supplemental Note: Effective 1/1/2013 - \$20.42

**Fuel Oil, Coal, Fuel Gas, Petroleum Product Chauffeur (2nd Year)**

Effective Period: 7/1/2012 - 12/15/2012

Wage Rate per Hour: **\$23.50**

Supplemental Benefit Rate per Hour: **\$18.80**

Effective Period: 12/16/2012 - 6/30/2013

Wage Rate per Hour: **\$24.00**

Supplemental Benefit Rate per Hour: **\$19.80**

Supplemental Note: Effective 1/1/2013 - \$20.42

**Fuel Oil, Coal, Fuel Gas, Petroleum Product Chauffeur (1st Year)**

Effective Period: 7/1/2012 - 12/15/2012

Wage Rate per Hour: **\$21.50**

Supplemental Benefit Rate per Hour: **\$18.80**

Effective Period: 12/16/2012 - 6/30/2013

Wage Rate per Hour: **\$22.00**

Supplemental Benefit Rate per Hour: **\$19.80**

Supplemental Note: Effective 1/1/2013 - \$20.42

**overtime**



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

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

**Overtime Holidays**

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

Martin Luther King Jr. Day  
Lincoln's Birthday  
Washington's Birthday  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Election Day  
Veteran's Day

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

New Year's Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

New Year's Day  
Martin Luther King Jr. Day  
Lincoln's Birthday  
Washington's Birthday  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Election Day  
Veteran's Day  
Thanksgiving Day  
Christmas Day

**Vacation**

Less than 75 days worked.....no vacation.  
75 days worked, but less than 110 days worked in a calendar year.....five (5) days the following year.  
110 days or more worked in a calendar year.....ten (10) days the following year.

**SICK LEAVE:**

1 day sick leave earned for each 40 days worked in the preceding calendar year for a maximum of five (5) days per calendar year.

(Local #553)

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**GARDENER**

**Gardener**

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

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

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)

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**LOCKSMITH**

**Locksmith**

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

Wage Rate per Hour: **\$21.46**

Supplemental Benefit Rate per Hour: **\$5.89**

**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)

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**MEDICAL WASTE REMOVAL**

**Driver**

Effective Period: 7/1/2012 - 3/31/2013

Wage Rate per Hour: **\$17.75**

Supplemental Benefit Rate per Hour: **\$8.79**

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

Wage Rate per Hour: **\$18.00**

Supplemental Benefit Rate per Hour: **\$9.34**

**Helper**

Effective Period: 7/1/2012 - 3/31/2013

Wage Rate per Hour: **\$14.00**

Supplemental Benefit Rate per Hour: **\$8.79**

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

Wage Rate per Hour: **\$14.25**

Supplemental Benefit Rate per Hour: **\$9.34**

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§230 PREVAILING WAGE SCHEDULE

**Tractor Trailer Driver**

Effective Period: 7/1/2012 - 3/31/2013

Wage Rate per Hour: \$20.25

Supplemental Benefit Rate per Hour: \$8.79

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

Wage Rate per Hour: \$20.50

Supplemental Benefit Rate per Hour: \$9.34

**Overtime Description**

Time and one half the regular hourly rate after an 8 hour day or after 40 hours in any work week. The seventh day of work in a workweek is paid at double time the regular hourly rate. Time and one half the regular hourly rate for work on a holiday plus days pay for below paid holidays.

**Paid Holidays**

- Presidents' Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Christmas Day

**Vacation**

1 year of service but less than five years.....	10 days
5 years of service but less than ten years.....	15 days
10 years of service.....	16 days
11 years.....	17 days
12 years.....	18 days
13 years.....	19 days
14 years.....	20 days
20 years.....	21 days
21 years.....	22 days
22 years.....	23 days
23 years.....	24 days
24 years.....	25 days
Plus 5 Personal Days	

(Local #813)

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**MOVER – OFFICE FURNITURE AND EQUIPMENT**

**Heavy and Tractor Trailer Truck Driver**

Tractor-trailer combination or a truck with a capacity of at least 26,000 pounds Gross Vehicle Weight (GVW)

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

Wage Rate per Hour: \$23.11

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

Supplemental Benefit Rate per Hour: **\$4.10**

**Light Truck Driver**

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

Wage Rate per Hour: **\$18.08**

Supplemental Benefit Rate per Hour: **\$4.10**

**Laborer and Freight, Stock, and Material Movers, Hand**

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

Wage Rate per Hour: **\$17.68**

Supplemental Benefit Rate per Hour: **\$4.10**

**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)

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**REFUSE REMOVER**

**Refuse Remover**

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

Wage Rate per Hour: **\$27.62**

Supplemental Benefit Rate per Hour: **\$4.10**

**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)

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**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

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

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.

### 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)

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## 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

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

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**

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

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

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.

### 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)

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## 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

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

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

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



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§230 PREVAILING WAGE SCHEDULE

**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**

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

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

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)

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**SECTION 01000**

**GENERAL  
CONDITIONS**

**APPLICABLE TO ALL CONTRACTS**

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The ADDENDUM TO THE GENERAL CONDITIONS is contained in Volume 3 of the Contract Documents. Volume 3 contains the following:

- Addendum to the General Conditions
- Specifications

## SECTION 01000 GENERAL CONDITIONS

### PART 1 - GENERAL

#### 1.01 Applicability of General Conditions

- A. Since there are several separate Contracts pertaining to the construction of this project, for convenience, the General Conditions are stated only once. These General Conditions are applicable to all Contracts and shall constitute an integral part of each separate Contract to the same extent as though they were repeated in full therein.
- B. The Contractor is advised that various sections of these General Conditions are amended by the Addendum to the General Conditions. This Addendum also includes various schedules referred to in these General Conditions (Schedules A through F). These schedules contain important information that is specific to this project. The Addendum, including Schedules A through F, is set forth in Volume 3 of the Contract Documents.
- C. Throughout these General Conditions, various responsibilities and obligations are assigned to each of the following four Contractors: (1) General Construction, (2) Plumbing, (3) Heating/Ventilating/Air-Conditioning/Fire Protection, and (4) Electrical. In the event the Project does not involve all four Contracts, the responsibilities and obligations of each omitted Contract shall be assigned to one of the Contracts which is included in the Project. The Addendum to the General Conditions specifies which Contractor shall perform the responsibilities and obligations of each omitted contract, as set forth in the General Conditions.

#### 1.02 Scope and Intent

- A. DESCRIPTION OF PROJECT - Refer to the Addendum to the General Conditions for a description of this project.
- B. PROGRESS SCHEDULE
  - 1. Within 15 days after the Notice to Proceed, the Contractor for General Construction Work shall prepare a composite Job Progress Chart that shall indicate graphically and chronologically the time the various parts of the work of all Contracts shall commence and be completed. The Chart shall be in a reproducible form approved by the Commissioner.
  - 2. Immediately after the Notice to Proceed of their Contracts, the Contractors for Plumbing Work, Heating, Ventilating and Air Conditioning Work (HVAC) and Electrical Work, as applicable, shall furnish all necessary data to the Contractor for General Construction Work, and cooperate in all respects in connection with formulation of the Chart.
  - 3. The Chart shall show the sequence and interrelationship of each operation of all the Contracts.
  - 4. The Chart shall show the estimated time for fabrication and/or delivery of all materials and equipment required for the work.
  - 5. As directed by the Resident Engineer, the Contractors shall meet with each other and with the Resident Engineer to review and make the necessary adjustments to the composite Job Progress Chart, and to coordinate the work indicated thereon. (Article 12 of the Contract).
  - 6. When completed, the Job Progress Chart shall be signed and dated by each Contractor or their official representative. The Resident Engineer is authorized to sign the Chart for the Department of Design and Construction. Thereafter, the Chart shall be modified only with the Commissioner's approval. When directed by the Commissioner, the Chart shall be revised and updated. If necessary, a new revised Chart shall be prepared in the same manner as outlined above for the original Chart.



7. The approved Chart shall be distributed by the Contractor for General Construction Work, as follows: the original and two (2) copies to the Resident Engineer, two (2) copies to each Contractor, and two (2) copies to the Department of Design and Construction
  8. All Contractors shall consult the approved Progress Chart and install their work within the time limits indicated on the Chart.
  9. The Resident Engineer shall post in a prominent place in the field office a copy of the Chart and mark thereon the progress of the work, including the times when various parts of the work commenced and were completed.
- C. **COMPLETION OF WORK** - Work to be done under each separate Contract comprises the furnishing of all labor, materials, equipment and other appurtenances and obtaining of all regulatory agency approvals necessary and required to complete the construction work in accordance with the Contract.
- D. **OMISSION OF DETAILS** - All work called for in the Specifications applicable to each separate Contract but not shown on the Contract Drawings in their present form, or vice versa, is required, and shall be performed by the Contractor as though it were originally delineated or described. Such work is deemed included in the Bid Price.
- E. **WORK NOT IN SPECIFICATIONS OR CONTRACT DRAWINGS** - Work not particularly specified in the Specifications nor detailed on the Contract Drawings but involved in carrying out their intent or in the complete and proper execution of the work, is required, and shall be performed by the Contractor. Such work is deemed included in the Bid Price.
- F. **SILENCE OF THE SPECIFICATIONS** - The apparent silence of the Specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best practice is to prevail and that only the best material and workmanship is to be used and interpretation of the Specifications shall be made upon that basis.
- G. **CONFLICT BETWEEN CONTRACT DRAWINGS AND SPECIFICATIONS** - Should any conflict occur in or between the Drawings and Specifications, the Contractor shall be deemed to have estimated on the most expensive way of doing the work unless the Contractor shall have asked for and obtained a decision in writing from the Commissioner before the submission of the bid as to what shall govern.
- H. **COOPERATION BETWEEN CONTRACTORS** - Inasmuch as the completion of the project within the prescribed limit of time is dependent largely upon the close and active cooperation of all those engaged therein, it is therefore expressly understood and agreed that the Contractor shall lay out and install all work at such time or times and in such manner as not to delay or interfere with the carrying forward of the work of other Contractors. In the event of any dispute arising as to possible or alleged interference between the various Contractors which may retard the progress of the work, the dispute shall be adjudicated by the Commissioner, whose decision as to the party or parties at fault and as to the manner in which the matter may be adjudicated, shall be binding and conclusive on all parties.
- I. **"DIRECTED," "REQUIRED," ETC.**- Wherever reference is made in the Contract to the work or its performance, the terms "directed," "required," "permitted," "ordered," "designated," "prescribed," "determined," and words of similar import shall, unless expressed otherwise, imply the direction, requirements, permission, order, designation or prescription of the Commissioner.
- J. **"APPROVED," ETC.** - "Approved," "acceptable," "satisfactory," and words of similar import shall mean and intend approved, acceptable or satisfactory to the Commissioner.
- K. **CONFLICTS OF INTERESTS** - The Charter of the City of New York, Section 2604, provides a number of safeguards in relation to conflicts of interest. Such safeguards include, without limitation, the following: "No public servant shall receive compensation except from the City for performing any official duty or accept or receive any gratuity from any person whose interest may be affected by the

public servant's official action."

1. Other sections of the City Charter, the Administrative Code and the Penal Law are applicable in implementing the basic Conflicts of Interest Section and under certain circumstances penalties may be invoked against the donor as well as the recipient of any form of valuable gift.
2. Notice is hereby given that sections of the City Charter, the Administrative Code and the Penal Law alluded to herein shall apply under the terms of this Contract to circumstances relevant to conflicts of interest and shall be extended in application to subcontractors authorized to perform work, labor and services pursuant to this Contract and further, it shall be the duty and responsibility of the Contractors to so inform their respective subcontractors.

### **1.03 Provisions Referenced in the Contract**

- A. Various Articles of the Contract refer to requirements set forth in Schedule A of the General Conditions. Schedule A, which is included in the Addendum to the General Conditions, sets forth 1) the referenced Articles of the Contract, and 2) the specific requirements applicable to each respective Contract.
- B. Applications for Extensions of Time, as indicated in Article 13 of the Contract, shall be made in accordance with the Rules of the Procurement Policy Board.
- C. **PARTIAL PAYMENTS FOR MATERIALS IN ADVANCE OF THEIR INCORPORATION IN THE WORK PURSUANT TO ARTICLE 42 OF THE "CONTRACT"** - In order to better insure the availability of materials, fixtures and equipment when needed for the work, the Commissioner may authorize partial payment for certain materials, fixtures and equipment, prior to their incorporation in the work, but only in strict accordance with, and subject to, all the terms and conditions set forth in the Specifications, unless an alternate method of payment is elsewhere provided in the Specifications for specified materials, fixtures or equipment.
  1. The Contractor shall submit to the Commissioner a written request, in quadruplicate, for payment for materials purchased or to be purchased for which the Contractor needs to be paid prior to their actual incorporation in the work. The request shall be accompanied by a schedule of the types and quantities of materials, and shall state whether such materials are to be stored on or off the site.
  2. Where the materials are to be stored off the site, they shall be stored at a place other than the Contractor's premises (except with the written consent of the Commissioner) and under the conditions prescribed or approved by the Commissioner. The Contractor shall set apart and separately store at the place or places of storage all materials and shall clearly mark same "PROPERTY OF THE CITY OF NEW YORK", and further, shall not at any time move any of said materials to another off-site place of storage without the prior written consent of the Commissioner. Materials may be removed from their place of storage off the site for incorporation in the work upon approval of the Resident Engineer.
  3. Where the materials are to be stored at the site, they shall be stored at such locations as shall be designated by the Resident Engineer and only in such quantities as, in the opinion of the Resident Engineer, will not interfere with the proper performance of the work by the Contractor or by other Contractors then engaged in performing work on the site. Such materials shall not be removed from their place of storage on the site except for incorporation in the work, without the approval of the Resident Engineer.
4. **INSURANCE**
  - a. **STORAGE OFF-SITE** - Where the materials are stored off the site and until such time as they are incorporated in the work, the Contractor shall fully insure such materials against any and all risks of destruction, damage or loss including but not limited to fire, theft, and any other casualty or happening. The policy of insurance shall be payable to the City of New York. It shall be in such terms and amounts as shall be approved by the Commissioner and shall be

placed with a company duly licensed to do business in the State of New York. The Contractor shall deliver the original and one (1) copy of such policy or policies marked "Fully Paid" to the Commissioner.

- b. STORAGE ON THE SITE - Where the materials are stored at the site, the Contractor shall furnish satisfactory evidence to the Commissioner that they are properly insured against loss, by endorsements or otherwise, under the policy or policies of insurance obtained by the Contractor to cover losses to materials owned or installed by the Contractor. The policy of insurance shall cover fire and extended coverage against windstorm, hail, explosion and riot attending a strike, civil commotion, aircraft, vehicles and smoke.
5. All costs, charges and expenses arising out of the storage of such materials, shall be paid by the Contractor and the City hereby reserves the right to retain out of any partial or final payment made under the Contract an amount sufficient to cover such costs, charges and expenses with the understanding that the City shall have and may exercise any and all other remedies at law for the recovery of such cost, charges and expenses. There shall be no increase in the Contract price for such costs, charges and expenses and the Contractor shall not make any claim or demand for compensation therefor.
6. The Contractor shall pay any and all costs of handling and delivery of materials, to the place of storage and from the place of storage to the site of the work; and the City shall have the right to retain from any partial or final payment an amount sufficient to cover the cost of such handling and delivery.
7. In the event that the whole or any part of these materials are lost, damaged or destroyed in advance of their satisfactory incorporation in the work, the Contractor, at the Contractor's own cost, shall replace such lost, damaged or destroyed materials of the same character and quality. The City will reimburse the Contractor for the cost of the replaced materials to the extent, and only to the extent, of the funds actually received by the City under the policies of insurance hereinbefore referred to. Until such time as the materials are replaced, the City will deduct from the value of the stored materials or from any other money due under the Contract, the amount paid to the Contractor for such lost, damaged or destroyed materials.
8. Should any of the materials paid for the City hereunder be subsequently rejected or incorporated in the work in a manner or by a method not in accordance with the Contract and Specifications, the Contractor shall remove and replace, at Contractor's own cost, such defective or improperly incorporated material with materials complying with the Contract and Specifications. Until such materials are replaced, the City will deduct from the value of the stored materials or from any other money due the Contractor, the amount paid by the City for such rejected or improperly incorporated materials.
9. Payments for the cost of materials made hereunder shall not be deemed to be an acceptance of such materials as being in accordance with the Contract Documents, and the Contractor always retains and must comply with the Contractor's duty to deliver to the site and properly incorporate in the work only materials which comply with the Contract Documents.
10. The Contractor shall retain any and all risks in connection with the damage, destruction or loss of the materials paid for hereunder to the time of delivery of the same to the site of the work and their proper incorporation in the work in accordance with the Contract Documents.
11. The Contractor shall comply with all laws and the regulations of any governmental body or agency pertaining to the priority purchase, allocation and use of the materials.
12. When requesting payment for such materials, the Contractor shall submit with the partial estimate duly authenticated documents of title, such as bills of sale, invoices or warehouse receipts, all in quadruplicate. The executed bills of sale shall transfer title to the materials from the Contractor to the City (in the event that the invoices state that the material has been purchased by a subcontractor, bills of sale in quadruplicate will also be required transferring title to the materials

from subcontractor to the Contractor).

13. Where the Contractor, with the approval of the Commissioner, has purchased unusually large quantities of materials in order to assure their availability for the work, the Commissioner, at the Commissioner's option, may waive the requirements of Paragraph 12 provided the Contractor furnishes evidence in the form of an affidavit from the Contractor in quadruplicate, and such other proof as the Commissioner may require, that the Contractor is the sole owner of such materials and has purchased them free and clear of all liens and other encumbrances. In such event, the Contractor shall pay for such materials and submit proof thereof, in the same manner as provided in Paragraph 12 hereof, within seven (7) days after receipt of payment therefor from the Comptroller. Failure on the part of the Contractor to submit satisfactory evidence that all such materials have been paid for in full, shall preclude the Contractor from payments under the Contract.
14. The Contractor shall include in each succeeding partial estimate requisition a summary of materials stored which shall set forth the quantity and value of materials in storage, on or off the site, at the end of each preceding estimate period; the amount removed for incorporation in the work; the quantity and value of materials delivered during the current period and the total value of materials on hand for which payment thereof will be included in the current payment estimate.
15. Upon proof to the satisfaction of the Commissioner of the actual cost of such materials and upon submission of proper proof of title as required under Paragraph 12 or Paragraph 13 hereof, payment will be made therefore to the extent of 85%, provided however, that the cost so verified, established and approved shall not exceed the estimated cost of such materials included in the approved detailed breakdown estimate submitted in accordance with Article 41 of the Contract; if it does, the City will pay only 85% approved estimated cost.
16. Upon the incorporation in the work of any such materials, which have been paid for in advance of such incorporation in accordance with the foregoing provisions, payment will be made for such materials incorporated in the work pursuant to Article 42 of the Contract, less any sums paid pursuant to Paragraph 15 herein.

D. **EXCISE AND TRANSPORTATION TAXES-** Pursuant to Section 6 of the "Information for Bidders", the Contractor may be exempted from the payment of Federal Excise and Transportation Taxes in accord with the following:

1. Excise Tax Exemption Certificate will be certified by the Department of Design and Construction where requested by the Contractor, for items which fall within the scope of the Contract and which may be exempt from Federal Excise Tax.
2. **TRANSPORTATION TAX** - The 3% Federal Tax has been repealed and is hereby deleted from the Contract. The 10% Federal Tax for travel remains in effect.

E. **CORRESPONDENCE** - There shall be six (6) copies of all letters of correspondence to the Department of Design and Construction. An additional copy of all correspondence shall be sent directly to the Resident Engineer at the job site.

F. **MOBILIZATION PAYMENT** - A line item for mobilization shall be allowed on the Contractor's Detailed Estimate Breakdown submitted in accordance with Article 41 of the Contract. The Mobilization Payment is intended to include the cost of required bonds, insurance coverage and/or any other expenses required for the initiation of the Contract Work. All costs for mobilization shall be deemed included in the total Contract Price. The Detailed Estimate shall reflect, and the Mobilization Payment shall be made, in accordance with the following schedule:

<b>Contract Amount</b>	<b>Percent</b>	<b>Mobilization</b>
Less than \$ 50,000 x	0 =	0
\$ 50,000 - \$ 100,000	= \$	6,000
\$ 100,001 - \$ 500,000 x	6 = \$	6,000 (min) - \$ 30,000 (max)

\$ 500,001 - \$ 2,500,000	x	5	=	\$ 30,000 (min) - \$ 125,000 (max)
Over \$ 2,500,000	x	4	=	\$ 125,000 (min) - \$ 300,000 (max)

The Contractor may requisition for one-half (1/2) of the Mobilization Payment upon satisfactory completion of the following:

1. Installation of any required field office(s).
2. Submission of all required insurance certificates and bonds.
3. Approval by the Department of Design and Construction of the coordinated progress schedule for the project and the Contractor's Shop Drawing schedule.

The remaining balance of the Mobilization Payment may be requisitioned only after 10 percent (10%) of the Contract price, exclusive of the total amount of Mobilization Payments made or to be made hereunder, shall have been approved for payment.

#### 1.04 Contract Drawings

- A. SCHEDULE C - The Contract Drawings are listed in Schedule C, which is set forth in the Addendum to the General Conditions. Such drawings referred to in the Contract, and in the applicable Specifications for the various Contracts bear the general title:

City of New York  
 Department of Design and Construction  
 Division of Structures

- B. DOCUMENTS FURNISHED TO THE CONTRACTOR - After the award of the Contract, the Contractor for General Construction Work will be furnished with five (5) sets of paper prints of all Contract Drawings mentioned in Paragraph A above.

- C. PRINTS (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)

Each Contractor, other than the Contractor for General Construction Work referred to in Paragraph B, will receive two (2) sets of paper prints of all Drawings listed in Paragraph A and three (3) sets of paper prints of all Contract Drawings applying directly to each Contractor's own Contract.

- D. Each Contractor will receive nine (9) complete sets of Specifications.
- E. ADDITIONAL COPIES of Drawings and Specifications, when requested, will be furnished to the Contractor if available.
- F. COORDINATION AND COOPERATION - Since the Contracts are all related to the project, the Contractor shall consult and study the requirement of the Contract Drawings and Specifications of all Contracts furnished to the Contractor, so that the Contractor may become acquainted with the work of the project as a whole in order to achieve the proper coordination and cooperation necessary for the efficient and timely performance of the work.
- G. SUPPLEMENTARY DRAWINGS - When, in the opinion of the Commissioner, it becomes necessary to more fully explain the work to be done, or to illustrate the work further, or to show any changes which may be required, drawings known as Supplementary Drawings will be prepared by the Commissioner.
- H. COMPENSATION - Where Supplementary Drawings entail extra work, compensation therefor to the Contractor shall be subject to the terms of the "Contract". The Supplementary Drawings shall be binding upon the Contractor with the same force as the Contract Drawings.

- I. SUPPLEMENTARY DRAWING PRINTS - Three (3) copies of prints of these Supplementary Drawings will be furnished to the Contractor.
- J. COPIES TO SUBCONTRACTORS - The Contractor shall furnish each of its subcontractors and material suppliers such copies of Contract Drawings, Supplementary Drawings, or copies of the Specifications as may be required for its work.
- K. CONTRACTOR TO CHECK DRAWINGS - The Contractor shall verify all dimensions, quantities and details shown on the Contract Drawings, Schedules, or other data received from the Commissioner, and shall notify the Commissioner of all errors, omissions, conflicts and discrepancies found therein. Notice of such errors shall be given before the Contractor proceeds with any work. Figures shall be used in preference to scale dimensions and large-scale drawings in preference to small-scale drawings.

#### **1.05 Shop Drawings and Record Drawings**

##### **A. SHOP DRAWINGS**

1. SUBMISSION OF SHOP DRAWINGS - For instructions relative to Shop Drawings involving electrical or mechanical work or equipment of any nature called for in any Contract, see the General Electrical Requirements and the General Mechanical Requirements.
2. SHOP DRAWINGS - The Contractor shall promptly prepare and submit layout detail and Shop Drawings of such parts of the work as are indicated in the Specifications or as required. These Shop Drawings shall be made in accordance with the Contract Drawings, Specifications and Supplementary Drawings, if any. The Shop Drawings shall be accurate and distinct and give all the dimensions required for the fabrication, erection and installation of the work.
3. SIZE OF DRAWINGS - The Shop Drawings, unless otherwise directed, shall preferably be on sheets of the same size as the Contract Drawings, with a one half (1/2) inch marginal space on each side and a two (2) inch marginal space for binding on the left side.
4. SCOPE OF DRAWINGS - Shop Drawings shall be numbered consecutively and shall accurately and distinctly represent the following:
  - a. All working and erection dimensions.
  - b. Arrangements and sectional views.
  - c. Necessary details, including performance characteristics, and complete information for making necessary connections with other work.
  - d. Kinds of materials including thicknesses and finishes.
  - e. All other information required by the Commissioner.
5. TITLES AND REFERENCE - Shop Drawings shall be dated and contain:
  - a. Name of the Project, DDC Project Number and Contract Number.
  - b. The descriptive names of equipment, or materials covered by the Contract Drawings and the classified item number or numbers, if any, under which it is, or they are required.
  - c. The locations or points at which materials, or equipment, are to be installed in the work.
  - d. Cross references to the section number, detail number and paragraph number of the Contract Specifications.

- e. Cross references to the sheet number, detail number, etc., of the Contract Drawings.

NOTE: In addition to the above requirements, the Shop Drawings shall bear a stamp having the following wording:

FIELD MEASUREMENTS - The Contractor certifies that it has verified and supplemented the Contract Drawings by taking all required field measurements, that said measurements correctly reflect all field conditions and that this Shop Drawing incorporates said measurements.

6. THE SUBMISSION OF SHOP DRAWINGS - The Shop Drawings shall be accompanied by a letter of transmittal, in triplicate, containing the name of the Project, the name of the Contractor, the number of Drawings, titles and any other requirements. Re-submission of the same drawings shall bear the original number of the drawings and the original titles.
7. PRELIMINARY SUBMISSION - The Contractor shall submit one (1) set of sepia Shop Drawings to the Consultant Architect/Engineer for their approval. A satisfactory Shop Drawing will be stamped "Approved", be dated and one (1) copy thereof will be returned to the Contractor by letter. Should the Shop Drawing not be approved by the Consultant Architect/Engineer, the Commissioner will return the sepia Shop Drawings with the necessary corrections and changes to be made as indicated thereon.
8. REVISIONS - The Contractor must make such corrections and changes and again submit one (1) set of sepia drawings for the approval of the Consultant Architect/Engineer. The Contractor shall revise and resubmit the Shop Drawing as required by the Consultant Architect/Engineer until approval thereof is obtained. However, Shop Drawings which have been stamped "Approved As Noted" shall be considered an "Approved" Shop Drawing and NEED NOT be revised and resubmitted.

No work called for by the Shop Drawings shall be done until the approval of the said drawings by the Consultant Architect/Engineer is given. In addition to the foregoing Shop Drawing transmissions, a copy of any Shop Drawing prepared by any of the Contractors which Shop Drawing indicated work related to, adjacent to, impinging upon, or affecting work to be done by other Contractors, shall be transmitted to the Contractors so affected. These approved Shop Drawings shall be delivered to the Resident Engineer for distribution to the affected Contractors at the job meetings and shall be so recorded in the minutes.

9. FINAL SUBMISSION - When approval of any Shop Drawing is obtained by the Contractor, it shall insert the date of the approval of the drawing and promptly furnish the Consultant Architect/Engineer with eight (8) additional prints of the approved Drawings. No work called for by the Shop Drawings shall be performed until the approval of the said drawings by the Commissioner is given. In addition to the foregoing Shop Drawing transmissions, a copy of any Shop Drawing prepared by any of the Contractors which indicates work related to, adjacent to, impinging upon, or affecting work to be done by other Contractors, shall be transmitted to the Contractors so affected. These approved Shop Drawings shall be delivered to the Resident Engineer for distribution to the affected Contractors at the job meetings and shall be so recorded in the minutes.
10. VARIATIONS - If the Shop Drawings show variations from the Contract requirements because of standard shop practice or other reasons, the Contractor shall make specific mention of such variations in its letter of submittal. Approval of the Shop Drawings shall constitute approval of the subject matter thereof only and not of any structural apparatus shown or indicated.
11. CATALOGUE CUTS - Except as otherwise prescribed herein, the submission of catalogue cuts shall conform to the procedures specified for Shop Drawings.
  - a. PRELIMINARY SUBMISSION - The Contractor shall submit three (3) sets of catalogue cuts to the Consultant Architect/Engineer to approve. A satisfactory catalogue cut will be stamped

"Approved", be dated and one (1) copy thereof will be returned to the Contractor by letter. Should the catalogue cut not be approved by the Commissioner, the Commissioner will return one (1) set of such catalogue cuts with the necessary corrections and changes to be made indicated thereon.

- b. REVISIONS - The Contractor shall make such corrections and changes and again submit four (4) sets of the catalogue cuts, in duplicate, for the approval of the Commissioner. The Contractor shall revise and resubmit the catalogue cuts as required by the Consultant Architect/Engineer until approval thereof is obtained.

However, catalogue cuts which have been stamped "Approved As Noted" shall be considered an "Approved" catalogue cut and need not be revised and resubmitted.

- c. FINAL SUBMISSION - When approval of any catalogue cut is obtained by the Contractor, it shall insert the date of the approval and promptly furnish the Consultant Architect/Engineer with four (4) additional sets of the approved catalogue cuts.
12. RESPONSIBILITY OF CONTRACTOR - The approval of Shop Drawings will be general and shall not relieve the Contractor of responsibility for the accuracy of such Shop Drawings, nor for the proper fitting and construction of the work, nor of the furnishing of materials or work required by the Contract and not indicated on the Shop Drawings. Approval of Shop Drawings shall not be construed as approving departures from the Contract Drawings, Supplementary Drawings or Specifications.
  13. SHOP DRAWINGS AND MATERIAL SAMPLES SCHEDULE - The Shop Drawings and Material Samples Schedule is set forth in Schedule F, which is included in the Addendum to the General Conditions. Completion of this Schedule shall be in accordance with Article 1.41 (A) of these General Conditions.
  14. PROCEDURE FOR PREPARING, FORWARDING, CHECKING AND RETURN - of all Shop Drawings shall be, generally, as follows:

The Contractor shall make available to its subcontractors the necessary Contract Documents and have them determine dimensions and conditions in the field, particularly with reference to coordination with other trades or work under other Contractors. The Contractor shall direct its subcontractors to prepare Shop Drawings for submission to the Consultant Architect/Engineer in accordance with the requirements of these General Conditions. The Contractor shall also direct its subcontractors to "Ring Up" corrections made on all re-submissions for approval, so as to be readily seen, and that the symbol "sub" be used to identify the source of the correction or information that has been added.

The Contractor shall:

- a. Review and be responsible to the Commissioner, or the Commissioner's authorized representative, for information shown on subcontractor's Shop and Installation drawings and manufacturers' date, and also for conformity to Contract Documents.
- b. "Ring Up" corrections made on all submissions for approval, so as to be readily seen, and that the symbol "GC", "PL", "HVAC" or "EL" be used to indicate that the correction and/or information added was made by the Contractor.
- c. Clearly designate which trade is to perform the work when the term, "work by others" or other similar phrases are indicated on the Contract Drawings before submission to the Consultant Architect/Engineer.
- d. Stamp submissions "Recommended for Approval", date and forward to the Commissioner or the Commissioner's authorized representative.



In order to expedite Shop Drawing procedures, the Contractor shall write a Shop Drawing status letter directly to the Consultant Architect/Engineer, each week, containing the following subject matter:

- (1) A list of all Shop Drawings which have been sent to but not returned by the Architect or Engineer giving name of the subcontractor, drawing number, title and date of submission.
- (2) An indication of the desired priority of the return, if necessary.

NOTE: The status letter shall be prepared and sent at a given time each week, preferably Friday afternoon, to enable the Consultant Architect/Engineer to receive the letter on Monday morning. This procedure shall be maintained throughout the active Shop Drawing period of construction.

**B. INTEGRATED DRAWINGS (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

1. The Contractor for General Construction Work shall provide to the Contractor for Heating, Ventilating and Air Conditioning Work reflected ceiling starting points or plans, beam soffit elevations, ceiling heights, roof openings, etc.
2. The Contractor for Heating, Ventilating and Air Conditioning Work shall prepare a drawing or drawings showing ductwork, heating and sprinkler piping. This drawing shall include location of grilles, registers, etc. and access doors in hung ceilings. Locations shall be fixed by elevations and dimensions from column center lines and/or walls.
3. The Contractor for Heating, Ventilating and Air Conditioning Work shall prepare and distribute to each of the other Contractors, the Resident Engineer and to the Consultant Architect a sepia of the above.
4. The Contractor for General Construction Work shall lay out on its sepia, the reflected ceiling plan, beam soffit elevations, ceiling heights, roof openings, etc.
5. The Contractor for Plumbing Work shall lay out its piping, valves, cleanouts, etc., indicating locations and elevations and shall indicate the necessary access doors.
6. The Contractor for Electrical Work shall indicate its fixtures, large conduit runs, clearances, pull boxes, junction boxes, sound system speakers, etc.
7. The Resident Engineer will call as many meetings with the Contractors as are necessary to resolve any conflicts that become apparent. The Resident Engineer will call on the services of the Consultant Engineer or Architect where necessary. The Resident Engineer is responsible for the coordination of the Contract Drawings.
8. Upon resolution of the conflicts, each Contractor shall enter its own work on the Resident Engineer's sepia, which will become the Master or Integrated Drawing. The Master Sepia shall be signed by each Contractor to indicate its acceptance of the arrangement of the work.
9. A reproducible copy of the Master Integrated Drawing or Drawings will be prepared and distributed by the Contractor for Heating, Ventilating and Air Conditioning Work to each Contractor and to the Consultant Architect for information.
10. Each Contractor shall prepare its Shop Drawings in accordance with the Integrated Drawings. No work will be permitted without approved Shop Drawings. It is therefore essential that this procedure be instituted as quickly as possible.
11. Contractors shall be held strictly accountable for cooperation in preparing the Integrated Drawing or Drawings.

C. RECORD DRAWINGS

1. The Department of Design and Construction, at the start of construction (kick-off meeting), will furnish to each Contractor at no cost a complete set of Contract Document mylars pertaining to the work to be performed under its Contract. It is the responsibility of each Contractor to modify the Contract Drawings to indicate all changes and corrections, if any, occurring in the work as actually installed. The Contractor is required to furnish all other mylar drawings if necessary such as Addenda Drawings and Supplementary Drawings as may be necessary to indicate all work in detail as actually completed.

NOTE TO CONTRACTOR: All professional seals must be blocked out. Title box complete with project title and Consultants' names will remain.

2. Each Contractor shall maintain, during the progress of the work, an accurate record of the work as actually installed, on Record Drawings, on mylar, in ink. These Record Drawings shall be made available to the Resident Engineer upon request.

The Contractor's attention is particularly directed to the necessity of keeping accurate records of all subsurface and concealed work, so that the Record Drawings may contain this information in exact detail and location. Record Drawings should also show all connections, valves, gates, switches, cut-outs and similar operating equipment.

Before substantial completion payment, each Contractor shall furnish to the Commissioner one (1) complete set of mylar Record Drawings, in ink indicating all of the work and locations as actually installed, plus one (1) set of paper prints which will be furnished to sponsoring agency by Department of Design and Construction.

3. Record Drawings shall be of the same size as that of the Contract Drawings, with a one (1) inch margin on three (3) sides and a two (2) inch margin on the left side.
4. Each Record Drawing shall bear the legend "RECORD DRAWING" in heavy block lettering, one half (1/2) inch high, and contain the following data:

RECORD DRAWING

Contractor's Name \_\_\_\_\_

Contractor's Address \_\_\_\_\_

Made by .                      Date                      \_\_\_\_\_

Checked by                      Date                      \_\_\_\_\_

Commissioner's Representatives  
(Resident Engineer)                      DDC  
(Plumbing Inspector)                      DDC  
(Heating & Ventilating Inspector)                      DDC  
(Electrical Inspector)                      DDC

5. RECORD DRAWING TITLE SHEET - Each Contractor shall prepare a title sheet, the same size as Record Drawings, which shall contain the following:
  - a. Heading:  
The City of New York  
Department of Design and Construction  
Division of Structures
  - b. Capital Budget Project Number (CAPIS ID)

- c. Name and Location of Project
  - d. Contractor's Name and Address
  - e. Record of changes (a caption description of work affected, and the date and number of Change Order or other authorization)
  - f. List of Record Drawings
6. All changes from Contract Drawings shall be distinctly encircled and identified by Change Order number correlating to changes listed on the "Title Sheet." The Contractor shall show within the encircled areas the work as actually installed.
7. **BULLETINS, OPERATING AND SERVICE MANUALS** - Where the Contractor has submitted prints in the form of technical bulletins, operating and service manuals, or other printed matter as a Shop Drawing, having diagrams or drawings thereon of a material or equipment installed in the work, the Contractor shall furnish three (3) sets thereof so that the Commissioner may have all the necessary information for the proper operation maintenance and repair of the material and equipment and the ordering of spare parts. All bulletins and operating and service manuals shall be compiled and indexed in book form for each Contract.

#### **1.06 Approval of Materials**

- A. **LOCAL LAWS** - All materials, appliances and types or methods of construction shall be in accordance with the Specifications and shall in no event be less than that necessary to conform to the requirements of the Building Code of the City of New York, Administrative Code and Charter of the City of New York.
- B. **APPROVAL OF MANUFACTURER** - The names of proposed manufacturers, material suppliers, and dealers who are to furnish materials, fixtures, equipment, appliances or other fittings shall be submitted to the Commissioner for approval, as early as possible, to afford proper review and analysis.
- C. **REPUTE OF MANUFACTURER** - No manufacturer will be approved for any materials to be furnished under the Contract unless it shall be of good reputation, shall have a plant of ample capacity and shall have successfully produced similar products. All required approvals for legal use of materials and equipment such as B.S.A. and M.E.A. must be obtained prior to installation.
- D. **ALL MATERIALS** - fixtures, fittings, supplies and equipment furnished under the Contract shall be new and unused, except as approved by the Agency, and of standard first-grade quality and of the best workmanship and design. The City of New York encourages the use of recycled products where practical.
- E. **INFORMATION TO SUPPLIERS** - In asking for prices on materials under any item of the Contract, the Contractor shall provide the manufacturer or dealer with such complete information from the Specifications and Contract Drawings as may in any case be necessary, and in every case the Contractor shall inform the manufacturer or dealer of all the General Conditions and requirements herein contained.
- F. **STANDARD REFERENCES** - Whenever reference is made to the furnishing of materials or testing thereof to conform to the standards of any technical society, organization or body, it shall be construed to mean the latest standard, code, specification or tentative specification adopted and published at the date of advertisement for bids, even though reference has been made to an earlier standard.
- G. **REFERENCES** - Reference to a technical society, organization or body may be made in the Specifications by abbreviations in accordance with the following list:

A.I.A. for American Institute of Architects

A.C.I.	for American Concrete Institute
A.G.A.	for American Gas Association
A.G.M.A.	for American Gear Manufacturer Association
A.I.E.E.	for American Institute of Electrical Engineers
A.I.S.C.	for American Institute of Steel Construction
A.S.A.	for American Standards Association
A.S.T.M.	for American Society for Testing Materials
A.W.S.C.	for American Welding Society Code
A.W.W.A.	for American Water Works Association
B.S.& A.	for New York City Board of Standards & Appeals
C.I.P.R.A.	for Cast Iron Pipe Research Association
B.G.& E.	for Bureau of Gas & Electricity of the City of New York
FED. SPEC.	for Federal Specification
I.P.C.E.A.	for Insulated Power Cable Engineer's Association
NAVY SPEC.	for Navy Department Specification
N.E.C.	for National Electric Code
N.E.M.A.	for National Electrical Manufacturers Association
N.Y.B.C.	for New York City Building Code
N.Y.E.C.	for New York City Electrical Code
N.Y. SPEC.	for New York City Department of Purchase Specification
P.P.S.	for Power Piping Society
S.A.E.	for Society of Automotive Engineers Standards
S.H.B.I.	for Steel Heating Boiler Institute

H. STANDARD SPECIFICATIONS - When no reference is made to a code, standard or specification, the Standard Specifications of the ASTM or the AIEE, as the case may be, shall govern.

I. SAMPLES OF MATERIALS - The Contractor shall submit to the Commissioner for approval, samples of all materials specified to be used in the project.

1. For samples of materials involving electrical work of any nature, see the General Electrical Requirements.
2. Samples shall be in triplicate, of sufficient size to show the quality, type, range of color, finish and texture of the material. However, in addition thereto, after approval, three (3) additional samples showing the material, color and texture of all interior finishes, including the finishes of exposed built-in equipment, trim, glazing, fittings and fixtures, etc., shall also be furnished. The sizes of these additional samples shall be as directed by and acceptable to the Commissioner.
3. Each of the samples shall be labeled, bearing the name and quality of the material, the Contractor's name, date, Contract and project, and the related Specification or Contract Drawing reference to the samples submitted.
4. A letter of transmittal, in triplicate, from the Contractor requesting approval must accompany all such samples.
5. Transportation charges to the Commissioner's office must be prepared on all samples forwarded.
6. Samples for testing purposes shall be as required in the Specifications.

J. SAMPLES ON DISPLAY - When samples are specified to be equal to samples in the office of the Commissioner, they shall be carefully examined by the bidders and by those whom the bidder expects to employ for the furnishing of such materials.

K. TIMELY SUBMISSIONS LOG/SCHEDULE - Samples shall be submitted in accordance with approved Shop Drawing log so as to permit proper consideration without delaying any operation under the project. Materials should not be ordered until approval is received, in writing, from the Commissioner. All materials shall be furnished equal in every respect to the approved samples.

- L. THE APPROVAL OF ANY SAMPLES - will be given as promptly as possible, and shall be only for the characteristic color, texture, strength, or other feature of the material named in such approval, and no other. When this approval is issued by the Commissioner, it is done with the distinct understanding that the materials to be furnished will fully and completely comply with the Specifications, the determination of which may be made at some later date by a laboratory test or by other procedure. Use of materials will be permitted only so long as the quality remains equal to the approved samples and complies in every respect with the Specifications, and the colors and textures of the samples on file in the Office of the Commissioner, for the project.
- M. ACCEPTIBILITY OF TEST DATA - The Commissioner will be the final judge as to acceptability of laboratory test data and performance in service of materials submitted.
- N. VALUABLE SAMPLES - such as hardware, plumbing and electrical fixtures, etc., not destroyed by inspection or test, will be returned to the Contractor and may be incorporated into the work after all questions of acceptability have been settled, providing suitable permanent records are made as to the location of the samples, their properties, etc.
- O. EQUIVALENT QUALITY OF MATERIALS - All materials and equipment which are designated in the Specifications by a number in the catalogue of any manufacturer or by a manufacturer's grade or trade name, are designated for the purpose of describing the article and fixing the standard or the quality and finish. Materials and equipment, which are, in the opinion of the Commissioner, the equivalent to that specified, will be acceptable.
- P. The submission of any material, or article, as the equal of the materials or articles set forth in the Specifications as a standard shall be accompanied by illustrations, drawings, descriptions, catalogues, records of tests, samples and any and all other information essential for judging the equality to the materials, finish and durability of that specified as standard, as well as information indicating satisfactory use under similar operating conditions.
- Q. MANUFACTURER'S DIRECTIONS - Where the Specifications provide that the manufacturer's directions are to be used, such printed directions shall be submitted to the Commissioner.
- R. COMMISSIONER TO SELECT INSPECTORS - Except as specifically provided in the Specifications, the Commissioner will select and designate all persons, firms, or corporations to make or witness each and every inspection, test or analyses, with or without reports.
- S. NOTICE - The Contractor shall give notice in writing to the Commissioner sufficiently in advance of its intention to commence the manufacture or preparation of materials especially manufactured or prepared for use in or as part of the permanent construction. Such notice shall contain a request for inspection, the date of commencement and the expected date of completion of the manufacture or preparation of materials. Upon receipt of such notice, the Commissioner will arrange to have a representative present at such times during the manufacture as may be necessary to inspect the materials, or the Commissioner will notify the Contractor that the inspection will be made at a point other than the point of manufacture, or the Commissioner will notify the Contractor that inspection will be waived.
- T. NO SHIPPING BEFORE INSPECTION - The Contractor shall comply with the foregoing before shipping any material.
- U. CERTIFICATE OF MANUFACTURE - When the Commissioner so requires, the Contractor shall furnish to the Commissioner authoritative evidence in the form of Certificates of Manufacture that the materials to be used in the work have been manufactured and tested in conformity with the Specifications. These certificates shall include copies of the results of physical tests and chemical analyses where necessary, that have been made directly on the product, or on similar products being fabricated by the manufacturer. This may include such approvals as B.S.A., M.E.A., B.E.C. Advisory Board, etc.

- V. ACCEPTANCE - When materials or manufactured products shall comprise such quantity that it is not practical to make physical tests or chemical analyses directly on the product furnished, a certificate stating the results of such tests or analyses of similar materials which were concurrently produced may, at the discretion of the Commissioner, be considered as the basis for the acceptance of such material or manufactured product.
- W. TESTING COMPLIANCE - The testing personnel shall make the necessary inspections and tests, and the reports thereof shall be in such form as will facilitate checking to determine compliance with the Specifications, indicating thereon all analyses and/or test data and interpreted results thereof.
- X. REPORTS - Six (6) copies of the reports shall be submitted and authoritative certification thereof must be furnished to the Commissioner as prerequisite for the acceptance of any material or equipment.
- Y. REJECTIONS - If, in making any test, it is ascertained by the Commissioner that the material or equipment does not comply with the Specifications, the Contractor will be notified thereof, and will be directed to refrain from delivering said materials or equipment, or to promptly remove it from the site or from the work and replace it with acceptable material without cost to the City.
- Z. FURNISH DESIGNATED MATERIAL - Upon rejection of any material or equipment submitted as the equivalent of that specifically named in the Specifications, the Contractor shall immediately proceed to furnish the designated material or equipment.
- AA. COST OF TESTS BORNE BY CITY - Where the City directs test to be performed to determine compliance with the Specifications regarding materials or equipment, and where such compliance is ascertained as a result thereof, the City will bear the cost of such tests.
- BB. COST OF TESTS BORNE BY CONTRACTOR - Where tests are specifically called for in the Specifications to be made by the Contractor, the cost thereof shall be borne by the Contractor and shall be deemed to be included in the Contract price. The expenses of the testing personnel assigned by the City shall not be the Contractor's obligation. The Contractor shall reimburse the City for expenditures incurred in the making of tests on materials and equipment submitted by the Contractor as the equivalent of that specifically named in the Specifications and rejected for non-compliance.

**1.07 Delivery of Materials**

- A. MATERIAL ORDERS - The Contractor shall furnish to the Commissioner a copy of each material order, indicating date of order and quantity of material, and shall also notify the Commissioner when materials have been delivered to the site and in what quantities.
- B. AMPLE QUANTITIES - The Contractor shall deliver materials in ample quantities to insure the most prompt and uninterrupted progress of the work so as to complete the work within the Contract time.
- C. CONTAINERS - The manufacturer's containers shall be delivered with unbroken seals and shall bear proper labels.
- D. THE CONTRACTOR SHALL COORDINATE DELIVERIES - in order to avoid delaying or impeding the progress of the work of any related Contractor.
- E. STACKING - All materials shall be properly stacked in convenient places adjacent to the site, or where directed, and protected in a satisfactory manner. Stacked materials shall be so arranged as to not interfere with visibility of traffic control devices.
- F. OVERLOADING - If authority is given to store materials in any part of the project area, they shall be so stored as to cause no overloading.
- G. NO INTERFERENCE - If it becomes necessary to remove and restack materials to avoid impeding the progress of any part of the work or interfering with the work to be done by any other Contractor, the relevant Contractor shall remove and restack such materials at no additional cost to the City.

**1.08 Temporary Structures**

- A. **FIELD OFFICE FOR CONTRACTOR** - The Contractor shall establish a temporary field office for its own use at the site during the period of construction, at which readily accessible copies of all Contract Documents shall be kept.
- B. The field office shall be located where it will not interfere with the progress of any part of the work or with visibility of traffic control devices.
- C. **CONTRACTOR'S REPRESENTATIVE** - In charge of each office there shall be a responsible and competent representative of the Contractor, duly authorized to receive orders and directions and to put them into effect.
- D. **TELEPHONE ARRANGEMENTS** - Arrangements shall be made by the Contractor whereby its representative may be readily accessible by telephone.
- E. **MATERIAL SHEDS** - used by the Contractor for the storage of its materials shall be kept at locations which will not interfere at any time with the progress of any part of the work or with visibility of traffic control devices.
- F. **SUBSTANTIAL CONSTRUCTION** - All temporary structures shall be of substantial construction and neat appearance, and shall be painted a uniform gray unless otherwise directed by the Commissioner.
- G. **ADVERTISING PRIVILEGES** - The City reserves the right to all advertising privileges. The Contractor shall not cause any signs of any kind to be displayed at the site unless specifically required herein or authorized by the Commissioner.
- H. **CONTRACTOR'S SIGN** - The Contractor shall post and keep posted, on the outside of its field office, office or exterior fence or wall at site of work, a legible sign giving full name of the company, address of the company and telephone number(s) of responsible representative(s) of the firm who can be reached in event of an emergency at any time.

**1.09 Surveys (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- A. **LINE AND GRADE** - The City will establish a baseline and bench mark near the site of the work for use of the Contractor in connection with the performance of the work.
- B. **RESPONSIBILITY** - The Contractor shall establish all other lines and elevations required for its work and shall be solely responsible for the accuracy thereof.
- C. **SAFEGUARD ALL POINTS** - Each Contractor shall safeguard all points, stakes, grade marks and bench marks made or established by the Contractor on the work, shall re-establish same if disturbed and bear the entire expense of rectifying the work improperly installed due to not maintaining, not protecting or removing without authorization such established points, stakes, or marks.
- D. **CITY MONUMENTS AND MARKS** - No work shall be performed near City monuments or marks so as to disturb them until the said monuments or marks have been referenced or reset or otherwise disposed of by the relevant Agency or party who installed them.
- E. **FOUNDATIONS** - The Contractor for General Construction Work shall furnish certification from a licensed Surveyor that all portions of the foundation work are located in accordance with the Contract Drawings and at the elevations required thereby. This certification shall show the actual locations and the actual elevations of all the work in relation to the locations and elevations shown on the Contract Drawings, including but not restricted to the following:
  - 1. The locations and elevations of all piles, if any.

2. Elevations of tops of all spread footings, tops of pile caps, and tops of all foundation walls, elevator pit walls and ramp walls.
  3. Location of all footing centers and pier centers including those for exterior wall columns.
  4. Location of all foundation walls including wall columns, elevator pit walls and ramp walls.
- F. **WALL LINES** - After the first courses of masonry or stone have been laid, the Contractor for General Construction Work shall establish the permanent lines of exterior walls. Such Contractor shall furnish promptly, certification from a licensed Surveyor, in the form of signed original drawings showing the exact location of such wall lines, of all portions of all structures. Except at its own risk, the Contractor for General Construction Work shall not proceed further with the erection of walls until the Surveyor's certification has been submitted and verified for correct location of wall lines.
- G. **SURVEYOR** - The Surveyor selected for any of the purposes mentioned in Paragraph E and Paragraph F above, and Paragraph I below, shall be a licensed Surveyor and shall be subject to the approval of the Commissioner. The Surveyor shall not be a regular employee of the Contractor, nor shall the Surveyor have any interest in the Contract. The Surveyor shall not be employed by the Contractor in laying out any work, it being intended that the Surveyor's certification shall represent an independent and disinterested verification of such layout. The Surveyor shall report to the Department of Design and Construction's Resident Engineer each time upon arrival to and departure from the site and review with the Resident Engineer the data required for the project.
- H. **FINAL CERTIFICATION** - Final certification shall be submitted upon completion of the work or upon completion of any subdivision of the work as directed by the Commissioner. Any exceptions or deviations from the drawings shall be noted on the final certificate and there shall be included any maps, plates, notes, pertinent documents and data necessary, in the opinion of the Commissioner, to constitute a full and complete report.
- I. **FINAL SURVEY** - The Contractor for General Construction Work shall submit to the Department of Design and Construction for submission to the Department of Buildings a final Survey by the licensed Surveyor showing the location of the new Structure, before completion of the Structure. This Survey shall show the location of the first tier of beams or of the first floor; the finish grades of the open spaces on the plot; the established curb level and the location of all other Structures on the plan, together with the location and boundaries of the lot or plot upon which the Structure is constructed, curb cuts, all yard dimensions, etc.

#### **1.10 Contractor's Superintendent**

- A. **SUPERINTENDENT** - The Contractor shall devote its time and personal attention to the work and shall employ and retain at the project site, from the commencement until the entire completion of the work, a Contractor's Superintendent competent and capable of maintaining proper supervision and care of the work and acceptable to the Commissioner, who, in the absence of the Contractor, and irrespective of any superintendent or foreman employed by any subcontractor, shall see that the instructions of the Commissioner are carried out.
- B. **REPLACEMENT** - The Contractor's Superintendent on the job shall not be changed or removed without the consent of the Commissioner.

#### **1.11 Permits**

The Contractor shall comply with all local, state and federal laws, rules and regulations affecting the Work of this Project, including, without limitation, (1) obtaining all necessary permits for the performance of the Work prior to commencement thereof, and (2) complying with all requirements for the disposal of demolition and/or construction debris, waste, etc., including disposal in City landfills. The Contractor shall be responsible for all costs in connection with such regulatory compliance, unless otherwise specified in the Contract.



## 1.12 Transportation

- A. AVAILABILITY - It shall be the duty of the Contractor to determine the availability of transportation facilities and dockage for the use of its employees, equipment and material and the conditions under which such use will be permitted.
- B. COSTS - If transportation facilities and dockage are available and are permitted to be used by the governmental agency having jurisdiction, the Contractor shall pay all necessary costs and expenses, and abide by all rules and regulations promulgated in connection therewith.
- C. VEHICLES - With respect to the use of vehicles on highways and bridges, the Contractor's attention is directed to the limitations set forth in the Rules of the City of New York, Title 34, Chapter 4, Section 4-15.
- D. CONTINUED USE - It is understood that the Commissioner makes no warranty as to the continued use by the Contractor of such facilities.

## 1.13 Sleeves And Hangers (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)

- A. COORDINATE TO PROGRESS SCHEDULE - Contractors required to furnish and install conduits, outlets, piping sleeves, boxes, inserts and all other materials and equipment necessary to be built into the work to be performed by the Contractor for General Construction Work, shall promptly furnish and set such sleeves or other materials in conformity with the requirements of the project.
- B. COOPERATION OF CONTRACTORS - All Contractors shall fully cooperate with each other in connection with the performance of the above work as "cutting in" new work is neither contemplated nor will it be tolerated.
- C. TIMELINESS - In the event that timely delivery of sleeves and other materials cannot be made, and to avoid delay, the affected Contractor may arrange to have boxes or other forms set at the locations where the piping or other material is to pass through or into the slabs, walls or other work. Upon the subsequent installation of the sleeves or other material, the Contractor for General Construction Work shall fill around them with materials as required by the Contract. The necessary expenditures incurred for the boxing out and filling in shall be borne by the Contractor or Contractors responsible therefore.
- D. INSERTS - The Contractor for General Construction Work is to install strip inserts four (4) foot on center and perpendicular to beams in ceiling slabs of boiler, machine and mechanical equipment rooms. Inserts are to be installed for strippable concrete slabs only.

## 1.14 Cutting And Patching

- A. RESPONSIBILITY - Each Contractor shall do all cutting, patching and restoration required by its work, unless otherwise particularly specified in the Specifications of its Contract.
- B. RESTORE WORK - Each Contractor shall restore any work they damage that is the work of another Contractor.
- C. COMPETENT WORKERS - All restoration work shall be done to the satisfaction of the Commissioner by competent workers skilled in the trade required by such restoration. If, in the judgment of the Commissioner, workers engaged in restoration work are incompetent, they shall be replaced immediately by competent workers.
- D. REMOVALS - Each Contractor must remove from the premises all demolished materials of every nature or description resulting from cutting, patching and restoration work, in accordance with the requirements hereinafter stipulated under article on REMOVAL OF RUBBISH AND SURPLUS MATERIALS.

**1.15 Temporary Heat (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

**A. GENERAL**

1. Definition - The provision of Temporary Heat shall mean the provision of heat in order to permit construction to be performed in accordance with the Progress Schedule during all seasons of the year and to protect the work from the harmful effects of low temperature. In the event the building, or any portion thereof, is occupied during construction, the provision of Temporary Heat shall include the provision of heat to permit normal operations in such occupied areas.
  - a. The provision of Temporary Heat shall be in accordance with the temperature requirements set forth in Paragraph (c) below.
  - b. The provision of Temporary Heat shall include the provision of: 1) all fuel necessary and required, 2) all equipment necessary and required, and 3) all operating labor necessary and required. Operating labor shall mean that minimum force required for the safe day to day operation of the system for the provision of Temporary Heat and shall include, without limitation, heating maintenance labor and/or Firewatch as required by NYC Fire Department regulations. Operating labor may be required seven (7) days per week and during other than normal working hours, for the period of time required by seasonal weather conditions.
  - c. In the event the building, or any portion thereof, is occupied and the Project involves the replacement, modification and/or shut down of the permanent heating system, or any key component thereof; and such system is a combined system which furnishes domestic hot water for the building occupants, the provision of Temporary Heat shall include the provision of domestic hot water at the same temperature as the system which is being replaced. Domestic hot water shall be provided in accordance with the phasing requirements set forth in the Contract Documents.
2. Responsibility - The Contractor responsible for the provision of Temporary Heat, and all expenses in connection therewith, shall be as set forth below.
  - a. Projects Involving Enclosure of the Building
    - (1) Prior to Enclosure - Until the Commissioner determines that the building has been enclosed, as set forth in Paragraph (b) below, each Contractor shall be responsible for the provision of its own Temporary Heat.
    - (2) Post Enclosure - Once the Commissioner determines that the building, or any portion thereof, has been enclosed, as set forth in Paragraph B below, the Contractor for Heating, Ventilating and Air Conditioning Work ("HVAC Work") shall be responsible for the provision of Temporary Heat by one or more of the following means: 1) by an existing heating system (if any), 2) by a permanent heating system which is being installed as part of the Project, or 3) by a temporary heating system(s). The Contractor for HVAC Work shall, within two (2) weeks of the kick-off meeting, submit to DDC for review its proposed plan to provide Temporary Heat. Such plan is subject to approval by the Resident Engineer. The Contractor for HVAC Work shall provide Temporary Heat in accordance with the approved plan until written acceptance by the Commissioner of the work of all Contractors, including punch list work, unless directed otherwise in writing by the Commissioner. The responsibility of the Contractor for HVAC Work provided for herein is subject to the exception set forth in Paragraph H.3.b.(2) below.
  - b. Projects not involving Enclosure of the Building
    - (1) If the Project involves the installation of a new permanent heating system if one did not exist previously, or the replacement, modification and/or shut down of the existing

permanent heating system, or any key component thereof, the Contractor for HVAC Work shall be responsible for the provision of Temporary Heat, except as otherwise provided in Paragraph H.3.b.(2) below.

- (2) If the Project does not involve the installation of a new permanent heating system if one did not exist previously, or the replacement, modification and/or shut down of the existing permanent heating system, or any key component thereof; there is no Contractor responsibility of the provision of Temporary Heat, unless otherwise specified in the Contract Documents. However, if the Commissioner, pursuant to Paragraph H.3.b.(1) below, determines that the provision of Temporary Heat is necessary due to special and/or unforeseen circumstances, the Contractor for HVAC Work shall be responsible for the provision of Temporary Heat and such Contractor shall be paid for the same in accordance with Paragraph H.3.b.(1).

## B. ENCLOSURE OF STRUCTURES

1. Notification - The Contractor for General Construction Work shall notify all other Contractors and the Resident Engineer at least 30 days prior to the anticipated date that the building(s) will be enclosed.
2. Commissioner Determination - The Commissioner shall determine whether the building, or any portion thereof, has been enclosed. As indicated in Paragraph A above, once the building has been enclosed, the Contractor for HVAC Work shall be responsible for the provision of Temporary Heat. The Commissioner's determination with respect to building enclosure shall be based upon all relevant facts and circumstances, including without limitation, 1) whether the building meets the criteria set forth in Paragraph 3 below, and 2) whether the openings in the building, such as doorways and windows, have been sufficiently covered so as to provide reasonable heat retention and protection from the elements.
3. Criteria for enclosure
  - a. Roof Area
    - (1) A building shall be considered to be roofed when the area to be roofed is covered by a permanent structure and all openings through the permanent structure are covered and protected by temporary covers in Paragraph (c) below.
    - (2) Intermediate floor structures of multi-floor buildings shall be considered to be roofed subject to the same requirements of the building roof.
    - (3) The final roofing system need not be in place for the building or structure to be determined to be enclosed; provided, however, all openings through the permanent structure covering the roof must be covered and protected by temporary covers, as described in Paragraph (c) below.
  - b. Walls - For the walls to be determined to be enclosed, permanent exterior wall elements or facing material must be in place and all openings must be covered and protected by temporary covers, as described in Paragraph (c) below.
  - c. Temporary Covers - In order to be acceptable, temporary covers must be securely fixed to prevent the entrance of rain, snow and direct wind. The minimum material requirements for temporary covers are as follows: 1) minimum 10 mil. plastic, 2) minimum 12 ounce waterproof canvas tarpaulins, or 3) a minimum three-eighths (3/8)inch thickness exterior grade plywood.
  - d. Temporary covers for openings shall be the responsibility of the Contractor for General Construction Work, and such work shall be deemed included in the Contractor for General Construction Work's bid price.

C. TEMPERATURE REQUIREMENTS

1. Unoccupied Buildings - The temperature requirement for the provision of Temporary Heat in unoccupied buildings shall be the GREATER of the following: 1) 50 degrees Fahrenheit, or 2) the temperature requirement for the particular type of work set forth in the Contract Documents.
2. Occupied Buildings - The temperature requirement for the provision of Temporary Heat in occupied buildings, or portions thereof, shall be the GREATER of the following: 68 degrees Fahrenheit or the temperature requirement for the particular type of work set forth in the Contract Documents.

D. DURATION

1. The Contractor for HVAC Work shall be required to provide Temporary Heat until written acceptance by the Commissioner of the work of all Contractors, including punch list work, unless directed otherwise in writing by the Commissioner. The Contractor for HVAC Work shall be responsible for the provision of Temporary Heat for the time specified herein, regardless of any delays in completion of the Project, including delays that result in the commencement of the provision of Temporary Heat during a season that is later than that which may have been originally anticipated. The Contractor for HVAC Work shall include in its Total Bid Price all expenses in connection with the provision of Temporary Heat in accordance with the requirements specified herein.
2. The total Contract duration is set forth in consecutive calendar days in Schedule A of the General Conditions. The Table set forth below indicates the number of full heating seasons that are deemed included in various contract durations, which are specified in consecutive calendar days (ccds). At a minimum, a full heating season shall extend from October 15<sup>th</sup> to April 15<sup>th</sup>.

Contract Duration	Full Heating Seasons Required
up to 360 ccds	1 full heating season
360 to 720 ccds	2 full heating seasons
more than 720 ccds	3 full heating seasons

E. METHOD OF TEMPORARY HEAT

1. The method of temporary heat shall be in conformance with all applicable laws, rules and regulations. Prior to implementation, such method shall be subject to the written approval of the Commissioner.
2. The method of temporary heat shall:
  - a. Not cause the deposition of dirt or smudges upon any finished work or cause any defacement or discoloration to the finished work.
  - b. Not be injurious or harmful to people or materials.
3. No open fires will be permitted.
4. Electric heating will not be permitted unless required by Contract Documents and Specifications or otherwise approved by the Commissioner.
5. Direct-fired equipment will be allowed in construction areas where the use of such equipment will not damage or deteriorate the construction or finishes or be harmful to persons working in the area.

F. TEMPORARY HEATING SYSTEM

1. The temporary system for the provision of Temporary Heat provided by the Contractor for HVAC

Work following enclosure of the building shall be complete including, but not limited to, torpedo blowers and/or propane heaters subject to provisions of paragraph E above), boilers and fuel storage, pumps, radiators, unit heaters, water and heating piping, insulation and controls. The temporary system for the provision of Temporary Heat shall be capable of maintaining the minimum temperature requirements set forth in Paragraph C above.

G. THE CONTRACTOR FOR GENERAL CONSTRUCTION WORK

1. The Contractor for General Construction Work shall coordinate with the Contractor for HVAC Work in the work of providing Temporary Heat, and shall so coordinate its operations as to insure sufficient and timely performance of the work under all Contracts. The Contractor for General Construction Work shall supply and pay for all water required and used in the building for the operation of the heating system(s) for the purpose of Temporary Heat. The Contractor for General Construction Work shall include all expenses in connection with the supply of water for Temporary Heat in its Total Bid Price. During the period in which Temporary Heat in an enclosed building is being furnished and maintained by the Contractor for HVAC Work, the Contractor for General Construction Work shall, in order to provide proper ventilating and drying, open and close the windows and other openings when necessary for the proper execution of the work and also when directed by DDC. The Contractor for General Construction Work shall maintain all permanent or temporary enclosures at its own expense.

H. THE CONTRACTOR FOR HVAC WORK

1. Use of Permanent Heating System for Temporary Heat after Building Enclosure
  - a. The Contractor for HVAC Work shall provide all labor and materials to promptly furnish and set all required equipment and convectors and/or radiators, piping, valves, fitting, etc., in ample time for their use for the provision of Temporary Heat after enclosure of the building.
  - b. New portions of the permanent heating system that are used for furnishing Temporary Heat shall be left in near perfect condition when delivered to the City for operation. Any repairs required, other than for ordinary wear and tear on the equipment, shall be made by the Contractor for HVAC Work at his expense. The starting date for the warranty or guarantee period for such equipment shall be the date of Substantial Completion acceptance.
  - c. In the event that the Contractor for HVAC Work does not advance the installation of the permanent heating system in sufficient time to permit its use for Temporary Heat as determined by DDC, the Contractor for HVAC Work shall furnish and install a separate system for the provision of Temporary Heat as required to maintain the minimum temperature requirements set forth in Paragraph C above.
2. All equipment for the system for the provision of Temporary Heat shall be placed so as to comply with the requirements specified hereinbefore, and shall be connected, disconnected and suitably supported and located so as to permit construction work, including finish work such as wall plastering and painting, to proceed. The installation of the system for the provision of Temporary Heat by the Contractor for HVAC Work, including the placing of ancillary system equipment, shall be coordinated with the operations of all Contractors so as to insure sufficient and timely performance of the work of all Contractors. Once the permanent heating system is operating properly, the Contractor for HVAC Work shall remove all portions of the system for Temporary Heat which are not part of the permanent heating system.
3. Temporary Heat Allowance for Special Conditions or and/or Unforeseen Circumstances.
  - a. The City has established an allowance in the Contract for HVAC Work for payment of costs and expenses in connection with the provision of Temporary Heat as set forth herein. The amount of such allowance is set forth on the Bid Form for the Contract for HVAC Work and shall be included in the Total Bid Price of the Contractor for HVAC Work. The Contractor for HVAC Work shall only be entitled to payment from this allowance under the conditions and in

accordance with the requirements set forth below. In the event this allowance or any portion thereof remains unexpended at the conclusion of the Contract, such allowance shall remain the sole property of the City. Should the amount of the allowance be insufficient to provide payment for the expenses specified below, the City will increase the amount of the allowance.

- b. The allowance set forth herein may be utilized only under the conditions set forth below.
- (1) In the event the Project does not involve the installation of a new permanent heating system if one did not exist previously, or the replacement, modification and/or shut down of the existing permanent heating system, or any key component thereof, and the Commissioner determines that the provision of Temporary Heat is necessary due to special and/or unforeseen circumstances, the Contractor for HVAC Work shall be responsible for the provision of Temporary Heat, as directed by the Commissioner. The City shall pay such Contractor for all costs for labor, material, and equipment necessary and required for the same. Payment shall be made in accordance with Article 26 of the Contract, except that the cost of fuel shall be as set forth in Paragraph (c) below.
  - (2) In the event that after enclosure of the building, the Commissioner determines that (i) Contractors other than the Contractor for HVAC Work have not sufficiently advanced the work of their contracts that is necessary and required to permit the Contractor for HVAC Work to use the permanent or other heating equipment for the provision of Temporary Heat, and (ii) the Contractor for HVAC Work does not bear any responsibility for such other Contractors' failure to advance the work, the City shall pay the Contractor for HVAC Work for all differential costs for labor, material, and equipment necessary and required for the provision of a substitute system(s) for the provision of Temporary Heat or portions thereof in lieu of the permanent or other systems intended for Temporary Heat. Payment shall be made in accordance with Article 26 of the Contract, except that the cost of fuel shall be as set forth in Paragraph (c) below.
  - (3) In the event the Commissioner determines that there is a need for maintenance of the permanent heating system by the Contractor for HVAC Work after written acceptance by the Commissioner of the work of all Contractors, and that the need for such maintenance is not the fault of the Contractor for HVAC Work, the Contractor for HVAC Work shall provide the required maintenance of the permanent heating system for the period of time directed by the Commissioner. The City shall pay the Contractor for HVAC Work for the cost of direct labor and fuel necessary and required in connection with such maintenance, excluding the cost of any foremen or other supervision. Payment shall be made in accordance with Article 26 of the Contract, except that the cost of fuel shall be as set forth in Paragraph (c) below.
- c. Payment for Fuel Costs - Payment from the allowance set forth herein for the cost of fuel necessary and required to operate the system for the provision of Temporary Heat or to maintain the permanent heating system under the conditions set forth in Paragraph b above shall be limited to the direct cost of such fuel. The Contractor for HVAC Work shall not be entitled to any overhead and/or profit for such fuel costs. In order to receive payment for such fuel costs, the Contractor for HVAC Work must present original invoices for the same. DDC reserves the right to furnish the required fuel.
- d. Deduction - In the event that any amount of the allowance set forth herein is expended for payment to the Contractor for HVAC Work under the circumstances set forth in Paragraph b.(2) above, the Commissioner shall deduct and retain such amount out of moneys that are due and owing hereunder to the other Contractor(s) responsible for the failure to advance the work, as determined by the Commissioner. In the event the amount expended from the allowance exceeds the total sum due and owing to such other Contractor(s), such excess shall be paid to the City by such other Contractor(s) immediately upon demand.

I. THE CONTRACTOR FOR ELECTRICAL WORK

1. The Contractor for Electrical Work shall be responsible for providing the items set forth below and shall include all expenses in connection with such items in its Total Bid Price. The Contractor for Electrical Work shall provide such items promptly when required and shall in all respects coordinate its work with the Contractor for General Construction Work and the Contractor for HVAC Work in order to facilitate the provision of Temporary Heat by the Contractor for HVAC Work.
  - a. The Contractor for Electrical Work shall provide all labor, materials, equipment and power necessary and required to furnish and maintain any temporary or permanent electrical connections to all equipment specified to be connected as part of the work of his Contract.
  - b. The Contractor for Electrical Work shall supply and pay for all power necessary and required for the operation of the system for the provision of Temporary Heat and/or the permanent heating system used for Temporary Heat by the Contractor for HVAC Work. Such power shall be provided by the Contractor for Electrical Work for the duration the Contractor for HVAC Work is required to provide Temporary Heat, as set forth in Paragraph D above.
2. In providing the items set forth in Paragraph 1 above, the Contractor for Electrical Work is advised that labor may be required seven (7) days a week and/or during other than normal working hours for the period of time required by seasonal weather conditions.

**J. THE CONTRACTOR FOR PLUMBING WORK**

1. The Contractor for Plumbing Work shall be responsible for providing all labor, materials and equipment necessary and required to furnish and maintain all temporary or permanent connections to all equipment or plumbing outlets specified to be provided as part of the work of his Contract. The Contractor for Plumbing Work shall include all expenses in connection with such items of work in its Total Bid Price. The Contractor for Plumbing Work shall provide such items of work promptly when required and shall in all respects coordinate its work with the Contractor for General Construction Work and the Contractor for HVAC Work in order to facilitate the provision of Temporary Heat by the Contractor for HVAC Work.
2. In the event portions of the permanent plumbing equipment furnished by the Contractor for Plumbing Work as part of the work of his Contract are used for the provision of Temporary Heat by the Contractor for HVAC Work, either during construction or prior to acceptance by the City of the complete plumbing system, the Contractor for Plumbing Work shall be responsible to provide such plumbing equipment to the City in near perfect condition and shall make any repairs required, other than for ordinary wear and tear on the equipment, at his expense. The starting date for warranty and/or guarantee period for such plumbing equipment shall be the date of Substantial Completion acceptance by the City.
3. For Projects requiring the installation of new and/or modified gas service, as well as associated meter installations, the Contractor for Plumbing Work shall promptly perform all required filings and coordination with the Utility Companies in order to expedite the installation, testing, and approval of the gas service and associated meter(s).

**1.16 Scaffolding and Platforms**

- A. **CONFORMANCE:** Unless otherwise indicated, the Contractor for General Construction is responsible for providing, erecting, installing and maintaining all temporary scaffolding and platforms which shall comply with requirements of Chapter 33 (Safeguards During Construction or Demolition) of the NYC Building Code, NYC Local Law 52 of 2005, OSHA Construction Standard 1926 Subpart L, and furnishing the following items.
- B. **RESPONSIBILITY**
  1. A Jobsite Monitor who shall be a competent person, designated and employed by the contractor who has a daily presence on the site during scaffold use. This designee must possess and

maintain a valid New York City Department of Buildings supported scaffold certificate of completion. An alternate shall also be designated, in the event that the Jobsite Monitor is absent. The Jobsite Monitor shall:

- a. Verify completeness of documentation and submittals (as described below).
  - b. Verify that inspections are performed, including pull tests (see below), reports are filed and reported deficiencies are corrected.
  - c. Monitor trades using scaffold.
  - d. Limit access to scaffold areas that are tagged for non-use.
  - e. Inform trades of scaffold load limitations.
  - f. Monitor loading of decks.
  - g. Verify that any ties that are temporarily removed are properly restored in the same shift.
  - h. Verify that outriggers and planks that are moved are properly set up and secured.
  - i. Verify that all scaffold decks in use have proper access/egress.
  - j. Verify that all open sides of decks in excess of 14 inches have proper guardrails and toe-boards.
  - k. Notify appropriate parties, including but not limited to the Resident Engineer, site safety coordinator / monitor, site safety consultant, scaffold users, contractor and the scaffold engineer, of misuses, non-conformances, hazards and accidents.
  - l. Keep a log of significant actions and events connected with the scaffolding.
2. The Contractor shall be responsible for erection, maintenance and dismantling of the scaffold / shed in conformance with the New York City Building Code and OSHA requirements, contract documents and engineering specifications. The Contractor shall also be guided by generally accepted standards of scaffold industry practice as promulgated by the Scaffold Industry Association.
  3. Scaffold Engineer is a New York State licensed PE engaged by the scaffold contractor / erector and responsible to ensure that the installation design conforms to the New York City Building Code and OSHA requirements, that the design comports with the capabilities of the components and the characteristics of the site, that scaffold loads on the host building, including netting, have been properly considered and that the design documents communicate information for erectors and users.
  4. Scaffold users are trade contractors assigned to work on the scaffold. Training certificates from a New York City Department of Buildings approved training provider are mandatory. These users have the duty to become familiar with the New York City Building Code and OSHA requirements germane to users, to obey the instructions of the Jobsite Monitor and inform the Jobsite Monitor of known hazards, non-conformances or violations.

C. JOBSITE DOCUMENTATION AND SUBMITTALS:

1. NYC Department of Buildings permit(s) for scaffold and sidewalk sheds (as applicable) including filing applications signed and sealed by A Professional Engineer licensed in the State of New York;
2. Site logistics plan / site safety plan;
3. Installation drawing(s), design and product data to be provided for all scaffold(s) and shed(s) must include, at a minimum:
  - a. Plan(s);
  - b. Elevation(s);
  - c. Duty load designation; "standard" (150 psf live load) or "heavy duty" (300 psf live load).
  - d. Details including base support, anchors and ties;
  - e. Notes and specifications including load limits, number of planked levels, tie spacing, netting, and sequence of installation and removal.
  - f. Anchorage into sound material.
  - g. Load limits based on pull tests;
  - h. Specifications for pull test(s), method, proof load and the number of trials;
  - i. Elevations, levels or heights, where anchorage is made into masonry;



- j. Specifications for frames, planks, screw jacks, anchors, and any other ancillary hardware;
- k. Samples for anchors, ties and netting;
- l. Sequence of operations for erection and demolition;
- m. Location plan, heights, widths, "jumps" over doorways and driveways;
- n. Specify size, maximum span and maximum spacing of headers and stringers;
- o. Specify legs, girts, braces, nailing and connections;
- p. All sidewalk sheds shall be designed, engineered, signed and sealed by a Professional Engineer licensed in the State of New York;
  - 1) Generic (not job specific) engineering drawings are satisfactory for standard sheds and arrangements.
  - 2) Special engineering is required for custom sheds, site-specific problems or non-standard arrangements.

**D. INSPECTIONS:**

- 1. Signed inspection reports shall be issued for each inspection and pull-test below, and shall be logged and maintained on site by the Jobsite Monitor for the duration of the project.
- 2. Pull testing shall be required during design, and during or post erection, where anchorage is made into masonry. The Scaffold Engineer shall specify the test method, proof load and the number of trials.
- 3. Sidewalk sheds shall be inspected after initial installation, major modification, or damage and thence every three months. Inspections shall be by a Scaffold Engineer for custom sheds and by a competent person employed by the Contractor for standard sheds.
- 4. Scaffolds shall be inspected by the Scaffold Engineer during erection, post-erection and prior to use and thence every three months. The Scaffold Engineer shall repeat inspections after major alteration/modification, damage.
- 5. A qualified person assigned by the Contractor shall inspect the progress of erection and dismantling, and the condition and integrity of the sidewalk sheds after high winds, major storms and at least once per month during usage.
- 6. A qualified person assigned by the Contractor shall inspect the progress of erection and dismantling at least weekly, and the condition and integrity of the scaffold after high winds, major storms and at least once per month during usage.
- 7. Scaffolds shall be inspected daily by the Jobsite Monitor or alternate prior to use by scaffold users.
- 8. At the completion of the project, submit all inspection documents to the Commissioner for record purposes.

**E. LADDERS AND STAIRS:** The Contractor for General Construction Work shall provide and maintain ladders or temporary stairs extending from the street to the first story, and to and from every floor and roof level of the project.

**F. ACCESS AND EXITS:** The ladders or temporary stairs shall be of acceptable size, number and location, so that proper and convenient access may be had by those required to proceed to and from all parts of the project.

**1.17 Hoists and Hoistways**

**A. RESPONSIBILITY -** The Contractor for General Construction Work shall provide adequate numbers of material hoists for the most expeditious performance of all parts of its work. All other Contractors are required to provide their own facilities for the hoisting of materials under their respective Contracts. However, these Contractors may make arrangements, whenever possible, with the Contractor for General Construction Work for the use of its hoist upon such terms and conditions as it may prescribe.

- B. LOCATIONS - No hoists shall be constructed at such locations as will interfere with, or affect the construction of, floor arches, or the work of other Contractors. The hoists may be located at the exterior sides of the structure or in the courtyard and extend upward adjacent to the line of window openings. The hoists shall be located a sufficient distance from the exterior walls and be so protected as to prevent any of the permanent work from being damaged, stained or marred.
- C. ELEVATOR SHAFT - Wherever possible, one or more of the permanent elevator shafts may be used as temporary hoistways providing such use meets with the Building Code of the City of New York and the approval of the Commissioner, and providing further it entails no interference with the progress of the work of any Contractor.
- D. PROTECTION FOR INTERIOR HOISTS - All interior material hoistways shall be enclosed on each floor and shall be adequately protected with appropriate safety guards. In no event shall the protection be less than that required by law.

**1.18 Certificates of Approval**

- A. RESPONSIBILITY - Each Contractor shall be responsible for and shall obtain all final approvals for the work installed under its Contract in the form of such certificates that are required by all governmental agencies having jurisdiction over the work of the Contract.
- B. TRANSMITTAL - All such certificates shall be forwarded to the Commissioner through the Resident Engineer before final acceptance of the work of the Contract.

**1.19 Acceptance Tests**

- A. GOVERNMENTAL AGENCIES - All equipment and appliances furnished and installed under the Contract shall conform with the requirements of the Specifications, and shall in no event be less than that necessary to comply with the minimum requirements of the law and all of the governmental agencies having jurisdiction.
- B. NOTICE OF TEST - Whenever the Specifications and/or any governmental agency having jurisdiction requires the acceptance test, the Contractor shall give written notice to all concerned of the time when these tests will be conducted.
- C. ENERGY - The City will furnish all energy, fuel, water and light required for tests.
- D. LABOR AND MATERIALS - The Contractor shall furnish labor and all other material and instruments necessary to conduct the acceptance tests at no additional cost to the City.
- E. CERTIFICATES - The final acceptance by the Commissioner shall be contingent upon the Contractor delivering to the Commissioner all necessary certificates evidencing compliance in every respect with the requirements of the regulatory agencies having jurisdiction.
- F. RESULTS - If the results of tests and Controlled Inspections indicate that the material or procedures do not meet requirements as set forth on the Contract Drawings or in the Specifications or are otherwise unsatisfactory, the Contractor shall only proceed as directed by the Resident Engineer. Additional costs resulting from retesting, reinspecting, replacing of material and/or damage to the work of other trades and any delay caused to the schedule shall be borne by the Contractor.

**1.20 Progress Photographs (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- A. PHOTOGRAPHER - The Contractor for General Construction Work shall employ and pay for the services of a competent photographer who shall take photographs showing the progress of the work.
- B. PHOTOGRAPHS - There shall be four (4) photographs taken each month from the commencement of the Contract to the time of completion. These photographs shall show as far as possible, the work

completed within and on the exterior of the structure. The first series of photographs shall be taken prior to the actual commencement of work at the site. In addition thereto before final payment, there shall be six (6) photographs taken of unobstructed views of the completed project or projects and site, as directed by the Commissioner and after all scaffolding, hoists, shanties, field offices or other temporary work has been removed and final cleaning done. (For demolition work included in the Contract there shall be four (4) photographs taken before commencement of demolition operations; four (4) at the mid-point of operations; and four (4) at the completion of demolition operations). The prints shall be 8" x 10" gloss finish, mounted with a one (1) inch binding flap of muslin on the left side. They shall be marked on the back with date of exposure; the title of the project; and the specific location. Three (3) copies of each photograph shall be furnished free of charge to the Department of Design and Construction. Photographs shall be taken as ordered by the Commissioner.

#### **1.21 Job Meetings**

- A. **MEETINGS SCHEDULE** - Meetings shall be held as scheduled by the Resident Engineer in his office at the site, at which time Contractors for all separate Contracts shall have their representatives present to discuss all details relative to the execution of the work.
- B. **ACCOMODATIONS** - The Contractor for General Construction Work shall provide ample tables and chairs to accommodate all present at the meetings, and table space for Contract Drawings.
- C. **AGENDA** - The Resident Engineer shall preside over these meetings. Prior to each meeting, the Resident Engineer will consult with the Contractors and will prepare an agenda of items to be discussed. In general, after informal discussion of any item on the agenda, the Resident Engineer will summarize the discussion in a brief written statement, and each Contractor will then dictate a brief statement for the record.

The Contractor for General Construction Work shall furnish all necessary typing and printing of the minutes prepared by the Consultant Architect/Engineer. Ample copies of the printed minutes shall be furnished to the Resident Engineer for distribution to all Contractors and representatives of the Commissioner.

- D. **COORDINATION** - Job meetings shall also be called by the Contractor for General Construction Work for the purpose of coordinating, expediting and scheduling the work of all Contracts in accordance with the master coordinated Job Progress Chart. All Contractors and their subcontractors, material suppliers or vendors whose presence is necessary, are required to attend. These meetings may, at the discretion of the Contractor for General Construction Work, be held at the same place and immediately following the Job Meetings held by the Resident Engineer. Minutes of these meetings shall be recorded, typed and printed by the Contractor for General Construction Work and distributed to all parties concerned.

#### **1.22 Guarantees and Warranties - Refer to the Addendum to the General Conditions for the applicability of this article.**

- A. **SCHEDULE B** - Requirements for guarantees and warranties for the Project are set forth in Schedule B, which is included as part of the Addendum to the General Conditions.
- B. **FORM** - For all guarantee requirements set forth in Schedule B, the Contractor shall provide a written guaranty, in the form set forth on the following page.

**GUARANTY**

DDC PROJECT # \_\_\_\_\_

PROJECT DESCRIPTION \_\_\_\_\_

CONTRACT # \_\_\_\_\_

SPECIFICATION SECTION # AND TITLE \_\_\_\_\_

GUARANTY TO BE IN EFFECT FROM \_\_\_\_\_

TO \_\_\_\_\_

The Contractor hereby guarantees that the work specified under the above section of the aforesaid Contract will be free from defects of material and/or workmanship, for the period indicated above.

The Contractor also guarantees that it will promptly repair, restore, rebuild or replace whichever may be deemed necessary by the City, any or all defective material or workmanship of the aforementioned section, that may appear within the guaranty period and any finished work to which damage may occur because of such defects, to the satisfaction of the City and without any cost or expense to the City.

The Contractor hereby agrees to pay to the City the cost of the repairs or replacements should the City make the same because of the failure of the Contractor to do so.

\_\_\_\_\_  
Contractor

\_\_\_\_\_  
By

Subscribed and sworn to before me this  
day of \_\_\_\_\_, year \_\_\_\_\_

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

### **1.23 Removal of Rubbish and Surplus Materials**

- A. RUBBISH - Rubbish shall not be thrown from the windows or other parts of the project. Mason's rubbish, dirt and other dust-producing material shall be wetted down periodically.
- B. LOCATION - Each Contractor shall sweep up and deposit, at a location designated on each floor by the Contractor for General Construction Work, all of its rubbish, debris and waste materials, as it accumulates and when directed by the Resident Engineer. Wood cratings shall be broken up, neatly bundled, tied and stacked ready for removal and be deposited at a location designated on each floor by the Contractor for General Construction Work.
- C. LABORERS - The Contractor for General Construction Work shall be responsible for the removal of all rubbish, etc., from the site. The Contractor shall remove from the designated locations all piles of rubbish, debris, waste material and wood cratings as they accumulate and when directed by the Resident Engineer, and shall remove them from the site. The Contractor shall employ and keep engaged for this purpose an adequate number of laborers.
- D. SURPLUS MATERIALS - Each Contractor shall remove from the site all surplus materials when there is no further use for same.
- E. TOOLS AND MATERIALS - At the conclusion of the work, all erection plant, tools, temporary structures and materials belonging to the Contractor shall be promptly removed.

### **1.24 Cleaning**

Each Contractor shall thoroughly clean all equipment and materials furnished and installed and shall deliver such materials and equipment undamaged in a clean and new appearing condition at time of substantial completion.

### **1.25 Inspections by Other City Agencies**

- A. LETTER OF COMPLETION - Just prior to substantial completion of this Project, the Commissioner will file with the Department of Buildings, an application for a Letter of Completion or a Certificate of Occupancy for the structure.
- B. FINAL INSPECTIONS - In connection with the above mentioned application for a Letter of Completion or a Certificate of Occupancy and before certificates of final payments are issued, each Contractor will be required to arrange for all final inspections by the inspectional staff of the Department of Buildings or other governmental agencies having jurisdiction, and secure all reports, sign offs, certificates, etc., by such inspection staff or other governmental agencies, in order that a Letter of Completion or Certificate of Occupancy can be issued promptly.

### **1.26 Security Guards/Fire Guards on the Site (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

#### **A. SECURITY GUARDS (WATCHMEN)**

- 1. The Contractor for General Construction Work shall provide competent Security Guards on the site until final completion of the project or earlier if so notified in writing by the Commissioner. The Security Service shall commence with the start of work. There shall be no less than one (1) Security Guard on duty every day, including Saturdays, Sunday and Holidays, 24 hours a day, except between the hours of 8:00 A.M. and 4:00 P.M. on any day which is a regular working day for a majority of the trades. This exception during the working day shall not apply after the finishing painting of the plaster work is commenced; thereafter, not less than one (1) Security Guard shall be on duty continuously, 24 hours a day, until final completion of the project or earlier if so notified in writing by the Commissioner.

2. Every Security Guard shall be required to hold a "Certificate of Fitness" issued by the Fire Department. Every Security Guard shall, during their tour of duty, perform the duties of Fire Guard in addition to their security obligations.
3. Should the Commissioner find that any Security Guard is unsatisfactory, such guard shall be replaced by the Contractor for General Construction Work upon the written demand of the Commissioner.
4. Each Security Guard furnished by the Contractor for General Construction Work shall be instructed by the Contractor for General Construction Work to include in their duties the entire construction site including the Field Office, temporary structures, and equipment, materials, etc.
5. Should the Contractor for General Construction Work or any other Contractor consider the security requirements outlined above inadequate, it shall provide such additional security as it thinks necessary, after obtaining the written consent of the Commissioner. The additional cost of such approved increased protection will be paid by the Contractor who provides the additional protection.
6. Nothing contained in this Article shall diminish in any way the responsibility of each Contractor for its own work, materials, tools, equipment, nor for any of the other risks and obligations outlined hereinbefore in this Article.

B. **COSTS** - The Contractor for General Construction Work shall employ Security Guards/Fire Guards at all times, except as otherwise modified by the detailed Specifications and as approved by the Commissioner, for the purpose of safeguarding and protecting the site. All costs for Security Guards/Fire Guards shall be borne by the Contractor for General Construction Work.

C. **RESPONSIBILITY** - All Contractors will be responsible for safeguarding and protecting their own work, materials, tools and equipment.

#### **1.27 Contractor's Daily Reports**

A. **DAILY REPORTS** - As soon as the Contractor has started work on the Project, it shall submit to the Resident Engineer written daily reports of the work performed the previous day by any of its employees, including the employees of its subcontractors.

B. **INFORMATION** - The reports shall be prepared by the Contractor's Superintendent and shall bear the Contractor's Superintendent signature. Each report shall contain the following information:

1. The type of materials and/or major equipment being installed by the Contractor and the total number of employees working in each category on that particular day.
2. The names of the subcontractors working and the type of materials and/or major equipment being installed by each, together with the total number of employees working for each subcontractor on that particular day.
3. The major construction equipment being used by each Contractor and/or subcontractor.

#### **1.28 Alternate or Substitute Equipment**

A. In general, the Contract Drawings and Specifications show and describe arrangements suitable for the specific items of equipment either named or described. In the event that a Contractor submits for approval, and receives such approval, a device or piece of equipment which requires connections (vacuum, gas, steam, water, air, electric, etc.) or arrangements of these services, differing from those indicated or described in the Contract Documents, it shall be incumbent upon the Contractor submitting the alternate or substitute equipment to give timely notice to the other Contractors involved so that they may make suitable alterations in the work to accommodate the substitute or alternate equipment. The Contractor making the substitution shall be responsible for any and all additional

costs incurred by any of the Contractors by virtue of the substitution of equipment for the equipment named or described in the Contract Documents.

**1.29 Sleeve and Penetration Drawings (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- A. As soon as practicable after the commencement of work and when the order in which concrete for the first slabs, walls, etc. to be poured is determined, the Contractors for the engineering trades (Plumbing, Heating, Ventilating and Air Conditioning, and Electrical) shall submit to the Department of Design and Construction a sketch indicating the location and size of all penetrations for sleeves, ducts, etc. which will be required to accommodate the mechanical trades, in order that it may be determined if such penetrations will materially weaken the project's structure. The sketch will be stamped and returned if approved and/or comments will be transmitted. The engineering Contractors shall continue to submit sketches as the pouring schedule and the concrete work progresses and, until approvals for the penetration sketches have been given, shall not predicate their layout work on unapproved sketches.

**1.30 Location of Partitions (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- A. Within three (3) weeks after the concrete slabs have been poured on each floor level, the Contractor for General Construction Work shall immediately locate accurately all of the partitions, including the door openings, on the floor slabs in a manner approved by the Resident Engineer.

**1.31 Furniture and Equipment**

- A. RESPONSIBILITY - Each Contractor is responsible for moving all loose furniture and/or equipment in all areas when such furniture and/or equipment interferes with the proper performance of its work.
- B. PROTECTION - All such furniture and/or equipment must be adequately protected with dust cloths and returned to their original locations when directed to do so by the Resident Engineer.

**1.32 Overtime Work (Ordered by Commissioner)**

- A. OVERTIME - The Commissioner reserves right to order and pay for overtime work.
1. The Commissioner can order overtime work when in the Commissioner's opinion, delay occurs and such delay is not the fault of the Contractor, or
  2. When work is of such an important nature that delay in carrying such work to completion would result in serious disadvantage to the public.
- B. ORDER FOR OVERTIME WORK - When overtime work is ordered by the Commissioner, such "Order" will be issued by the Commissioner on a special form letter over the signature of the Commissioner.
- C. CONTRACTOR'S PROCEDURE PRIOR TO COMMENCING WORK
1. Make immediate application to the Commissioner of Department of Labor, State of New York, for dispensation in accordance with Subdivision 2 of Section 220 of the Labor Law.
  2. Upon receipt of such dispensation, proceed expeditiously with ordered overtime work.

**1.33 Compliance with OSHA Regulations**

These Contract Documents and the work hereby contemplated shall be governed, at all times, by the following Federal Laws:

- A. William Steiger Occupational Safety and Health Act of 1970, Public Law 91-596;

- B. Part 1910 - Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations;
- C. Part 1926 - Safety and Health Regulations for Construction, Chapter XVII of Title 29, Code of Federal Regulations.

### 1.34 Temporary Services

#### PART A (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)

- A. TEMPORARY WATER - during construction shall be furnished in the following manner:
  - 1. Immediately after the Contractor for General Construction Work has been ordered by the Commissioner to start work, it shall file an application with the Dept. of Environmental Protection for the schedule of charges for water use during construction. The Contractor for General Construction Work will be responsible for payment of water charges.
  - 2. Immediately after the Contractor for Plumbing Work has been ordered by the Commissioner to start work, it shall file an application with the Department of Environmental Protection's Bureau of Water Supply and obtain its permit to install the temporary water supply system. The system shall be installed and maintained for the use of all Contractors. A copy of the above mentioned permit shall be filed with the Commissioner. The Contractor for Plumbing Work shall provide temporary water main, risers and waste stacks as directed and install on each floor, outlets with two (2) 3/4" hose valve connections over a barrel installed on a steel pan. The Contractor for Plumbing Work shall provide drains from the pans to the stack and house sewer and hose bibs to drain the water supply risers and mains. During winter months the Contractor for Plumbing Work shall take the necessary precautions to prevent the temporary systems from freezing.
- B. TOILET FACILITIES - both exterior and interior, for the use of all Contractors, shall be furnished and installed in the following manner:
  - 1. Toilet fixtures shall be furnished, installed and maintained in a satisfactory operating condition by the Contractor for Plumbing Work.
  - 2. Enclosures for the toilet fixtures shall be erected and maintained by the Contractor for General Construction Work.
  - 3. Heating for the enclosures shall be furnished, installed and maintained by the Contractor for General Construction Work.
  - 4. Electric lighting for the enclosures shall be furnished, installed and maintained by the Contractor for Electrical Work.
  - 5. The Contractor for General Construction Work shall keep the temporary toilet fixtures and enclosures in a clean and sanitary manner.
  - 6. No Contractor shall cause any sanitary nuisances to be committed by its employees in or about the work. Each Contractor shall enforce all sanitary regulations of the City and State Health Authorities.
- C. OVERTIME USE - Whenever any Contractor(s) work before or after the regular work hours hereinafter specified under Subparagraph D, or on a Saturday, Sunday or Holiday of any trade, such Contractor(s) shall pay the Contractor for Plumbing Work for the activation of the temporary water system and toilet facility services during such overtime periods. When more than one (1) Contractor is involved in overtime work, the costs thereof shall be prorated as determined by the Resident Engineer. When overtime is required by any or all Contractors on the work, the provisions for payment for regular time use of the temporary water supply system as specified in Subparagraph D shall apply.



- D. **ACTIVATION** - The Contractor for Plumbing Work shall bear the cost of keeping the temporary water supply system activated from a period of time 15 minutes before the established starting time of that trade which starts work earliest in the morning, to 15 minutes after the established quitting time of that trade which stops work latest in the evening. This applies to every day in the week which is established as a regular working day for aforementioned trades and holds until completion and final acceptance of the work of the Contractor for Plumbing Work or until the services are terminated by instructions from the Commissioner.

**PART B (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- A. **WATER** - The Contractor for General Construction Work will be responsible for payment of water charges. Billing will be in accordance with the Department of Environmental Protection schedule of charges for Building Purposes.
- B. **ELECTRICITY** - for temporary light and the operation of small tools, is available in the area of this project and will be furnished to the Contractor for General Construction Work by the Contractor for Electrical Work without cost.
- C. **TOILET FACILITIES** - The Contractor for General Construction Work shall arrange with the Commissioner for the temporary use of certain toilets or washrooms within the project for the use of all employees during the execution of the work.
- D. **MAINTENANCE** - The Contractor for General Construction Work shall maintain the temporary toilet facilities in a clean and sanitary manner and make all necessary repairs due to misuse.
- E. **NUISANCES** - The Contractors shall not cause any sanitary nuisance to be committed by its employees in or about the work, and shall enforce all sanitary regulations of the City and State Health Authorities.

**1.35 Temporary Use, Operation and Maintenance of Elevators during Construction**

**PART A - FOR NEW BUILDINGS UP TO AND INCLUDING 15 STORIES (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- A. **INSTALLATION** - The Contractor for General Construction Work shall install and complete, as indicated herein, one (1) selected main elevator in the Project for temporary operation by the Contractor for General Construction Work for the transporting of employees of all Contractors and representatives of the Department of Design and Construction and other Governmental Agencies having jurisdiction of work at the project. The Contractor for General Construction Work shall furnish, install and maintain for such elevators, all necessary hoisting ropes, governor cables, traveling conductor cables, operating devices, temporary hand reset target annunciators, temporary signal devices, and all other permanent or temporary parts. The installation and maintenance of the temporary elevator and all equipment and/or parts utilized in connection therewith shall be in accordance with the rules and regulations of all agencies and/or entities having jurisdiction over elevators in temporary use.
- B. **RESPONSIBILITY** - The Contractor for General Construction shall be responsible for any injury to persons or damage to property arising out of the temporary elevator and all equipment and/or parts utilized in connection therewith. The Contractor for General Construction shall employ and pay wages, including overtime wages if necessary, for all workers required for the operation and maintenance of the temporary elevator. The Contractor for General Construction shall be responsible for all costs for: (1) the installation of the temporary elevator, (2) maintaining the temporary elevator in clean, proper operating condition, including the cost of lubricants and/or parts for such maintenance, (3) all work in pits, shaftways and machine rooms necessary for the operation of the elevator, and (4) the replacement of the temporary elevator or parts utilized in connection therewith, if required.

- C. **ACTIVATION TIME** - The Contractor for General Construction Work shall keep the temporary elevator activated from a period of time 15 minutes before the established starting time of that trade which starts work earliest in the morning to 15 minutes after the established quitting time of that trade which stops work latest in the evening. This applies to every day in the week, which is established as a regular working day for the aforementioned trades.
- D. **COMMENCEMENT OF SERVICE** - The Contractor for General Construction Work shall begin to provide temporary elevator service using the selected main passenger elevator no later than eight (8) weeks (40 working days) after the machine room roof slab, or that portion of it surrounding the elevator shaft, has been placed. No later than three (3) weeks (15 working days) after the machine room roof slab, or that portion of it surrounding the elevator shaft, has been placed the following work shall have been completed:
1. The shaft shall have been completely enclosed by either the permanent or a temporary enclosure meeting the requirements of the law.
  2. The machine room shall have been made completely watertight either by permanent or temporary construction. Beams or other devices, either permanent or temporary shall be provided which will enable the safe and practicable hoisting of the elevator machinery for installation.
  3. There shall have been installed on all floors at the shaftway entrances to the elevator, solid substantial frames and either sliding or swing doors with substantial hardware and door locks and any necessary approved wire mesh barricades for adjacent shaftways.
  4. There shall have been furnished and installed solid substantial enclosures at front, back, sides and top of car platform enclosure, with emergency exit at top of car, excepting that the portion of the front at the elevator entrance shall have been provided with a substantial temporary door or gate.
- E. **ELECTRICAL INSTALLATION** - The Contractor for Electrical Work, not later than 20 calendar days after the machine room roof slab or that portion of its surrounding the elevator has been placed, shall have furnished and installed temporary or permanent power and light feeders as required for the elevator used for temporary service and shall have connected such feeders to the terminals on the starter panels or controllers in the machine room to the low voltage transformers and car light outlets in the center of shaftway and for the car control and signal traveling cables. The Contractor for Electrical Work shall make all these required connections as soon as the equipment is declared ready for such connections by the Resident Engineer. The cost of this work shall be included in the Contractor for Electrical Work's Contract.
- F. **REMOVAL** - When elevators for permanent use have been installed and are in condition for service, and when directed by the Commissioner, the Contractor for General Construction Work shall remove the temporary enclosures and all temporary elevator equipment and promptly proceed with the installation of the permanent equipment as is required under the Contract.
- G. **INSPECTION** - Before temporary elevator equipment has been removed, a joint inspection of the equipment shall be made by the Contractor for General Construction Work and the Commissioner to determine the condition of this equipment upon the discontinuation of its temporary use. If this inspection deems it necessary, the Contractor for General Construction Work shall furnish and install new governor and compensating ropes, new traveling cables and new controller parts, etc. The car and counterweight safeties shall be thoroughly cleaned of all dirt and all foreign matter, then properly lubricated and placed in good operating condition to the satisfaction of the Commissioner. If it is determined and ordered by the Commissioner that new hoist ropes are required, such ropes shall be installed and payment therefor will be made in accordance with Article 26 of the Contract.
- H. **REPLACEMENT** - The Contractor for General Construction Work shall replace with new, any of the equipment or parts of the temporary elevator installation that were damaged, destroyed, or that indicate excessive wear or corrosion excepting the replacement of hoisting ropes. All shaftways, pits, motor rooms and sheave spaces used for temporary operation of elevators shall be thoroughly

cleaned. Where lubricated rails are used they shall be washed down. If roller guides are used, all rust, dirt, etc., must be moved from the rails. The full cost of parts replacement, cleaning, etc., shall be borne by the Contractor for General Construction Work except for the replacement of hoisting ropes.

- I. COSTS - The Contractor for Electrical Work shall pay the costs of all electrical current used for operating the temporary elevators. The Contractor for General Construction Work shall provide all necessary conduit and wiring connections for the proper operation of the elevator and the signaling of the temporary elevators.
- J. LIMITATIONS OF USE - The temporary elevator shall not be used during its operation for hoisting of materials or removal of rubbish, but shall be limited only to the transportation of employees of all Contractors and the representatives of City Departments and other Governmental Agencies having jurisdiction of work at the project. However, the Resident Engineer may grant special permission at specified times to the various Contractors to hoist materials, which in the Resident Engineer's opinion will not overload or damage the elevator installation, but only after such times as all plastering has been completed from the second floor up. The particular Contractor using the elevator for the hoisting of its material shall be responsible for any damage to the elevator during the entire period of such use. The Contractor for General Construction Work shall give notification in writing to the Resident Engineer of any alleged damage to the elevator installation within 24 hours after the elevator has been employed for the hoisting of materials by the particular Contractor(s).
- K. PAYMENT FOR USE - The Contractor for General Construction Work shall be paid for its operation and maintenance of the temporary elevator or permanent elevator used for temporary service at the daily rate indicated under the Item of its Contract. All other costs in connection with the elevator installation and equipment, excepting electrical work done by the Contractor for Electrical Work under its Contract, shall be included in the Contractor for General Construction Work's Contract.
- L. LIQUIDATED DAMAGES - The Contractor for General Construction Work will be charged at the rate of \$100 per day for each day it fails to provide the temporary elevator service described in this section beginning with the 41<sup>st</sup> working day after the machine room roof slab, or that portion of it surrounding the elevator shaft, has been placed and stripped. This charge will be deducted from any amount due and owing to the Contractor for General Construction Work.
- M. OVERTIME USE - All Contracts. Whenever any Contractor or Contractors work before or after the regular work hours as indicated in Paragraph B above, or on a Saturday, Sunday or Holiday, such Contractor or Contractors shall pay the Contractor for General Construction Work for the operation and maintenance of the temporary elevator, if required by such Contractor or Contractors, at the daily rate indicated in the Contract but increased to reflect the difference between regular wage rates and overtime wage rates. The basic hourly charge shall be considered as one ninth (1/9) of the amount shown in the Item of the Bid form of the General Construction Work Contract. The City will not pay any Contractor for such overtime use of the elevator. When more than one (1) Contractor is involved in the overtime work, the charges shall be prorated as determined by the Resident Engineer unless otherwise agreed mutually among all the Contractors involved.

**PART B - FOR NEW BUILDINGS OVER 15 STORIES (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- A. INSTALLATION - The Contractor for General Construction Work shall install and complete, as indicated herein, two (2) selected main elevators in the Project for temporary operation by the Contractor for General Construction Work for the transporting of employees of all Contractors and representatives of the Department of Design and Construction and other Governmental Agencies having jurisdiction over work at the project. The Contractor for General Construction Work shall furnish, install and maintain for such elevators, all necessary hoisting ropes, governor cables, traveling conductor cables, operating devices, temporary hand reset target annunciators, temporary signal devices and all other permanent or temporary parts. The installation and maintenance of the temporary elevator and all equipment and/or parts utilized in connection therewith shall be in accordance with the rules and regulations of all agencies and/or entities having jurisdiction over elevators in temporary use. The two (2) elevators will not be operated simultaneously.

- B. **RESPONSIBILITY** - The Contractor for General Construction shall be responsible for any injury to persons or damage to property arising out of the temporary elevator and all equipment and/or parts utilized in connection therewith. The Contractor for General Construction shall employ and pay wages, including overtime wages if necessary, for all workers required for the operation and maintenance of the temporary elevator. The Contractor for General Construction shall be responsible for all costs for: (1) the installation of the temporary elevator, (2) maintaining the temporary elevator in clean, proper operating condition, including the cost of lubricants and/or parts for such maintenance, (3) all work in pits, shaftways and machine rooms necessary for the operation of the elevator, and (4) the replacement of the temporary elevator or parts utilized in connection therewith, if required.
- C. **ACTIVATION TIME** - The Contractor for General Construction Work shall keep the temporary elevator activated from a period of time 15 minutes before the established starting time of that trade which starts work earliest in the morning to 15 minutes after the established quitting time of that trade which stops work latest in the evening. This applies to every day in the week, which is established as a regular working day for the aforementioned trades.
- D. **LOW RISE ELEVATOR** - The Contractor for General Construction Work shall begin to provide temporary elevator service using one (1) selected main passenger elevator no later than six (6) weeks (30 working days) after the 12th Floor slab, or that portion of it surrounding the elevator shaft, has been placed and stripped. No later than one (1) week, five (5) working days, after the 12th Floor slab, or that portion of it surrounding the elevator shaft, has been placed and stripped the following work shall have been completed:
1. The shaft shall have been completely enclosed up to the 12th Floor by either the permanent or a temporary enclosure meeting the requirements of the law.
  2. A temporary machine room enclosure shall have been provided at the 11th Floor and shall have been made completely watertight either by permanent or temporary construction. Beams or other devices, either permanent or temporary, shall be provided which will enable the safe and practicable hoisting of the elevator machinery for installation.
  3. There shall have been installed on all floors up to and including the 9th Floor at the shaft entrances to the elevator, solid substantial wood frames and either sliding or swing doors with substantial hardware and door locks, also any necessary approved wire mesh barricades for adjacent shaftways.
  4. There shall have been furnished and installed solid substantial enclosures at front, back, sides and top of car platform enclosure, with an emergency exit at top of car, excepting that the portion of the front at the elevator entrance shall have been provided with a substantial temporary door or gate.
- E. **ELECTRICAL INSTALLATION** - The Contractor for Electrical Work, not later than 10 calendar days after the 12th Floor slab or that portion of it surrounding the elevator, has been poured and stripped, shall have furnished and installed temporary or permanent power and light feeders as required for the elevator used for temporary service and shall have connected such feeders to the terminals on the starter panels or controllers in the temporary machine room, to the low voltage transformers and car light outlets in the center of the shaftway and for the car control and signal traveling cables. The Contractor for Electrical Work shall make all these required connections as soon as the Equipment is declared ready for such connections by the Resident Engineer. The cost of this work shall be included in the Contractor for Electrical Work's Contract.
- F. **HIGH RISE ELEVATOR** - The Contractor for General Construction Work shall begin to provide temporary elevator service to all floors, using a selected main passenger elevator, no later than eight (8) weeks (40 working days) after the machine room roof slab, or that portion of it surrounding the elevator shaft, has been placed. No later than three (3) weeks (15 working days) after the machine room roof slab, or that portion of it surrounding the elevator shaft, has been placed, the following work shall have been completed:

1. The shaft shall have been completely enclosed by either the permanent or temporary enclosure, meeting the requirements of the law.
2. The machine room shall have been made completely watertight either by permanent or temporary construction. Beams or other devices, either permanent or temporary shall be provided which will enable the safe and practicable hoisting of the elevator machinery for installation.
3. There shall have been installed on all floors at the shaftway entrances to the elevator, solid substantial frames and either sliding or swing doors with substantial hardware and door locks, also any necessary approved wire mesh barricades for adjacent shaftways.
4. There shall have been furnished and installed, solid substantial enclosures at front, back, sides and top of car platform enclosure, with an emergency exit at top of car, excepting that the portion of the front at the elevator entrance shall have been provided with a substantial temporary door or gate.

G. The Contractor for Electrical Work, not later than 20 calendar days after the machine room slab or that portion of it surrounding the elevator shaft has been placed, shall have furnished and installed temporary or permanent power and light feeders as required for the high rise elevator to be used for temporary service and shall have connected such feeders to the terminals on the motor-generator starter panels or controllers in the machine room, to the signal circuits low voltage transformers for the annunciators and car light outlets in the center of shaftway.

The Contractor for Electrical Work shall make all these required connections as soon as the equipment is declared ready for such connections by the Resident Engineer. The cost of this work shall be included in the Contractor for Electrical Work's Contract.

H. When the high rise elevator is completed and ready for temporary operation, the low rise temporary elevator shall be shut down.

I. When one (1) or more elevators for permanent use have been installed and are in condition for service, and when directed by the Commissioner, the Contractor for General Construction Work shall remove the temporary enclosures and all temporary elevator equipment, and promptly proceed with the installation of the permanent equipment as is required under the Contract.

J. Before temporary elevator equipment has been removed, a joint inspection of the equipment shall be made by the Contractor for General Construction Work and the Commissioner to determine the condition of this equipment upon the discontinuation of its temporary use. If this inspection determines it necessary, the Contractor for General Construction Work shall furnish and install new governor and compensating ropes, new traveling cables, new controller parts, etc. The car and counterweight safeties shall be thoroughly cleaned of all dirt and all foreign matter, then properly lubricated and placed in good operating condition to the satisfaction of the Commissioner. If it is determined and ordered by the Commissioner that new hoist ropes are required, such ropes shall be installed and payment therefor will be made in accordance with Article 26 of the Contract.

K. The Contractor for General Construction Work shall replace with new, any of the equipment or parts of the temporary elevator installations that were damaged, destroyed, or that indicate excessive wear or corrosion excepting the replacement of hoisting ropes. All shaftways, pits, motor rooms and sheaves spaces used for temporary operation of elevators shall be thoroughly cleaned down. Where lubricated rails are used they shall be washed down, if roller guides are used, all rust, dirt, etc., must be removed from the rails. The full cost of parts replacement cleaning, etc., shall be borne by the Contractor for General Construction Work except for the replacement of hoisting ropes.

L. The Contractor for Electrical Work shall pay the costs of all electrical current used for operating the temporary elevators. The Contractor for General Construction Work shall provide all necessary conduits and wiring connections for the proper operation of the elevators and the signaling of the temporary elevators.

- M. No temporary elevator shall be used during its operation for hoisting of materials or removal of rubbish, but shall be limited only to the transportation of employees of all Contractors and the representatives of City Departments and other governmental agencies having jurisdiction of work at the project. However, the Resident Engineer may grant special permission at specific times to the various Contractors to hoist materials which, in the Resident Engineer's opinion, will not overload or damage the elevator installation, but only after such time as all plastering has been completed from the second floor up. The particular Contractor using the elevator for the hoisting of its material shall be responsible for any damage to the elevator during the entire period of such use. The Contractor for General Construction Work shall give notification in writing to the Resident Engineer of any alleged damage to the elevator installation within 24 hours after the elevator has been employed for the hoisting of materials by the other Contractors.
- N. The Contractor for General Construction Work shall be paid for its operation and maintenance of each temporary elevator or permanent elevator used for temporary service at the daily rate indicated under the item of its Contract. All other costs in connection with elevator installation and equipment, excepting Electrical Work done by the Contractor for Electrical Work under its Contract, shall be included in the Contractor for General Construction Work's Contract.
- O. LIQUIDATED DAMAGES - The Contractor for General Construction Work will be charged at the rate of \$100 per day for each day it fails to provide the temporary elevator service described in this Section beginning with the 31st working day after the 12th Floor slab, or that portion of the 12th Floor slab surrounding the elevator shaft, has been placed and stripped. This charge will be deducted from any amount due and owing to the Contractor for General Construction Work.
- P. OVERTIME USE - ALL CONTRACTS. Whenever any Contractor(s) work before or after the regular work hours as indicated in Subparagraph B above, or on a Saturday, Sunday or Holiday, such Contractor or Contractors shall pay the Contractor for General Construction Work for the operation and maintenance of the temporary elevator, if required by such Contractor or Contractors, at the rate indicated in the Item of the bid form of the General Construction Work Contract but increased to reflect the difference between regular wage rates and overtime wage rates. The basic hourly charge shall be considered as one ninth (1/9) of the amount shown in the item of the General Construction Work Contract. The City will not pay any Contractor for such overtime use of the elevator. When more than one (1) Contractor is involved in the overtime work, the charges shall be prorated as determined by the Resident Engineer unless otherwise agreed mutually among all the Contractors involved.

**PART C - EXISTING BUILDINGS (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- A. The Contractor for General Construction Work may use, at the Commissioner's discretion, one (1) selected elevator in the project for temporary operation by the General Construction Work Contractor for the transportation of employees of all Contractors and representatives of the Department of Design and Construction and other Governmental Agencies having jurisdiction over work at the Project. The Contractor for General Construction Work shall maintain for such elevators, all necessary hoisting ropes, governor cables, traveling conductor cables, operating devices hand reset target annunciators, signal devices, and all other permanent or temporary parts. The installation and maintenance of the temporary elevator and all equipment and/or parts utilized in connection therewith shall be in accordance with the rules and regulations of all agencies and/or entities having jurisdiction over elevators in temporary use.
- B. The Contractor for General Construction shall be responsible for any injury to persons or damage to property arising out of the temporary elevator and all equipment and/or parts utilized in connection therewith. The Contractor for General Construction shall employ and pay wages, including overtime wages if necessary, for all workers required for the operation and maintenance of the temporary elevator. The Contractor for General Construction shall be responsible for all costs for: (1) the installation of the temporary elevator, (2) maintaining the temporary elevator in clean, proper operating condition, including the cost of lubricants and/or parts for such maintenance, (3) all work in pits, shaftways and machine rooms necessary for the operation of the elevator, and (4) the replacement of

the temporary elevator or parts utilized in connection therewith, if required.

- C. The Contractor for General Construction Work shall keep the temporary elevator activated from a period of time of 15 minutes before the established starting time of that trade which starts work earliest in the morning to 15 minutes after the established quitting time of that trade which stops work latest in the evening. This applies to every day in the week, which is established as a regular working day for the aforementioned trades.
- D. The Contractor for General Construction Work shall replace with new any of the equipment or parts of the elevator for temporary operation installation that were damaged, destroyed, or that indicate excessive wear or corrosion excepting the replacement of hoisting ropes. All shaftways, pits, motor rooms and sheave spaces used for temporary operation of elevators shall be thoroughly cleaned down. Where lubricated rails are used they shall be washed down, if roller guides are used, all rust, dirt, etc., must be moved from the rails. The full cost of parts replacement, cleaning, etc., shall be borne by the Contractor for General Construction Work except for the replacement of hoisting ropes.
- E. The elevator for temporary operations shall be used during its operation for hoisting of materials or removal of rubbish, but shall be limited only to the transportation of employees of all Contractors and the representative of City Departments and other Governmental Agencies having jurisdiction of work at the project. However, the Resident Engineer may grant special permission at specified times to the various Contractors to hoist materials which, in the Resident Engineer's opinion, will not overload or damage the elevator installation. The particular Contractor using the elevator for the hoisting of its material shall be responsible for any damage to the elevator during the entire period of such use. The Contractor for General Construction Work shall give notification in writing to the Resident Engineer of any alleged employee for the hoisting of materials by the particular Contractor(s).
- F. The Contractor for General Construction Work shall pay all costs for the operation and maintenance of the elevator for temporary operation. All other costs in connection with the elevator and equipment excepting electrical work done by the Contractor for Electrical Work under its Contract, shall be included in the Contractor for General Construction Work's Contract.
- G. LIQUIDATED DAMAGES - The Contractor for General Construction Work will be charged at the rate of \$100 per day for each day it fails to provide elevator services described in this section beginning with 15 consecutive calendar days from notice to proceed. This charge will be deducted from any amount due and owing to the Contractor for General Construction Work.
- H. OVERTIME USE - ALL CONTRACTS - Whenever any Contractor(s) work before or after the regular work hours as indicated in Paragraph B above, or on a Saturday, Sunday or Holiday, such Contractor(s) shall pay the Contractor for General Construction Work for the operation and maintenance of the elevator, if required by such Contractor(s) at the union daily rates but increased to reflect the difference between regular wage rates and overtime wage rates. The City will not pay any Contractor for overtime use of the elevator. When more than one (1) Contractor is involved in the overtime work, the charges shall be prorated as determined by the Resident Engineer unless otherwise agreed mutually among all the Contractors involved.

**1.36 General Mechanical Requirements (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- A. The General Mechanical Requirements contained herein shall be followed by all Contractors furnishing mechanical equipment under their respective Contracts.
- B. CONCEALED PIPING - and ducts shall mean piping and ducts hidden from sight in masonry or other construction, in floor fill, trenches, partitions, hung ceilings, furred spaces, pipe shafts and in service tunnels not used for passage. Where piping and ducts run in areas that have hung ceilings, such piping and ducts shall be installed in the hung ceilings.
- C. THE CONTRACT DRAWINGS - are in part diagrammatic and show the general arrangement of the equipment, ducts and piping included in the Contract and the approximate size and location of the

equipment. The Contractor shall follow these Contract Drawings in laying out the work and shall consult the Contract Drawings of the other Contracts to become familiar with all conditions affecting it and to verify the spaces in which it will be installed. The Contractor shall cooperate with the Public Utilities doing certain necessary work for this project. The attention of the Contractor is called to the Contract Drawings for General Construction Work for the location, arrangement and extent of plumbing and other fixtures and equipment. All work shall be installed in locations as shown on these Contract Drawings.

- D. **CERTIFICATES** - On completion of the work, the Contractor shall obtain certificates of inspection, approval, acceptance and of compliance with all laws from all agencies and/or entities having jurisdiction over the work and shall deliver these certificates to the Commissioner. The work shall not be deemed substantially complete until the certificates have been delivered.
- E. **SHOP DRAWING SUBMITTALS** - Contractors doing mechanical work shall submit, as directed, Shop Drawings, roughing drawings, manufacturer's Shop Drawings, field drawings, cuts, bulletins, etc., of all materials, equipment and methods of installation shown or specified.
1. Submit sheet metal shop standards. Submit manufacturer's product data including gauges, materials, types of joints, scaling materials and installations for metal ductwork materials and products.
  2. Submit scaled layout drawing (3/8"=1') of metal ductwork and fittings including, but not limited to, duct sizes, locations, elevations, slopes of horizontal runs, wall and floor penetrations and connections. Show modifications of indicated requirements made to conform to local shop practice and how those modifications ensure that free area, materials and rigidity are not reduced. Layouts should include all the room plans, mechanical equipment rooms and penthouses. Method of attachment of duct hangers to building construction all with the support details. Coordinate shop drawings with related trades prior to submission.
  3. Indicate duct fittings, particulars such as gauges, sizes, welds and configuration prior to start of work for low-pressure systems.
  4. Submit maintenance data and parts lists for metal ductwork materials and products. Include this data, product data and shop drawings in maintenance manual.
- F. **ACCESSIBILITY** - All work shall be installed by the Contractor so as to be readily accessible for inspection, operation, maintenance and repair. Minor deviations from the arrangement indicated on the Contract Drawings may be made to accomplish this, but they shall not be made without approval by the Commissioner.
- G. **CHANGES IN PIPING, DUCTS, AND EQUIPMENT** - Wherever field conditions are such that for proper execution of the work, reasonable changes in location of piping, ducts and equipment are necessary and required, the Contractor shall make such changes as directed and approved, without extra cost to the City.
- H. **CLEANING OF PIPING, DUCTS, AND EQUIPMENT** - Piping, ducts and equipment shall be thoroughly cleaned by the Contractor of all dirt, cuttings and other foreign substances. Should any pipe, duct or other part of the several systems be obstructed by any foreign matter, the Contractor will be required to pay for disconnecting, cleaning and reconnecting wherever necessary for the purpose of locating and removing obstructions. The Contractor shall pay for repairs to other work damaged in the course of removing obstructions.
- I. **STANDARDIZATION OF SIMILAR EQUIPMENT** - Unless otherwise particularly specified, all equipment of the same kind, type or classification, and used for identical purposes, shall be the product of one (1) manufacturer.
- J. **MACHINERY PARTS** - shall conform exactly to the dimensions shown on the Contract Drawings. The equivalent parts of identical machines shall be identical so that they can be interchangeable.



- K. **FITTINGS** - All grease lubricating fittings on equipment shall be of a uniform type and shall be readily accessible and types proposed to be used shall be submitted for approval.
- L. **GUARDS** - All machinery shall be designed with protecting guards conforming with the requirements of the Industrial Code of the New York State Department of Labor or OSHA, whichever is stricter.
- M. **LIMIT SWITCHES** - Unless otherwise specified, limit switches and other mechanically actuated switches shall be enclosed in tight metal boxes and be installed in the proper locations ready for conduit connections. Switches shall be complete with all supports, stops, cams, arms, tripping and operating members, which shall be adjustable where required for proper functioning.
- N. **ANCHORS, BOLTS, ETC. AND FOUNDATIONS** - Unless otherwise specified, the Contractor shall furnish the necessary anchors, bolts, guides, track rails, bearing plates, substantial templates and all other appurtenances, and build the necessary foundations, as approved by the Commissioner, for all equipment supplied by the Contractor under its Contract.
- O. **EQUIPMENT DESIGN** - Equipment and appurtenances shall be designed in conformity with ASME and AIEE standards and shall be of rugged construction and of sufficient strength to withstand all stresses which may occur during fabrication, testing, transportation, installation, and all conditions of operations. Adequate stays, braces and anchors shall be provided. All bearings and moving parts shall be adequately protected against wear by bushings, or other approved means, and shall be fully lubricated by readily accessible devices. Details shall be designed for appearance as well as utility. Protruding members, joints, corners, gear covers and the like shall be finished in appearance. All exposed welds shall be ground smooth and the corners of structural shapes shall be mitered.
- P. **SUPPORTING STRUCTURES DESIGNED BY THE CONTRACTOR** - Unless otherwise specified, supporting structures for equipment to be furnished by the Contractor shall be designed and built by the Contractor of sufficient strength to safely withstand all stresses to which they may be subjected, within permissible deflections, and shall meet the following standards:
1. Structural Steel - ASTM Standard Specifications, AISC and NYBC.
  2. Concrete for supports for equipment shall conform to the Specifications for concrete herein, but in no case shall be less than the requirements of the NYBC for average concrete.
  3. Steel reinforcement for concrete shall be of intermediate grade and shall meet the requirements of the Standard Specifications for Billet Steel-Concrete Reinforcement Bars, ASTM.
- Q. **ENGINEER'S ASSUMED DESIGN DATA** - All structural steel, concrete and reinforcement indicated or specified to support the equipment or appurtenances and the area immediately adjacent thereto have been designed from data based on assumed average anticipated clearances and loading. The final structural design in these locations will be based on definite data received from the Contractor after the Commissioner approves the equipment and appurtenances to be installed. The Commissioner will then redesign, if necessary, the supporting structure to properly support and maintain the approved equipment and appurtenances. Necessary major changes in design will be covered by Supplementary Drawings that will be furnished to the Contractor. All changes indicated or necessary to accommodate the equipment and appurtenances, shall be incorporated into the Working Drawings submitted for approval, and the cost of furnishing and installing the work necessitated by these changes shall be borne by the Contractor furnishing the equipment.
- R. **INSTALLATION OF EQUIPMENT** - Equipment shall be erected in a neat and workmanlike manner on the foundations, at the locations and elevations shown on the Contract Drawings or as required. All equipment shall be correctly aligned, leveled and adjusted for satisfactory operation and shall be installed so that proper and necessary connections can be made readily between various units and with piping and equipment that may be installed under other Contracts. When required by the Specifications, the Contractor shall obtain the assistance of a competent and experienced Engineer or Superintendent, in the employ of the manufacturer, to install the equipment.

- S. **ELIMINATION OF NOISE** - All work provided under the Contract shall operate without objectionable noise or vibration.
1. Should operation of any one or more of the several systems produce noise or vibration which is, in the opinion of the Commissioner, objectionable, the Contractor shall at its own expense make changes in piping, equipment, etc. and do all work necessary to eliminate objectionable noise or vibration.
  2. Should noise or vibration found objectionable by the Commissioner be transmitted by any pipe or portions of the structure from equipment installed under the Contract, the Contractor shall at its own expense install such insulators and make such changes in or additions to the installations as may be necessary to prevent transmission of this noise or vibration.
- T. **GROUTING** - The Contractor shall furnish all material and labor for proper bedding on Portland Cement grout, the equipment or its supporting base. Grout shall consist of one (1) part Portland Cement and one (1) part of approved sand. The top of the masonry foundation shall be properly cleaned and wetted before grouting. Grout shall completely fill all spaces between the equipment, or base, and the foundation and it shall generally average one (1) inch in thickness. Leveling wedges shall not be removed before the grout has reached its final set. Voids left by wedges shall be pointed with grout. Exposed surfaces of the grout shall have a finished appearance.
- U. **PRELIMINARY FIELD TEST** - As soon as conditions permit, the Contractor shall furnish all necessary labor and materials for, and shall make, preliminary field tests of the equipment to ascertain compliance with the requirements of the Contract. If the preliminary field tests disclose equipment that does not comply with the Contract, the Contractor shall, prior to the acceptance test, make all changes, adjustments and replacements required.
- V. **INSTRUCTIONS ON OPERATION** - At the time the equipment is placed in permanent operation by the City, the Contractor shall make all adjustments and tests required by the Commissioner to prove that such equipment is in proper and satisfactory operating condition. The Contractor shall instruct the City's operating personnel on the proper maintenance and operation of the equipment for the period of time called for in the Specifications.

### **1.37 General Electrical Requirements**

**SCOPE** - This Article sets forth the general requirements applicable to electrical work for the Project. Such requirements are intended to be read in conjunction with the Specifications and Contract Drawings for the Project. In the event of any conflict between the requirements set forth in this Article and the requirements of the Specifications and/or the Contract Drawings, whichever requirements is the most stringent, as determined by the Commissioner, shall take precedence.

#### **PART A - PROCEDURE--ELECTRICAL APPROVALS**

**SCOPE**- This Section sets forth general electrical information, as well as required approvals for all electrical work required for the Project, including ancillary electrical work which may be included in contracts for other than the Contract for Electrical Work.

- A. **ELECTRIC SERVICE** - The electric service supply is subject to commercial and operating variation of the utility company. Proper provision shall be made to have all apparatus operate normally under these conditions.
- B. **SUPERVISION AND ACCEPTANCE** - The electrical work and equipment shall be installed under the supervision of the Commissioner's representative. Final acceptance and approval of the work will be contingent upon the inspection and test of the installation by the City regulatory agency, on completion.
- C. **TESTS** - The Contractor shall notify the Commissioner when the Contractor will examine and begin

work and shall also notify the Commissioner when the Contractor has completed the work and is ready to have it inspected and tested. Upon completion of the work and prior to final payment, tests shall be made as required by the Commissioner of all electrical materials, electrical and associated mechanical equipment, and of appliances installed hereunder. The Contractor shall furnish all labor and material for such tests. Should the tests show that any of the material, appliances or workmanship are not first class or not in compliance with the Contract, the Contractor on written notice shall remove and promptly replace them with other materials in conformity with the Contract.

- D. **CERTIFICATE OF THE BUREAU OF ELECTRICAL CONTROL, OF THE DEPARTMENT OF BUILDINGS (B.E.C.)** - Before final payment is made, there must be filed with the Department of Design and Construction, a Certificate of Inspection signed by the Director of the B.E.C., which Certificate shall certify that all materials and workmanship comply with the rules and regulations of the B.E.C. of the City of New York and with the Electrical Code of the Administrative Code of the City of New York.
- E. **RESPONSIBILITY FOR CARE AND PROTECTION OF EQUIPMENT**
1. The Contractor furnishing any equipment shall be responsible for the equipment until it has been finally inspected, tested and accepted, in accordance with the requirements of these Specifications.
  2. After delivery and before and after installation, the Contractor shall protect all equipment against theft, injury or damage from all causes. The Contractor shall carefully store all equipment received for work, which is not immediately installed. If any apparatus has been subject to possible injury by water, it shall be thoroughly dried out and put through a special dielectric test as directed by the Commissioner, at the expense of the Contractor or replaced by the Contractor without additional cost to the City.
- F. **UNIFORMITY OF EQUIPMENT** - Any two (2) or more pieces of apparatus or materials of the same kind, type or classification and being used for identical types of service, shall be made by the same manufacturer.
- G. **CONTRACTOR'S ELECTRICAL DRAWINGS AND SAMPLES FOR APPROVAL**
1. The Contractor shall submit to the Commissioner for approval, complete dimensional drawings of all equipment, wiring diagrams, motor test data, details of control, installation layouts showing all details and locations and including all schedules, and descriptions and supplementary data to comprise complete working drawings and instructions for the performance of the work. A description of the operation of the equipment and controls shall be included. A letter, in triplicate, shall accompany each submittal.
  2. The Contractor shall submit duplicate samples of such materials and appliances as may be requested by the Commissioner for approval. These samples shall be properly tagged for identification and submitted for examination and test. After the samples are approved, one (1) sample will be returned to the Contractor and the other sample will be filed in the office of the Commissioner's representative for inspection use. After the Contract is completed, the second set of samples will be returned to the Contractor.
- H. **TIMELINESS** - All material shall be submitted in sufficient time for the program of construction. Failure to promptly submit acceptable samples and dimensional drawings of equipment will not be accepted as grounds for an extension of time. The Commissioner may decline to consider submittals unless all related items are submitted at the same time.
- I. **CONTRACTOR'S STATEMENT WITH SUBMITTALS** - All dimensional drawings of equipment, blueprints, catalogues, models, samples and other data relative to the equipment, the materials, the work or any part thereof submitted for approval are to be accompanied by a statement that they have been examined by the Contractor and that the drawings, data and other material submitted agree with the requirements of the Contract and Specifications and shall list and describe the points of

disagreements, if any exist. In the absence of such statement, approvals will be given with the understanding that articles of equipment or materials or methods of installation are in substantial compliance with the Contract and that if the adoption of these designs, details, articles, equipment, materials, constructions, installations, places and locations necessitate changes, alterations or replacements at an increased cost to the Contractor or others, the Contractor making the substitution for the specified equipment or material shall bear all such additional expense involved.

- J. BULLETINS AND INSTRUCTIONS - The Contractor shall furnish and deliver to the Commissioner, after acceptance of the work, four (4) complete sets of instructions, technical bulletins and any other printed matter (diagrams, prints, or drawings) required to provide complete information for the proper operation, maintenance and repair of the equipment and the ordering of spare parts.

#### PART B - TEMPORARY LIGHTING, SITE SECURITY LIGHTING & POWER

SCOPE - This Section sets forth the General Conditions and procedures relating to Temporary Lighting, Site Security Lighting and Power during the construction period, and is applicable to, and binding on, all Contracts insofar as they are affected.

#### A. TEMPORARY LIGHTING (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)

1. Energy for the Temporary Lighting System for minor rehabilitation projects (those projects whose existing distribution system is not being changed or modified under the scope of this project) may be taken from the existing electrical distribution system if the existing system is of adequate capacity for the additional temporary lighting load. The Contractor for Electrical Work is to cooperate and coordinate with the facility custodian so as not to interfere with the normal operation of the facility.
2. Energy for the Temporary Lighting system for new projects and for those existing projects that are not covered in the preceding paragraph shall be provided as in the following paragraphs.
3. CONNECTION TO UTILITY LINES - Temporary Electric Service for use during construction shall be provided as follows: The Contractor for Electrical Work shall provide adequate service for the temporary lighting system, or a minimum of 100 Amperes, 3-phase, 4-wire service for the temporary lighting system, whichever is greater, and make all necessary arrangements with the Public Utility Company and pay all charges by them for the Temporary Lighting system. The Contractor for Electrical Work shall include in its bid any charges which may be made by the Public Utility Company for extending its electrical facilities, and for making final connections. The Contractor for Electrical Work shall make payment directly to the Public Utility Company.
4. APPLICATIONS FOR METER - The Contractor for Electrical Work shall make application to the Public Utility Company and sign all documents necessary for, and pay all charges incidental to, the installation of a watt hour meter or meters for Temporary Lighting. The Contractor for Electrical Work shall pay to the Public Utility Company, all bills for Temporary Lighting energy used throughout the work, as they become due.
5. SERVICE AND METERING EQUIPMENT - The Contractor for Electrical Work shall furnish and install, at a suitable location on the site, approved service and metering equipment for the Temporary Lighting System, ready for the installation of the Public Utility Company's metering devices. The temporary service mains to and from the metering location shall be not less than 100 Amperes, 3-phase, 4-wire and shall be of sufficient capacity to take care of all demands for Temporary Lighting and Site Security Lighting and shall meet all requirements of the NYCEC.
6. The Contractor for Electrical Work shall furnish and connect to the metered service point, a system of Temporary Lighting to illuminate the entire area where work is being performed and points adjacent to the work, with separately fused circuits for stairways and bridges. Control switches for stairway circuits shall be located near entrance on ground floor.

7. ITEMS - The Temporary Lighting System shall consist of wiring, fixtures, left-hand double sockets, (one (1) double socket for every 400 square feet, with one (1) lamp and one (1) three-prong outlet) lamps, fuses, locked type guards, trailers and any other incidental material. Additional details may be outlined in the detailed Specifications for the Electrical Work. Changes may be made, provided the full equivalent of those requirements is maintained.
8. The Temporary Lighting System shall be progressively installed as required for the advancement of the work under the various Contracts.
9. RELOCATION - Any Contractor requiring the relocation or extension of the original Temporary Lighting System that is not required due to the normal advancement of the work, as determined by the Commissioner's field representative, shall bear all costs thereof.
10. TRAILERS - Trailers shall be furnished with left-hand sockets with locked type guards and 40 feet of rubber covered cable. The Contractor for Electrical Work shall furnish and distribute a minimum of three (3) complete trailers to each Contractor. See the detailed Electrical Specifications for possible additional trailers required.
11. LAMPS - The Contractor for Electrical Work shall furnish and install one (1) complete set of lamps, including those for the trailers. Broken and burned out lamps in the general lighting system shall be replaced by the Contractor for Electrical Work while those in the trailers shall be replaced by the Contractor using such equipment. All lamps shall be 100 watt.
12. CIRCUIT PROTECTION - The Contractor for Electrical Work shall furnish and install GFI protection for the Temporary Lighting and Site Security Systems.
13. ENERGIZING - The Contractor for Electrical Work shall keep the Temporary Lighting System energized from a period of time, 15 minutes before the established starting time of that trade, which starts work earliest in the morning to 15 minutes after the established quitting time of that trade which stops work latest in the evening. This applies to every day in the week which is established as a regular working day for any trade involved in the construction of this facility and holds until completion and final acceptance of the work of the Contractor for Electrical Work or until the services are terminated by instructions from the Commissioner.
14. MAINTENANCE OF TEMPORARY LIGHTS
  - a. The Contractor for Electrical Work shall maintain the Temporary Lighting System in good working order during the scheduled hours established.
  - b. The Contractor for Electrical Work is to include in its contract all charges for energy for the Temporary Lighting System.
  - c. The Contractor is advised to show the estimated cost of the installation, maintenance and energy of temporary electrical facilities in its detailed cost estimate of its Contract so as to facilitate partial payments during construction.
15. OVERTIME USE - Any Contractor requiring Temporary Lighting Service before or after hours set forth hereinbefore, or on weekends or a Holiday for all trades involved in the construction of this facility, shall pay for the additional cost of keeping the system energized and repaired. If more than one (1) Contractor is involved, the charges shall be prorated, or shared by other acceptable means previously agreed upon by the Contractors involved. When overtime is required by all Contractors on the work, the provisions for payment for regular time use of the Temporary Lighting System shall apply.
16. SERVICE BEYOND COMPLETION DATE - When failure to comply with the terms and conditions of any Contract necessitates temporary light beyond the date set for completion of the Contract for Electrical Work, the Contractor requiring such additional service shall pay for keeping it energized. When more than one (1) Contractor requires such service, the expense thereof shall be prorated

as determined by the Commissioner.

17. **ADJUSTMENT IN CONTRACT PRICE FOR TEMPORARY LIGHTING MAINTENANCE** - In the event that the temporary lighting maintenance extends beyond the Contract time through no fault of the Contractor for Electrical Work, the additional maintenance cost will be in accordance with the requirements of the following paragraphs:
  - a. Payment for maintaining Temporary facilities when required will be made at the average hourly wage for electricians plus 69% of this rate, for each hour of work done upon order of the Resident Engineer. Payments will be included in partial estimates upon submission of detailed vouchers stating date, hour and time expended for each item of work.
  - b. The addition of 69% of the average hourly wage rate specified above shall be deemed as the total allowance for all profit and overhead and for any and all other costs and expenses of any nature whatsoever, including but not limited to allowance for insurance, workman's compensation, unemployment insurance and other supplementary benefits.
18. **REMOVAL OF TEMPORARY LIGHTING WIRING** - The temporary lighting system shall be removed by the Contractor for Electrical Work when authorized by the Commissioner.
19. **HAND TOOLS** - The temporary electric lighting system shall not be used for power purposes, excepting that light hand tools not larger than 1/4 horsepower may be operated therefrom by any Contractor.

**B. SITE SECURITY LIGHTING (FOR NEW CONSTRUCTION ONLY) (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

1. The Contractor for the Electric Work shall furnish, install and maintain a system of site security lighting, as herein specified, to illuminate the construction site of the project, and it shall be connected to and energized from the Temporary Lighting System.
2. It is essential that the site security lighting system be completely installed and operating, at the earliest possible date. All Contractors must cooperate, coordinate and exert every effort to accomplish an early complete installation of the site security lighting system. After the system is installed and in operation, and a part of the system interferes with the work of any trade, that trade shall be completely responsible for the expense of removing, relocating and replacing all equipment necessary to reinstate the system to proper operating conditions.
3. The system shall consist of flood lighting by pole mounted guarded sealed-beam units. Floodlight units shall be mounted 16 feet above grade. Floodlights shall be spaced around the perimeter of the site to produce an illumination level of no less than one (1) foot candle around the perimeter of the site, as well as in any potentially hazardous area or any other area within the site that might be deemed by the Resident Engineer to require security illumination. The system shall be installed in a manner acceptable to the Resident Engineer. The first lighting unit in each circuit shall be provided with a photoelectric cell for automatic control. The photoelectric cell shall be installed as per manufacturer's recommendations.
4. All necessary poles shall be furnished and installed by the Contractor for Electrical Work.
5. The site security system shall be kept illuminated at all times during the hours of darkness. The Contractor for Electrical Work, at its own expense, shall keep the system in operation, furnishing and installing all material necessary to replace all damaged or burned out parts.
6. The Contractor for Electrical Work shall be on telephone call alert for maintaining the system during the operating period stated above.
7. All materials and equipment furnished under this section shall remain the property of the Contractor for Electrical Work and shall be removed and disposed of by the Contractor for

Electrical Work upon completion of that phase of the project.

**C. TEMPORARY POWER**

1. Any Contractor requiring temporary power for equipment larger than 1/4 horsepower shall arrange with the Public Utility for service and pay for all electrical energy consumed by its lines.
2. The Contractor shall provide service, metering equipment and distribution centers as required, and be responsible for keeping the system in working order.
3. When directed by the Commissioner, the Contractor shall remove its own temporary power system.

**D. USE OF COMPLETED PORTIONS OF THE ELECTRICAL WORK**

1. **USE OF MAIN DISTRIBUTION PANEL** - As soon as the permanent electric service feeders and equipment, metering equipment and main distribution panel are installed and ready for operation, the Contractor for Electrical Work shall have the temporary lighting system changed over from the temporary service points to the main distribution panel.
2. **COST OF CHANGE OVER** - The Contractor for Electrical Work shall be responsible for all cost due to this change over of service and it shall also make application to the Public Utility Company for a watt hour meter to be set on the permanent meter equipment.
3. The requirements for temporary lighting specified herein shall be adhered to after change over of service.
4. **NO EXTRA COST** - The operation of the service and switchboard equipment shall be under the supervision of the Contractor for Electrical Work, but this shall in no way be interpreted to mean the acceptance of such part of the installation or relieve the Contractor from its responsibility for the complete work or any part thereof. There shall be no additional charge for supervision by the Contractor for Electrical Work.

**PART C - ELECTRICAL INSTALLATION PROCEDURE**

**SCOPE** - This Section sets forth the general installation procedure that shall apply to all electrical work and electrical equipment appearing in any of the Contracts.

- A. INTENT OF CONTRACT DOCUMENTS** - Contract Specifications and Contract Drawings are to be interpreted as a means of conveying the scope and intent of the work without giving every minor electrical detail. It is intended, nevertheless, that each Contractor shall provide whatever labor and materials are found necessary, within the scope of its Contract, for the successful operation of the installation. Specific details of individual installations are to be finally decided upon when the Contractor submits Working or Shop Drawings for approval to the Department of Design and Construction. Whenever there are two (2) or more methods to complete project work within the Contract scope, the Commissioner reserves the right to choose that method which, in the Commissioner's opinion, will afford the most satisfactory performance, lasting qualities, and accessibility for repairs, even though this selection is the most costly.
- B. SCHEMATIC PLANS - APPROXIMATE LOCATIONS** - Conduits and wiring are shown on the plans for diagrammatic purposes only. Therefore, conduit layouts may not necessarily give the actual physical route of the conduits. The Contractor who installs a conduit system will also be required, as part of the work, to furnish and install all hangers and pull-boxes, including any special pull-boxes found necessary to overcome interferences, and to facilitate the pulling of electrical cables. Similarly, the locations of equipment, appliances, outlets and other items shown on Contract Drawings are only approximate and are to be definitively established when equipment Shop Drawings are submitted and approved by the Department of Design and Construction during construction.

- C. SLEEVES - required for conduits passing through walls or floors, shall be furnished and set by the Contractor installing the conduits. Sleeves in waterproofed floors shall be provided with flashing extending 12 inches in all directions from sleeve and secured to waterproofing. Flashing shall be turned down into space between pipe and sleeve and caulked watertight. Flashing shall be 20 oz. cold rolled copper. Sleeves shall be supplied with welded flanges similar to those supplied by the Contractor for Plumbing Work and shall extend one (1) inch above finished floor.
- D. COORDINATION - Each Contractor shall keep in close touch with the construction progress and obtain the necessary information for the accurate placement of its work in ample time before project construction operations obstruct its work. Each Contractor is to consult all other Contract Drawings, as well as approved equipment Shop Drawings on file in the Resident Engineer's Field Office. This will aid in avoiding interferences, omissions and errors in the electrical installation.
- E. RESPONSIBILITY FOR ERRORS OF INSTALLATION - In case of interference with the work of others or erroneous placement of work with respect to equipment or structures, each Contractor shall cooperate with other affected Contractors for an immediate agreeable solution of the affected work with each Contractor furnishing its responsible share of the labor and materials necessary to complete the installation in an approved manner.
- F. RESTORATION - If drilling or cutting is done on finished surfaces of equipment or the structure, any marring of the surface shall be repaired or replaced by the Contractor who caused the damage. Each Contractor shall be held responsible for corrective restoration due to its cutting or drilling, and for any damage to the project or its contents caused by the Contractor or the Contractor's workers. Any Contractor who pierces waterproofing because of the installation of their work shall, at their own expense, restore the waterproofing to the satisfaction of the Commissioner.
- G. ELECTRICAL WORK AT SITE - Any Contractor who is required to furnish equipment consisting of a number of related electrical devices or appliances, mounted in a single enclosure, or on a common base, shall furnish this unit complete with internal wiring, connections, terminal boxes with copper connectors and/or lugs and ample electrical leads, ready for connection and operation. The cost of any wiring, re-wiring or other work required to be done on this unit in the field, shall be borne by the Contractor who furnished the unit, without cost to the City.
- H. COOPERATION AMONG CONTRACTORS - Whenever an electrically operated unit or system involves the combined work of several Contractors for its installation and successful operation, each Contractor shall exercise the utmost diligence in cooperating with others to produce a complete, harmonious installation.
- I. DEFINITIONS
1. WIRING means both wire and raceway (rigid steel, heavy wall conduit unless specifically indicated otherwise).
  2. POWER WIRING means wiring from a panelboard or other specified source to a starter (if required) then to a disconnect (if required) then to the final point of usage such as a motor, unit or device.
  3. CONTROL and/or INTERLOCK WIRING means that wiring that signals the device to operate or shut down in response to a signal from a remote control device such as a temperature, smoke, pressure, float, etc. device (starters and disconnect switches are not included in this definition) regardless of the voltage required for the controlling device.
- J. WORK BY CONTRACTORS FURNISHING ELECTRICAL EQUIPMENT - Any Contractor who furnishes an electrically operated or motorized unit of equipment shall install same and, as part of its Contract, perform the following work in connection therewith:
1. FOUNDATIONS - Unless otherwise specified or indicated, the Contractor furnishing electrically operated equipment shall also furnish and install approved foundations for same. Special



foundations, if required, will be described in the detailed Specification.

- a. **MATERIAL** - All foundations, unless required otherwise, shall rest on a structural slab and shall be of poured concrete, of a mixture specified for reinforced concrete. Foundations shall present a neat, smooth appearance without voids, sharp corners or edges.
  - b. **DIMENSIONS** - Foundation dimensions, height above floor, methods of setting, aligning and anchoring of equipment shall be as recommended by the manufacturer of equipment and approved by the Commissioner. The minimum height of foundations above finished floor shall be four (4) inches and foundations shall extend at least six (6) inches at all sides beyond the base plates of equipment.
2. At least one (1) inch of grout shall be applied under the equipment base plate after placement and alignment of the equipment.
  3. **ITEMS** - Anchor plates, bolts, sleeves, nuts and washers and other necessary items for proper installation of equipment shall be provided. The Contractor shall also furnish and set required templates to locate accurately the positions of the hold-down bolts.
  4. **VIBRATION ISOLATION** - If specifically required in the detailed Specifications for a particular unit, vibration isolators shall be provided for rotating equipment.
  5. **SUPPORTS** - If any motorized equipment is required to be mounted overhead or off a wall, the Contractor supplying the unit shall furnish and install a suitable platform, bracket or shelf, whichever is appropriate or specified, and mount the equipment thereon. This support shall be constructed of substantial steel members, plates, etc., and the whole securely fastened to the structure or to anchors previously embedded in the wall or slab. In case of excessive vibration transmitted to structure, isolating pads or other devices shall be installed. The Contractor shall apply one (1) coat of approved primer paint to the support and one (1) additional coat of approved paint in the field.
  6. **ASSOCIATED EQUIPMENT** - The Contractor who furnishes a motorized or electrically operated unit of equipment shall also furnish all associated motor starters, disconnect means, relays, control devices, lamps, or other devices, necessary for the successful functioning of the unit.
  7. **POINT OF DELIVERY** - Any item specified to be installed by the Contractor for Electrical Work and delivered to the site that can not be hand carried (due to bulk, weight or timeliness) to the location of its installation is to be delivered and set in place, leveled and secured by the Contractor furnishing the equipment. Such delivery shall be to the location where it is to be installed by the Contractor for Electrical Work.
  8. **CONTROL AND INTERLOCK WIRING**
    - a. **General Construction Work and Plumbing Work.**
      - (1) All control wiring associated with doors and door hardware is to be furnished and installed, unless otherwise indicated, by the Contractor furnishing the doors. Power for the door operation and for its controls shall be furnished and installed by the Contractor for Electrical Work.
      - (2) All other control wiring associated with equipment furnished by either the Contractor for General Construction Work or the Contractor for Plumbing Work is to be furnished and installed by the Contractor for Electrical Work.
    - b. **Contractor for Heating, Ventilating and Air Conditioning Work**
      - (1) The furnishing and installing of all control devices and all control and interlock wiring for equipment furnished under the Heating, Ventilating and Air Conditioning Contract shall be

by that Contractor, including any power required for any control device.

- (2) The Contractor for Heating, Ventilating and Air Conditioning Work shall deliver to the Contractor for Electrical Work all starters and disconnect switches specified to be furnished under the Heating, Ventilating and Air Conditioning Contract. The Contractor for Electrical Work is to install the starters and disconnect switches, and furnish and install all power wiring and make connections between the starter, disconnect switch and motor or equipment being served. The motor or equipment is to be mounted by the Contractor furnishing the motor.

9. **INSTALLATION OF BURNER** - The Contractor who furnishes and installs the gas/oil-fired boiler/furnace shall also include as part of its Contract, the work of furnishing, installing and connecting all equipment, controls with necessary conduits and wiring, to a service point provided by the Contractor for Electrical Work. Unless detailed otherwise in the Specific Requirements, the Contractor for Electrical Work shall furnish power from the power source to a junction box furnished and installed by the Contractor for the Electrical Work and located near the boiler/furnace control panel. The Contractor for Electrical Work shall also furnish and install an empty conduit and a junction box to be located at a remote location (outside of the boiler/furnace room) for an emergency shut-off switch. The shut-off switch and all other conduit and wire shall be furnished and installed by the Contractor furnishing the boiler/furnace.

**K. WORK BY CONTRACTOR FOR ELECTRICAL WORK** - The Contractor for Electrical Work shall perform the following work:

1. **PANELETTE** - The Contractor for Electrical Work shall furnish and install a four (4) circuit panelette in each mechanical equipment room.
2. **STARTERS AND DISCONNECT SWITCHES** - The associated disconnect switches and starters approved by the Department of Design and Construction which require mounting or wiring apart from a main equipment unit shall be delivered, prewired, to the Contractor for Electrical Work at the site of the project, who shall install and wire them. The electrical Contractor shall acknowledge acceptance in writing to the Contractor supplying them, and thereafter assume responsibility for their safe keeping until final acceptance of its work by the City.
3. **CONTROL DEVICES** - The Contractor for Electrical Work shall install conduit, wire, and make all connections for all interlock and control devices furnished under the Plumbing Work Contract and also all control and interlock devices furnished under the General Construction Work Contract, except for door control wiring. The various control and interlock devices, furnished (prewired) by the Contractors for Plumbing and General Construction Work Contractors, shall be installed and final connections made by the Contractor for Electrical Work.
4. **DOOR CONTROL WIRING** - Unless specifically detailed otherwise in the Contract Documents for Electrical Work, all door control and interlock devices are to be furnished and installed and wired by the Contractor furnishing the required control and interlock devices.
5. **TESTS** - The Contractor supplying the equipment, together with the Contractor for Electrical Work shall cooperate in making preliminary tests to establish the correctness of the installation. If a faulty operation of the unit is discovered, the Contractor whose work is the cause shall, without delay, remedy the trouble.

**L. PAINTING**

1. Ingredients and methods of application shall conform to that as required for similar work under the Contract for General Construction Work.
2. **ALL METAL CABINETS** - including switchboards, panelboards, boxes (pull, junction and outlet), trims, doors and covers shall be painted as follows:

All surfaces inside and outside, one (1) approved coat of primer. All accessible surfaces one (1) coat of approved paint inside and outside, in the field after installation.

3. HANGERS, CONDUITS AND FITTINGS – The Contractor who installs them shall give one (1) field applied, approved coat primer, followed by a second coat.
4. FINAL COAT--A final or third coat of paint, as directed, shall be applied by the Contractor installing them when the wall surfaces on which they are supported or the ceiling from which they are hung are not painted by the Contractor for General Construction Work. Pull boxes shall be neatly and legibly stenciled to show service.
5. PAINTING OF MOTORIZED EQUIPMENT - The Contractor furnishing electrically driven equipment shall paint motors and driven equipment, starters and controllers and other equipment provided by the Contractor. The Contractor shall provide any painting or finishing that may be required in the Specifications. For certain equipment having special corrosion resistant factory finishes, painting may be waived by special permission. Equipment shall be neatly stenciled, with legible characters to indicate service by the Contractor who supplies the equipment.
6. NAME PLATES - shall be left clean of all paint.

**PART D - ELECTRICAL CONDUIT SYSTEM INCLUDING BOXES (PULL, JUNCTION AND OUTLET) - (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

SCOPE - This Section sets forth the requirements applying to any Contract requiring the installation of electrical conduits, boxes or fittings. Rigid steel conduit shall be used through out, unless specifically indicated otherwise. TYPES-where the word 'conduit', without a modifier such as, rigid steel, EMT, etc., is specified to be used, it shall be interpreted to mean, rigid steel, heavy wall, threaded conduit.

**A. CONDUIT TYPES**

1. RIGID STEEL CONDUIT - shall be interpreted to mean rigid steel, heavy wall conduit that is hot dipped galvanized inside and outside. The conduit shall meet the requirements of the latest edition, as amended, of the "Standard for Rigid Steel Conduit" of the Underwriters' Laboratories, Inc. Unless otherwise specified in the Specifications or indicated on the Contract Drawings, rigid steel conduit shall be used for all exposed work, for all underground conduits in contact with earth and for fire alarms systems as required by the Building Code. Rigid steel conduit shall be used for all underground conduits in contact with earth, for Fire Alarm Systems and as required by authorities having jurisdiction.
2. ELECTRICAL METALLIC TUBING (EMT) - shall be industry standard thin wall conduit of galvanized steel only. All elbows, bends, couplings and similar fittings which constitute a part of the conduit system shall be specifically designed for use with electric metallic tubing. Couplings and terminating fittings shall be of the pressure type as approved by the Commissioner. Set screw fittings will not be acceptable. EMT shall meet the requirements of the latest edition, as amended, of the "Standard for Electrical Metallic Tubing of the Underwriters Laboratories Inc." EMT may only be used where specifically indicated. In no case will EMT be permitted in spaces other than hung ceilings and dry wall partitions.
3. FLEXIBLE METALLIC - For final connections to motors and motorized equipment, not more than a 4' - 0" length of flexible conduit may be used; for watertight installations, this conduit shall be of a watertight type, attached with watertight glands or fittings, for final connections from outlet box to recessed lighting fixtures and in locations only where specifically permitted by the Specifications or Contract Drawings.

**B. INSTALLATIONS AND APPLICATIONS**

1. Unless otherwise specified or indicated on the Contract Drawings, conduit runs shall be installed

- concealed in finished spaces.
2. CONDUIT SIZES - The sizes of conduit shall be as indicated on the Contract Drawings. Wherever conduit sizes are not indicated, the conduit shall meet the requirements of the NYCEC to accommodate the conductors to be installed therein.
  3. Conduits shall be reamed smooth after cutting. No running threads will be permitted. Universal type couplings shall be used where required. Conduit joints shall be screwed up to butt. Empty conduits after installation shall have all open ends temporarily plugged to prevent the entrance of water or other foreign matter.
  4. Conduits being installed in concrete or masonry shall be securely held in place by the Contractor installing them during pouring and construction operations. A group of conduits terminating together shall be held in place by a template.
  5. UNDERGROUND STEEL CONDUITS - Unless otherwise specified, all underground steel conduits in contact with earth shall be encased by the Contractor who installs them, in a covering of not less than two (2) inches of an approved concrete mixture. Concrete mix shall be one (1) part cement to four and one-half (4 ½) parts of fine and coarse aggregate.
  6. EXCAVATION RESTORATION PERMITS - The Contractor installing underground conduits, duct banks or manholes shall perform, as part of its Contract, the work of cutting pavement, excavation shoring, keeping trenches or holes pumped dry, backfilling, restoration of surfaces to original condition and removal of excess earth and rubbish from premises. During the work, the Contractor shall provide adequate crossovers, protective barriers, lamps, flags, etc., to safeguard traffic and the public. When the work is in a public highway or street, the Contractor shall secure and pay for all necessary permits and inspection fees and pay the cost of repaving.
  7. EXPOSED CONDUIT SUPPORTS - Exposed conduit shall be supported by zinc coated hangers with necessary inserts, beam clamps of approved design or attached to walls or ceilings by expansion bolts. Exposed conduits shall be supported or fastened at intervals not more than five (5) feet.
  8. Exposed conduit shall be installed parallel or at right angles to ceiling, walls and partitions. Where direction changes of exposed conduit cannot be made with neat bends, such as required around beams or columns, conduit type fitting shall be used.
  9. The conduit shall be installed with an approved expansion joint:
    - a. Wherever the conduit crosses a building expansion joint (each Contractor will be held responsible for determining where the building expansion joints are located).
    - b. Every 200 feet, when in straight runs of 200 feet or longer.
  10. Conduit may only enter and leave a floating slab in the vertical direction, and then only in an approved manner. Horizontal entries into floating slabs are not permitted.
  11. Conduit installed in pipe shafts shall be properly supported to carry the total weight of the raceway system complete with cable. In addition at least one (1) horizontal brace per 10 ft. section shall be provided to assure stability of the raceway system.
  12. BUSHINGS AND LOCKNUTS - Approved bushings and locknuts shall be used wherever conduits enter outlet boxes, switch boxes, pull boxes, panel board cabinets, etc. For conduits one (1) inch in diameter or larger, insulating bushings to be O.Z. or approved equal.
  13. CONDUIT BENDS - shall be made without kinking conduit or appreciably reducing the internal diameter. All bends in conduit of two (2) inch in diameter or larger shall be made with an hydraulic or power pipe bender. The radius of the inner edge of any bend shall not be less than six (6)

times the internal diameter of the conduit where rubber covered conductors are to be installed. And not less than 10 times the internal diameter of the conduit where lead covered conductors are to be used. Long gradual sweeps will be required, rather than sharp bends, when changes of direction are necessary.

#### 14. EMPTY CONDUITS

- a. TESTS - All conduits and ducts required to be installed and left empty shall be tested for clear bore and correct installation by the Contractor who installed them using a ball mandrel and a brush and snake before the installation will be accepted. The ball shall be of lignum vitae turned to approximately 85% of the internal diameter of the raceway to be tested. Two (2) short wire brushes shall be included in the mandrel assembly. Snaking of conduits, ducts, etc., shall be performed by the Contractor in the presence of the Electrical Inspector. Any conduits or ducts which reject the mandrel shall be cleared at once with the Contractor bearing all costs, such as chopping concrete, to replace the defective conduit and restore the surface to its original condition.
- b. TAGS - Numbers or letters shall be assigned to the various conduit runs, and as they test clear they shall be identified by a fiber tag not less than 1-¼ inch width, attached by means of a nylon cord. All conduit terminations in panel, splice or pull boxes as well as those out of the floor or ceiling shall be tagged.
- c. TEST RECORDS - As the conduit runs clear, a record shall be kept under the heading of "Empty Conduit Tested, Left Clear, Tagged and Capped" showing conduit designation, diameter, location, date tested and by whom. When complete, this record shall be signed by the Electrical Inspector and submitted in triplicate for approval. This record shall be entered on the Record drawings, which are required under "General Conditions Governing All Contracts."
- d. CAPPING - All empty conduit and duct openings, after test, shall be capped or plugged by the Contractor as directed.
- e. DRAG LINES - A drag line shall be left in all empty conduit.

#### C. BOXES

1. The Contractor shall furnish and erect all pull boxes indicated on the plans or where required. Sides, top and bottom of pull boxes shall be zinc coated and shall be built of No. 12 USSG steel reinforced at corners by substantial angle irons and riveted or welded to plates. Bottom or side of pull boxes shall be removable and held in place by corrosion resistant machine screws. Pull boxes in damp locations shall have threaded hubs and gaskets. All pull boxes shall be suspended from ceiling or walls in the most substantial manner.
2. For large boxes, sufficient suitable porcelain clamp insulators or other approved devices shall be provided in the pull boxes for supporting the cables passing through the box so that the cables will not be unsupported for a distance greater than three (3) feet and so as to permit a neat and orderly arrangement of the cables.
3. For pull boxes having the largest side more than nine (9) square feet in area, special rectangular and diagonal angle-iron bracing will be required as approved.
4. Pull boxes of special or odd shapes are required to be installed by the Contractor, even though not shown on plans, where necessary to overcome interference or to facilitate the pulling of conductors in conduits.
5. In centering outlets, the Contractor is cautioned to allow for overhead pipes, ducts and other obstructions, and for variations in arrangement and thickness of fireproofing, soundproofing and plastering. Precautions should be exercised regarding the location of window and door trims,

paneling, etc. Mistakes resulting from failure to observe these precautions, must be corrected by the Contractor without cost to the City. Outlets in hung ceilings shall be supported from the black iron or structure.

6. The exact location of all outlets in finished rooms shall be as directed. When the interior finish has been applied, the Contractor shall make any necessary adjustment of its work to properly center the outlets. All outlet boxes for local switches near doors shall be located at the strike side of doors as finally hung, whether so indicated on the drawings or not.
7. Exposed wall outlet boxes shall be erected neatly and tight against the walls and securely anchored to same.
8. All wall outlets of each type shall be set accurately at the same level on each floor, except where otherwise specified or directed. Where special conditions occur, outlets shall be located as directed.
9. MOUNTING HEIGHTS - The following heights are standard heights and are subject to correction due to coordination with Contract Drawings. All such changes must be approved by the Resident Engineer. Heights given are from finished floor to center line of outlet or device on wall or partition, unless otherwise indicated.

a. General Convenience Outlets	
(mount vertical)	1'-6"
b. Clock Outlets	8'-6" or 1'-6" below ceiling
c. Wall Lighting Switches	4'-0"
d. Motor Controllers	5'-0"
e. Motor Push-button	4'-2"
f. Telephone Outlets	As Directed
g. Fire Alarm Bells	8'-6" or 1'-6" below ceiling
h. Fire Alarm Stations	4'-0"
i. Intercom Outlet	1'-6"
j. Cooking and Refrigerator Unit	As Directed
10. Outlet boxes shall be of approved design and construction; of form and dimensions suited and adapted to its specific location; the kind of fixture to be used and the number and arrangements of conduits, etc., connecting therewith. All ferrous outlet boxes shall meet the requirements for zinc coating as specified under Electrical Conduit Systems.
11. There shall be knockouts opened only for the insertion of conduit. Any outlet boxes with more openings than are necessary for conduit insertion, shall be sealed by the Contractor without additional charge.
12. All outlet boxes and junction boxes for exposed work shall be galvanized cast iron or cast aluminum with threaded openings. Outlet boxes for exposed inside work in damp locations shall be galvanized cast iron or cast aluminum with threaded hubs and neoprene gaskets.
13. Junction boxes shall not be less than 4 11/16" square and shall be equipped with zinc coated plates. Where plates are exposed they shall be finished to match the room decor.
14. FIXTURE SUPPORTS - Outlet boxes supporting lighting fixtures shall be equipped with fixture studs held by approved galvanized stove bolts or integral with the box. Cast iron or malleable boxes shall have four (4) tapped holes for mounting required cover or fixtures.
15. Outlet boxes exposed to the weather or indicated W.P., shall be cast iron or cast aluminum and the covers made watertight with neoprene gaskets. The boxes shall have external lugs for mounting. Drilling of the body of the fitting for mounting will not be permitted. The cover screws shall be appropriate in size, noncorrodible and not less than four (4) in number for each box opening.

**PART E - ELECTRICAL WIRING DEVICES (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- A. WALL SWITCHES shall be of the best specification grade, quiet type, and shall have a rating of 20 Amperes at 277 volts, as manufactured by Bryant, Hubbell or approved equal. The mechanism shall be equipped with arc snuffers. They shall be of the tumbler type, single pole. Switches of the 3-way type shall have a similar rating.
- B. RECEPTACLES
1. CONVENIENCE OUTLETS - shall be of the best specification grade, duplex, two-pole, 3-wire, 15 Amperes at 125 volts. It shall have a grounding pole that shall be grounded to the conduit system. Receptacles shall be capable of both back and side wiring and shall have only one (1) grounding screw. Receptacles shall be Hubbell Cat. #5262 or approved equal.
  2. HEAVY DUTY RECEPTACLE OUTLETS - shall have the Ampere rating and the number of poles specified on the Contract Drawings and shall be Hubbell, Russell-Stoll, Bryant, AH & H or approved equal. Each outlet shall have a grounding pole, which shall be grounded to the conduit system.
  3. FLOOR RECEPTACLES - shall be Russell & Stoll #3040 or approved equal, to fit into floor box previously specified.
  4. NAMEPLATES - are required for all receptacles other than 120V.
- C. CLOCK HANGERS - Clock outlets for surface type clocks shall be equipped with a supporting hook and recessed faceplate to conceal the electrical cord.
- D. WATERTIGHT DEVICES - For installations exposed to weather or in damp locations, the devices shall be in a gasketed, cast iron enclosure.
- E. PLATES
1. Every convenience outlet and switch outlet shall be covered by means of a stainless steel No. 302 - 0.4" antimagnetic plate with an approved finish, unless provided otherwise in the detailed Specifications.
  2. Where two (2) or three (3) switches are grouped together a single faceplate shall be used. Where more than three (3) switches are located at one (1) point, the faceplates may be made up in multiple units.

**PART F - ELECTRICAL CONDUCTORS AND TERMINATIONS (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- A. CONDUCTORS FOR LIGHT AND POWER - All wire and cable shall be of annealed copper of 98% conductivity. Aluminum wire or cable will not be permitted. The insulation shall be flame retardant, moisture and heat resistant, thermoplastic, type THW or THWN rated for 600 volts at 75 degrees C. for both wet and dry locations. Wires No. 8 or larger shall be stranded. Wires and cables shall also be subject to the requirements of the NYCEC. Cables for incoming service or wire in conduits contiguous with the earth or in concrete or other damp or wet locations shall be synthetic rubber insulated with neoprene jacket, heat and moisture resistant and shall be equal to UL Type USE and rated for 600 volts at 75 degrees C. for both wet and dry locations.
- B. FIXTURE WIRE - Lighting fixtures shall be wired with No. 14 gauge wire designated as AWM and rated at 105 degrees C.
- C. OTHER TYPES - Cables and wires for interior communication systems are described in detailed

Specifications of applicable Contracts.

- D. MINIMUM SIZE - Conductors smaller than No. 12 AWG shall not be used for light or power.
- E. COLOR CODE - Wires shall have a phase color code, and multiple conductor cables shall be color coded.
- F. CABLE DATA - The Contractor shall submit for approval the following information for each size and type of cable to be furnished.
  - 1. Manufacture of Cable - Location of Plant.
  - 2. Minimum insulation resistance at standard test temperature.
  - 3. Days required for delivery to site of work after order to proceed with manufacture.
- G. ORIGINAL REELS - Cable and wire shall be delivered to the site of the work on original sealed factory reels.
- H. TESTS
  - 1. NOTIFICATION OF TEST - No cable shall be released for shipment from the mill unless authorized by the Commissioner. The Contractor shall give the Commissioner at least 10 days notice when the cable will be available for testing at the mill. The Contractor's representative or inspector shall have access during working hours to all parts of the plant where the cable is being manufactured, and all reasonable inspection and testing facilities shall be afforded to the Contractor without increase in price to the City. The Inspector shall witness the complete test of cable and receive a copy of all test data.
  - 2. TEST DATA - The Contractor shall forward to the Commissioner six (6) copies of all test data for approval before accepting shipment of the cable.
  - 3. INSPECTION DURING MANUFACTURE - The Commissioner reserves the right to dispatch a representative to the factory at any time during the period of manufacture of the cable for the purpose of expediting or checking progress. The living and traveling expenses of the City Engineers making these inspections and witness tests will be borne by the City of New York.
  - 4. TEST IN CITY LABORATORY - Sufficient additional length of conductor shall be provided on each reel, so that a six (6) foot sample may be removed for testing in the City's Laboratories. This sample shall be cut from the reel in the presence of the Inspector of the Department of Design and Construction and cut in two (2) three-foot lengths, each piece to be tagged showing reel number, size and type, manufacture, date, name or project & Contract number. Samples shall be handed to the Inspector for transmittal. If it is found as the result of test that the cable does not comply with the approved factory test the Contractor will be ordered to remove all cable which came off the reel and has been installed, and to replace the defective cable not used, without cost to the City. The Contractor will be held responsible for any delays in the construction program caused by the defective cable.
  - 5. FINAL FIELD TEST - After conductors are installed and connected, the City will test the work for overall insulation resistance. The Contractor shall furnish all test equipment necessary. To be acceptable, the test shall meet the requirements set forth in the NYCEC.
- I. WIRE INSTALLATION
  - 1. INSTALL WIRES AFTER PLASTERING - Feeder and branch circuits wiring shall not be installed in conduit before the rough plastering work is completed. No conductors shall be pulled into floor conduits before floor is poured.



2. **CONDUIT SECURED IN PLACE** - No conductor shall be pulled into any conduit run before all joints are made up tightly and the entire run rigidly secured in place.
3. **WIRE ENDS** - All wires shall be left with sufficiently long ends for proper connection and stowing.
4. **PULLING COMPOUNDS** - When required to ease the pulling-in of wires into conduit, only approved compounds as recommended by cable manufacturers shall be used.
5. **PRESSURE CONNECTORS** - for wires shall be of the cast copper or forged copper pressure plate type. Connectors shall be O.Z., Burndy, National Electric Products or approved equal.
6. Splices and feeder taps in the gutters of panel boxes shall be made by means of pressure plate type connectors encased in composition covers as manufactured by O.Z., Burndy, National Electric Products or approved equal.
7. Splices in branch wiring for sound systems and fire systems, shall be first made mechanically secure, then soldered and taped.
8. In lieu of soldered splices (except for sound and Fire Systems, which must have soldered splices) the following alternates are acceptable for operating temperatures up to 105 degrees C., for fluorescent fixtures and for the splicing of branch circuit wiring up to No. 8 AWG wire:
  - a. Mechanical splices made with mechanical connectors as manufactured by the Minnesota Manufacturing Company "Scotchlock" or approved equal. Mechanical connectors requiring a special tool (pressure connectors, insulators and locking rings) by Buchanan or approved equal. The tool used for connector application shall be as approved by the connector manufacturer.
  - b. For wire and cable No. 6 AWG and larger for branch circuit wiring the seamless tubular connector will only be accepted. Application of this connector shall be with a tool recommended by the connector manufacturer.
9. **TAGS** - All feeders and risers shall be tagged at both ends, and in all pull and junction boxes and gutter spaces through which they pass. Such tags shall be of fiber and have the feeder designation and size stamped thereon.

#### 10. BRANCH CIRCUIT WIRING

- a. The Contractor installing branch circuit wiring shall test the work for correct connections and leave all loop splices in the fixture outlet boxes properly spliced and taped. The Contractor shall provide wire ends long enough for convenient connection to device.
- b. **NEUTRALS** - No common neutrals shall be used except for lighting branch circuits. Each neutral wire shall be terminated separately on a neutral busbar in the panelboard. No common neutrals will be permitted for convenience receptacle branch circuits.

#### J. TERMINATIONS

1. **LUGS** - All lugs for all devices and all cable terminations shall be copper. AL/CU rated lugs will not be permitted. The only exception to this requirement is when the particular device is not manufactured with copper lugs by any manufacture. Lugs for No. 6 AWG cable and larger shall be cast copper or forged copper pressure plate type. Lugs for 1/0 and larger shall be fastened with two (2) bolts.
2. All lugs shall be of the proper size to accept the cable connected to them. Any Contractor furnishing a device containing lugs is to coordinate with the Electrical Work Contract Documents to insure that the device terminations are adequate for the wire or cable (whose size may be larger than expected due to voltage drop considerations) connected to the device. This requirement

applies to both the Contractor for Electrical Work whose branch circuit protector must have lugs of the proper size, as well as to the Contractor who furnishes the device who may have to increase the size of that particular device.

**PART G - CIRCUIT PROTECTIVE DEVICES (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

**SCOPE** - This Section sets forth the circuit protective devices such as circuit breakers and safety switches, used in connection with Motor Control Equipment, Distribution Centers, Panelboards and Service Entrance.

**A. CIRCUIT BREAKERS**

1. **CIRCUIT BREAKERS** shall be operable in any position and shall be of the quick-make, quick-break type on manual operation. The handle shall be trip free, preventing contacts from being held in closed position against abnormal overloads or short circuits. Positive visual indication of automatic tripped position of breaker shall be provided, in addition to the "On" and "Off" indication. All circuit breakers shall be of the bolted type.
2. **TRIP RATING** - Circuit breakers shall be provided with the required number of trip elements, calibrated at 40 degrees C., ambient temperature, in accordance with wire sizes or motor currents as shown on Contract Drawings or indicated in the Specifications.
3. **POLE BARRIERS** - Multipole pole breakers shall be designed to break all poles simultaneously. They shall be provided with barriers between poles and arc suppressing devices.
4. **ELEMENTS** - Multipole circuit breakers shall have frames of not less than a 100 Ampere rating. Multipole circuit breakers for 480 volts AC operation shall have an NEMA interrupting rating of 18,000 Amperes, unless a higher rating is specified in the Specific Requirements or indicated on the Contract Drawings.
5. For circuit breakers with frame size up to and including 225 Amperes, the breakers may be provided with non-interchangeable trip elements. For frame ratings above 225 Amperes, the breakers shall be provided with interchangeable trip elements, which can be replaced readily.
6. The trip rating of all circuit breakers shall not exceed 70% of frame rating.
7. Single pole circuit breakers for branch circuits shall have a frame size of no less than 100 Amperes, and shall be rated at 125 volt A.C. with a NEMA interrupting rating of 10,000 Amperes, unless a higher rating is specified in the Specific Requirements or indicated on the Contract Drawings.
8. **INVERSE TIME ACTION** - The circuit breakers shall be dual element type, one (1) element with time limit characteristics, so that tripping will be prevented on momentary overloads, but will occur before dangerous values are reached, the other with instantaneous trip action. Inverse time delay action shall be effective between a minimum tripping point of 125% of rating of breaker and an instantaneous tripping point between 600% and 700% of rated current.
9. **CONSTANCY OF CALIBRATION** - The tripping elements shall insure constant calibration and be capable of withstanding excessive short circuit conditions without injury.
10. **CONTACTS** shall be non-welding under operating conditions and of the silver to silver type.
11. **TEMPERATURE RISE** - Current carrying parts, except thermal elements shall not rise in temperature in excess of 30 degrees C. while carrying rated current at rated frequency.
12. **NUMBERING** - Each circuit breaker shall be distinctly numbered when installed in a group with other breakers. The calibration of trip element shall be indicated on each breaker.

**B. SAFETY SWITCHES**

NEMA TYPE HD - When safety switches are permitted to be used for service entrance, motor disconnecting means or to control other types of electrical equipment, they shall be of the type HD of a rating not less than 30 Amperes. Enclosures shall be provided with means for locking. For ratings above 60 Amperes terminals shall have double studs.

**PART H - DISTRIBUTION CENTERS (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

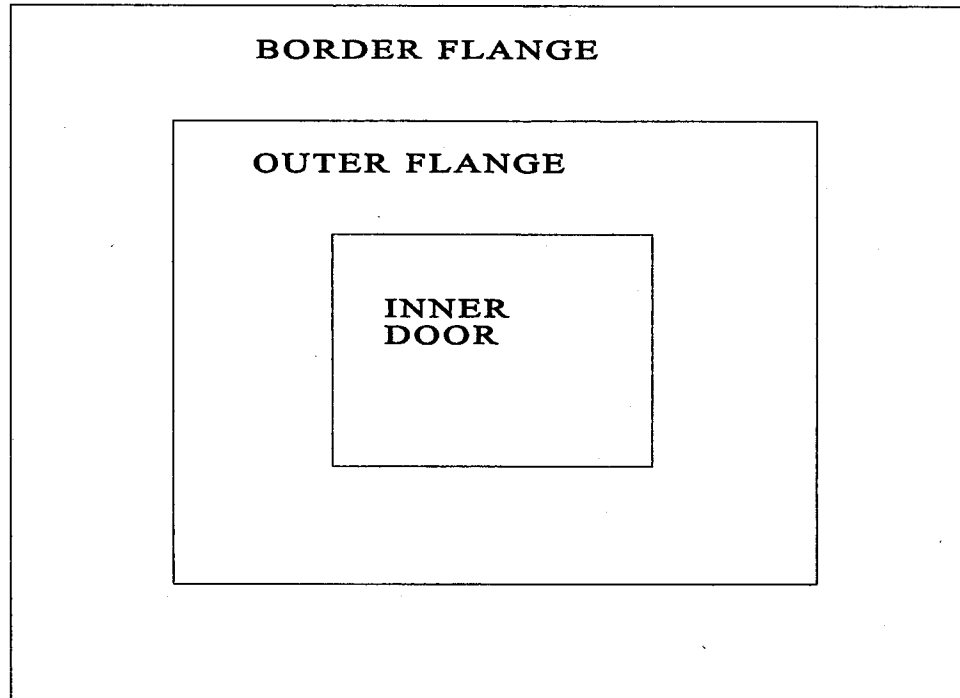
**SCOPE** - This Section sets forth the construction and installation procedure for Switchboards, Panelboards and Cabinets.

- A. PANELBOARDS--GENERAL TYPE** - The panelboards shall be of the automatic circuit breaker type with individual breakers for each circuit, removable without disturbing the other units. Circuit breakers shall be in accordance with the requirements outlined under "Circuit Protective Devices."
- B. NUMBER AND RATING OF CIRCUIT BREAKERS** - The Contract Drawings show a layout of each panel, giving the number, frame, size and trip setting of circuit breakers and number of branch circuits and spare breakers. Each branch circuit shall be distinctly numbered.
- C. BUS-BAR CONSTRUCTION AND SUPPORT** - Panel Boards shall be of the deadfront type and shall have bus bars and branch circuits designed to suit the system and voltage. Current carrying parts, exclusive of circuit breakers shall be copper and based on a maximum density of 1,000 Amperes per square inch. Bus bars for the main switchboard shall be designed for the frame rating of the Service Breaker. Bus bars shall run up the center of the panel, unless otherwise indicated, and shall have connected thereto the various branch circuits. Unless otherwise specified, bus bars for each panelboard shall be equipped with main lugs only and capacity as required on Contract Drawings. Where main protection is required, automatic circuit breakers shall be used. A neutral bus of at least the same capacity as a live bus bar shall be provided for the connection of all neutral conductors. Each terminal shall be identified. All current carrying parts, exclusive of circuit breakers, shall be of copper with a minimum number of joints. The bus bar structure shall be a self supporting unit, firmly fastened to a 1/2 inch plastic board, extending the full length and width of assembly which shall serve to insulate the bus structure from the back of panel box. Other methods affording equally effective bus structure support and insulation will be given consideration. An insulating barrier shall separate neutral bus from other parts of panel.
- D. CIRCUIT BREAKER ASSEMBLY** - The entire circuit breaker and bus bar assembly shall be mounted on an adjustable metal base or pan and secured to the back of panel box. The panel shall have edges flanged for rigidity.
- E. PANEL MOUNTING** - The panel shall be centered in the panel box to line up with door openings and set level and plumb so that no live parts are exposed with the door open.
- F. PANEL CABINET CONSTRUCTION AND SUPPORT**

  - 1. Panel boxes shall be fabricated from No. 12 USSG sheet steel of no more than three-piece construction, reinforced at the corners and with continuous welds. Boxes having a back whose area is larger than 16 square feet, shall be of No. 10 USSG sheet steel and reinforced to provide ample stiffness and to prevent buckling. Boxes shall be of sufficient size to afford a clear gutter space on all sides, of not less than six (6) inches.
  - 2. **PANEL CABINET INSTALLATION** - When installed surface, or in panel closets, they shall be mounted on Kindorf channel, supported from floor slab to ceiling slab.
  - 3. Where cabinets cannot be set entirely flush due to shallow walls or partitions or where cabinet is extra deep, the protruding sides of cabinet shall be trimmed with a metal or hardwood return

molding of approved design and fastened to cabinet so as to conceal the intersection between the wall and cabinet.

- G. **CABINET TRIM** - Trim for both lighting and power panelboards shall be door-in-door type installation as depicted in **DETAIL A TRIM FOR LIGHTING AND POWER PANELBOARDS**. Construction details are to be as described in the following paragraphs.



**DETAIL A TRIM FOR LIGHTING AND POWER PANELBOARD**

1. **CABINET TRIM** - The trim and doors for lighting and power panels shall be made of No. 12 USSG full finish sheet steel in one (1) piece. Cabinet trim larger than 16 square feet shall be made of No. 10 USSG. The inner door shall cover the circuit breaker section only and be provided with appropriate brass hinges. The outer door shall cover the entire gutter space and shall be attached to the border type flange with appropriate hinges. Both doors for power panels shall be provided with a New York City Lock No. 511S, with key change to No. 47 and two (2) keys. For lighting panels, the inner door shall be provided with a substantial catch. All hinges shall be of the concealed type. Locks shall be flush with trim. In addition, for panels requiring doors over 48 inches in height, furnish a vault handle and a 3-point catch arranged to fasten door at top, bottom and center.
  2. The door shall close against a flange or rabbet to afford a dust tight fit. All space between the panel and the cabinet trim shall be closed by means of a sectional plate secured to the trim.
  3. The border flange of the trim shall be fastened to the box with oval head screws finished to prevent corrosion or with approved trim clamps.
  4. To facilitate installation of trim, a suitable angle iron shall be spot welded across the bottom of each trim to carry the weight of the trim while the holding screws are being put in place.
- H. **MOTOR CONTROL CENTERS** - Motor centers shall be furnished by the Contractor as indicated in the Specifications or Contract Drawings, but shall be installed by the Contractor for Electrical Work.
- I. **NAMEPLATES** - Nameplates where required, shall be made of engraved Lamicoid sheet, or approved

equal. Letters and numbers shall be engraved white on a black background (except for Firehouse projects which shall have white letters on a red background) the Contractor shall submit an engraved sample for approval as to design and style of lettering before proceeding with the manufacture of the nameplate. Nameplates shall be of suitable size and shall also be provided at the top of the switchboard or section thereof and on the trim at the top of all lighting and power panels. Similar nameplates shall also be provided for each distribution circuit breaker giving the breaker number, the number of the feeder, and the name of the equipment fed.

- J. SHOP DRAWINGS - showing all details of boxes, panels, etc., shall be submitted for approval.
- K. DIRECTORIES - A directory shall be fastened with brass screws and consist of a noncorrosive metal frame with dimensions not less than five (5) inches x eight (8) inches and a transparent window of Plasticile, Plexiglass, Lucite or approved equal that is not less than 1/16 inch thick over cardboard or heavy paper. The directory shall be typewritten and show the number of each circuit, the name of circuit and lighting or equipment supplied. The size of riser feeder shall be as indicated on directory. The dimensions of directory shall be submitted for approval for each size of panel.
- L. CONSTRUCTION
  - 1. FINISH - Panel boxes, doors and trim for installation in dry locations, shall be zinc coated after fabrication by the hot-dip galvanizing or electroplate process on inside and outside surfaces. In damp locations, panelboards shall be enclosed and gasketed NEMA 3R type. Panelboards located outdoors or exposed to the weather shall be cast iron.
  - 2. PAINTING - Panel boxes, doors and trim shall receive a coat of approved priming paint and a second coat of approved paint in the field after installation. Paint shall be applied to the inside and outside of boxes and on both sides of trim. Panel trims and doors shall receive a third or finishing coat on the outside after installation. Approval as to texture and color must be obtained before the final coat is applied. All of the aforementioned painting is to be done by the Contractor who furnishes the boxes and trim. Where panel trims or boxes are installed on walls which are to be painted, the previously mentioned third or finishing coat of paint shall be included in the work of the Contractor who has the Contract for general interior painting.

**PART I - MOTORS (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

SCOPE - This Section sets forth the general design, construction and performance requirements, which shall apply to all motors furnished in any of the Contracts.

- A. MOTOR DESIGN - All motors shall be designed to comply with the New York State Energy Code currently in effect. Motors shall have standard NEMA frames and shall have nameplate ratings adequate to meet the specified conditions of operation. Motor performance under variable conditions of voltage and frequency shall be within the limits set in NEMA standards, unless modified in present Specifications. Motors shall be expressly designed for the hazard duty load, voltage and frequency as specified in the Contract. All motor windings shall be copper. All motors intended to operate on a 208 volt system shall be designed and rated for 200 volts.
- B. MOTORS OF SAME MANUFACTURER - Unless expressly permitted otherwise by the Commissioner, all motors under the same Contract shall be manufactured by the same company. Exceptions may be granted in the case of motors of 1/4 horsepower rating and smaller, or for a motor that is an integral part of the equipment, with its housing especially built for this purpose.
- C. STANDARDS OF COMPARISON - In general, the best standard products of the leading motor manufacturers shall be considered as a standard for comparison. The requirements of the NEMA standards for motors and generators shall be deemed to contain the minimum requirements of performance and design.
- D. OBJECTIONABLE NOISES - Objectionable noises will not be tolerated and exceptionally quiet motors

may be required for certain specified locations. Noise control tests as per the Building Code of the City of New York may be performed as directed by the Commissioner. Such motors shall bear a nameplate lettered "Quiet Motor." Springs and slip rings shall be of approved non-ferrous material.

**E. BEARINGS**

1. Bearings, unless specified otherwise, shall be of the ball or roller type. Motors one (1) horsepower and larger that are equipped with ball roller bearings shall also have lubrication of the pressure-relief greasing type. Each Contractor who furnishes four (4) or more such motors shall also furnish, as part of its Contract, a pressure grease gun of rugged design, of approximately 10 ounce capacity, complete with necessary adapters. The Contractor shall also provide 10 pounds of approved gun grease.
2. For any particular unit where sleeve bearings are deemed desirable, permission for their use may be granted by the Commissioner. Motors one (1) horsepower and larger that are equipped with sleeve type bearings shall in addition to having protected accessible fittings for oiling be provided with visible means for determining normal oil level. Lubrication shall be positive, automatic and continuous.

**F. MOTOR TERMINALS AND BOXES** - Each motor shall be furnished with flexible leads of sufficient length to extend for a distance of not less than three (3) inches beyond the face of the conduit terminal box. This box shall be furnished of ample size to make and house motor connections. These requirements shall be met irrespective of any other standards or practices. Size of cable terminals and conduit terminal box holes shall be subject to approval. For motors five (5) horsepower or larger, each terminal shall come with two (2) cast or forged copper pressure type connectors with bolts, nuts and washers. For motors of smaller ratings, connectors of other acceptable types may be furnished. For installations exposed to the weather or moist locations, terminal boxes shall be of cast iron with threaded hubs and gasketed covers. Cover screws shall be of non-corrosive material.

**G. MOTOR TEMPERATURE RISES** - The motor nameplate temperature rises for the various types of motor enclosures shall be as listed below:

- |   |               |
|---|---------------|
| 1. Open Frame                               | 40 degrees C. |
| 2. Totally enclosed and enclosed fan cooled | 55 degrees C. |
| 3. Explosion proof and submersible          | 55 degrees C. |
| 4. Partially enclosed and drip proof        | 40 degrees C. |

The temperature of the various parts of a motor shall meet the requirements of NEMA standards for the size and type of the motors. Tests for heating shall be made by loading the motor to its rated horsepower and keeping it so loaded for the rated time interval or until the temperature becomes constant.

**H. SPECIAL CODE INSTALLATIONS** - Electrical installations covered by special publications of NBFU and by special City rulings and regulations shall comply in design and safety features with such applicable codes, regulations and rulings, and shall be furnished and installed complete with all accessories and safety devices as therein specified.

**I. MOTORS ON LIGHTING PANELS** - The largest A.C. motor permitted on branch circuits of lighting panels shall not exceed 1/4 horsepower.

**J. MOTORS RATED 1/2 horsepower and larger shall be polyphase.**

**K. TESTS**

1. **FACTORY INSPECTION** - Electrical equipment and devices (except portable) not covered by standard Specifications or tests herein prescribed shall be inspected and witnessed on test at the factory with the tested equipment being completely assembled and connected under conditions approved by the Commissioner as equivalent to the actual working conditions. Suitability and

ruggedness of the design for the specified purpose will be a condition for acceptance.

2. **SHOP TESTS** - to determine the load performance of motors shall be made in accordance with Standard C-50, of the ASA. Motors shall meet the requirements of C-50 for insulation resistance, dielectric strength, efficiency and temperature rise. Efficiency (and power factor for A.C. motors) shall be established for 50, 75 and 100 percent of rated horsepower but for motors of 100 horsepower or larger, the 125 percent loading shall be included.
  3. **TEST REPORTS** - The result of shop tests shall be submitted to the Commissioner for approval and shall be on forms approved by the City. The evaluated test data shall include a signed statement confirming the fact that the equipment meets the requirements of the standards of performance.
  4. **MANNER OF TEST** - For motors of 100 horsepower or smaller, check tests against complete tests of similar motors will be accepted. For motors larger than 100 horsepower, complete tests for each motor furnished shall be made, and certified test data sheets shall be submitted for approval, unless shop tests are required by the Detailed Specifications.
  5. **PREFERRED METHODS** - The efficiency of fractional horsepower motors shall be determined by the input-output method; for larger motors up to and including 100 horsepower, the separate loss method as specified in ASA Standards C-50 will be accepted unless otherwise required in the Specifications.
- L. **SPARE PARTS** - The Contractor who furnishes motors, including fractional horsepower, shall provide the following spare parts and accessories in connection therewith:
1. **BRUSHES** - One (1) additional set of brushes for each motor equipped with them.
  2. **BEARINGS** - For each group of three (3) and fraction thereof, of each type and size of motor, the Contractor shall furnish one (1) set of extra bearing linings or ball or roller bearings. Where less than three (3) of any type of motor is involved, one (1) set of extra bearings shall be furnished.
  3. **SPRINGS** - One (1) set of brush springs used in slip ring motor or universal type motors.
  4. **WRAPPER MARKING** - All parts shall be delivered neatly and securely wrapped and boxed, plainly tagged and marked for identification and reordering.

**PART J - MOTOR CONTROL EQUIPMENT (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

**SCOPE** - This Section sets forth the requirements for motor controllers and associated devices, which are applicable to all Contracts under which motor control equipment is furnished or installed.

- A. **MANUFACTURER** - All control equipment furnished under one (1) Contract shall be the product of a single manufacturer. Exceptions to this rule may be granted in the case of controllers for fractional horsepower motors driving special equipment, the various units of which have been engineered to obtain specific performance.
- B. **CONTROL ITEMS REQUIRED** - The Contractor who furnishes a motor shall also furnish therewith complete disconnecting, starting and control equipment as required by the detailed Specifications, the various code authorities and for the successful operation of the driven equipment. These items include circuit breaker, magnetic starter with overload protection and low voltage release or protection, push button stations, pilot lights and alarms, float, pressure, temperature and limit switches, load transfer switches, devices for manual operation and speed controllers, etc. The Contractor shall furnish as many of these items as are required for the successful operation of the driven unit.
  1. Where a motor is to be located out of sight of the controller, the Contractor who furnishes the motor shall furnish an approved disconnecting means to be mounted near motor.

C. TYPES OF STARTERS

1. SQUIRREL CAGE - A.C. motors of the squirrel cage type, rated from one (1) to 30 horsepower shall have magnetic across the line starters; motors rated above 30 horsepower shall be furnished with reduced voltage (autotransformer type) starter or part winding start with time delay to reduce inrush current. Size of starters shall be based on 200V. operation.
2. SLIP RING - A.C. Motors of the slip-ring type shall be furnished with primary across the line starters interlocked with secondary starting and regulating equipment. The interlocking feature shall prevent starting of the motor when the secondary controller is off the initial starting point.
3. MAGNETIC - For fractional horsepower motors, magnetic type starters are not required unless the particular method of controlling the driven equipment makes them necessary. Where individual single phase fractional horsepower motors or the sum of fractional horsepower motors controlled by an automatic device are  $\frac{1}{2}$  horsepower or more, magnetic starters and circuit breakers shall be used. Single phase A.C. motors smaller than  $\frac{1}{2}$  horsepower or three-phase A.C. motors smaller than one (1) horsepower where manual control is specified may be furnished with starters of toggle switch or push button type with inbuilt thermal protection. No additional disconnecting means is required to be furnished with this type of starter. This type of starter may also be used in series with automatic control devices such as thermostats, float and pressure switches, provided the individual motor or the sum of fractional horsepower motors is less than  $\frac{1}{2}$  horsepower. Means for manual operation shall be provided.

D. DISCONNECTING BREAKER - All motor starters, unless otherwise specified shall be provided with a disconnecting means in the form of a circuit breaker of the type specified under "CIRCUIT PROTECTIVE DEVICES" of the General Conditions. This disconnecting means shall be contained in the same housing with the starter and shall be operable from outside. Means shall be provided for locking the handle of the circuit breaker in the "OFF" position if it is desired to take the equipment out of service and prevent unauthorized starting.

E. CONTROL CABINET - DRY LOCATIONS - all starters shall be furnished with general purpose, NEMA Type 1, sheet metal enclosures with hinged covers and baked enamel finish.

F. CONTROL CABINET - WATERTIGHT - In wet locations, cast iron watertight enclosures with threaded hubs, galvanized and gasketed hinged covers shall be provided.

G. 1. PANELS - Motor control devices and appliances shall be mounted on approved insulating slabs with all wiring and connections made on the back of the slabs.

2. WIRING AND TERMINALS - Wiring connections for currents of 100 Amperes or less may be made with copper wire or cable with special flameproof insulating coverings. Such wires shall be installed in a neat workmanlike manner, flat against the slab, and held in place by clips. Connections shall be made with pressure connectors for No. 8 AWG and larger wires, and with grommets for small stranded wires. Except for incoming and outgoing main leads, all connections shall terminate on approved connector blocks, which may be installed on the face of the slab. For small, across the line starters the above requirements may be modified if satisfactory connections are provided.

3. COPPER BUS - For currents exceeding 100 Amperes, copper bus shall be used in place of wires. The bus shall be constructed of copper rods, tubing or flat strap, bent and shaped properly and securely attached to the slab in a neat and workmanlike manner. The cross section of copper shall provide sufficient areas to keep current density at not more than 1,000 Amperes per square inch.

H. COOPERATION - The Contractors who furnish electrically operated equipment shall give to the Contractor for Electrical Work full information relative to sizes and locations of apparatus furnished by them which require electrical connections.



Equipment being installed by the Contractor for Electrical Work shall be delivered to the Contractor for Electrical Work by other Contractors in proper time and sequence so that the Contractor for Electrical Work shall be able to meet the Contractor for Electrical Work working schedule.

**I. SPARE PARTS**

1. FURNISH - Each Contractor shall furnish the following spare parts pertaining to equipment furnished by each Contractor.

One (1) set of contact fingers and springs and thermal elements for each three (3) (or fraction) of each size of magnetic contactor starter.

One (1) holding coil for each three (3) (or fraction) of each size of magnetic contactor starter.

2. WRAPPER MARKING - All parts shall be delivered to the Resident Engineer neatly wrapped and boxed and plainly tagged and marked for identification and reordering.

**PART K - SCHEDULE OF ELECTRICAL EQUIPMENT**

Schedule D requirements for electrical motor equipment may be included in one or more of the Specifications for the separate contracts for the Project. SCHEDULE D delineates the responsibilities of each separate contractor for electrical motor control equipment. SCHEDULE D is included in the Addendum to the General Conditions. In the event of any conflict between the Specifications and SCHEDULE D, SCHEDULE D shall take precedence; provided, however, in the event of an omission from SCHEDULE D (i.e., SCHEDULE D omits either a reference to or information concerning electrical motor equipment which is set forth in the Specifications), such omission from SCHEDULE D shall have no effect and the Contractor's obligation with respect to the electrical motor control equipment, as set forth in the Specifications, shall remain in full force and effect.

**1.38 Safety**

- A. Each Contractor shall provide and maintain all necessary temporary closures, guard rails, and barricades to adequately protect all workers and the public from possible injury. Any Contractor requiring removal of these items shall be responsible for the replacement of same.

**1.39 Interruption of Services and of Project Facilities**

- A. EVENING AND WEEKEND WORK - Where the work makes temporary shutdowns of the services unavoidable, they shall be made at night or on weekends or at such times that will cause no interferences with the established routines and operations of the projects in question.

1. Where weekend or evening work is required due to unavoidable service shutdowns, such work shall be performed at no extra cost to the City.

**B. INTERRUPTION OF PROJECT FACILITIES**

1. The Contractor shall not interrupt any of the services of the project nor interfere with these in any way without the permission of the Commissioner. Such interruption, or interferences, shall be made as brief as possible, and only at such time stated.
2. Under no circumstances will the Contractor, or its workers, be permitted to use any part of the project as a shop, without the permission of the Commissioner.
3. Unnecessary noise shall be avoided at all times and necessary noise shall be reduced to a minimum.
4. The facility operates 24 hours per day seven (7) days a week. Toilet facilities, water and electricity

must be operational at all times. No services of the project can be interrupted in any way without the permission of the Commissioner. Careful coordination of all work with the Resident Engineer must be done to maintain the operational level of the project personnel.

5. Contractors shall schedule their work to avoid noise interference that will affect the normal functions of the project. In particular, construction operations producing noises that are objectionable to the project functions will be scheduled at times of day or night, day of the week, or weekend, which will not interfere with the project personnel. Any additional cost resulting from this scheduling shall be borne by the specific Contractor.
6. The Contractor shall arrange to work continuously, including overtime, if required, to assure that services will be shut down only during the time actually required to make the necessary connections to the existing work.
7. The Contractor shall give ample written notice in advance to the Commissioner and project personnel of any required shutdown.

**1.40 Separation of Work Between Trades (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- A. SCHEDULE E – Requirements for various items of work are included in the Specifications for the separate contracts for the Project and in the General Conditions. Schedule E delineates the responsibilities of each separate contractor for various items of work, as well as the extent to which certain items involve coordination between trades. Schedule E is included in the Addendum to the General Conditions. The delineation set forth in Schedule E shall be taken as specific instruction to the Contractor that it is responsible for the listed items of work. Schedule E is not intended to limit the Contractor's responsibility for supervision and coordination as set forth in Paragraph B below. In the event of any conflict between the Specifications, the General Conditions and Schedule E, Schedule E shall take precedence; provided, however, in the event of an omission from Schedule E (i.e., Schedule E omits either a reference to or information concerning an item of work which is set forth in the Specifications or the General Conditions), such omission from Schedule E shall have no effect and the Contractor's obligation to perform the work, as set forth in the Specifications or the General Conditions, shall remain in full force and effect.
- B. SUPERVISION AND COORDINATION - Each Contractor is required to supply all necessary supervision and coordination information to any other trades who are to supply work to accommodate their installations.

**1.41 Shop Drawing and Material Samples Schedule**

- A. SCHEDULE F – Schedule F sets forth all submittal requirements for shop drawings and material samples. Schedule F is included in the Addendum to the General Conditions. At the kick-off meeting, each Contractor must review this Schedule with the Commissioner's Representative and the Consultant. Within 10 days after the kick-off meeting, the Contractor must complete information on Schedule F concerning the submission date, the required delivery date and the fabrication time. For all required submittals of shop drawings and material samples, the Schedule F provided by the Contractor must indicate a submission date which is at least 20 days prior to the date of the manufacture of the item or materials to be installed. In addition, if so directed by the Commissioner, the Schedule F provided by the Contractor must indicate a submission date for shop drawings and/or material samples of specified items or materials which is within 60 days after the kick-off meeting. In the event of any conflict between the Specifications and Schedule F, Schedule F shall take precedence; provided, however, in the event of an omission from Schedule F (i.e., Schedule F omits either a reference to or information concerning a submittal requirement which is set forth in the Specifications), such omission from Schedule F shall have no effect and the Contractor's submittal obligation, as set forth in the Specifications, shall remain in full force and effect.
- B. COORDINATION - The Resident Engineer for this project will coordinate and review the data submitted by various Contractors. Upon acceptance by the Resident Engineer, the Resident Engineer

will date and sign the schedule as approved and transmit it to the Consultant, Contractors and Project Manager within the Department of Design and Construction.

- C. ARTICLE 11 - Thereafter, this schedule will be subject to the provisions of Article 11 of the agreement and must be strictly adhered to by the Contractor.

**1.42 Specific Requirements**

- A. The work of this article shall be the responsibility of the Contractor for General Construction Work, unless otherwise indicated.

**B. FIELD MEASUREMENTS**

1. Each Contractor shall verify all dimensions and conditions on the job so that all work will properly join the existing work.
2. Each Contractor, before commencing work, shall examine all adjoining work on which each Contractor's work is in any way dependent on good workmanship in accordance to the intent of the Specification and Contract Drawings. The Contractor shall report to the Commissioner any condition that will prevent any Contractor from performing work that is below the required standard.

**C. BORINGS (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

1. REFERENCE DRAWINGS - The Boring Drawings as listed on the title sheet are for information to the bidder and are to be used under the conditions as follows:
2. BORING LOGS - shown on the Boring Drawings, record information obtained under engineering supervision in the course of exploration carried out by or under the direction of forces of the Department of Design and Construction at the site.
3. SOIL AND ROCK SAMPLES - All inferences are drawn from the indications observed as made by engineering and scientific personnel. All such inferences and all records of the work including soil samples and rock cores, if any, are available to bidders for inspection.
4. CERTIFICATION OF SAMPLES - The City certifies that the work was carried out as stated, and that the soil samples and rock cores, if any were referred to, were actually taken from the site at the times, places and in the manner indicated. The samples are available for inspection in the Department of Design and Construction Subsurface Exploration Section.
5. BIDDER'S RESPONSIBILITY - The bidder, however, is responsible for any conclusions to be drawn from the work. If the bidder accepts those of the City, it must do so at its own risk. If the bidder prefers not to assume such risk, the bidder is under the obligation of employing its own experts to analyze the available information, and must be responsible for any consequences of acting on their conclusions.
6. CONTINUITY NOT GUARANTEE - The City does not guarantee continuity of conditions shown at actual boring locations over the entire site. Where possible, borings are located to avoid all obstructions and previous construction which can be found by inspection of the surface and the bidder is required to estimate the influence of such features from its own inspection of the site.

**D. DEFERRED CONSTRUCTION**

1. Where necessity for deferred construction is certified by the Commissioner, in order to permit the installation of any item or items of equipment required to be furnished and installed under any other Contract in effect concurrent with the time allowed for doing and completing the work of the Contract, the Contractor shall defer construction work limited to adequate areas as approved by

the Commissioner.

2. The Contractor shall confer with the affected Contractors and ascertain arrangements, time and facilities necessary to be made by the Contractor in order to execute the provisions specified herein.

**E. WORK FENCE ENCLOSURE (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

1. The Contractor shall furnish and erect a wood fence to the extent shown on the drawings enclosing the entire project on all sides. All materials used shall be new. Any permit required for the installation and use of said fence shall be borne by the Contractor.
2. THE FENCE shall be 7'-0" high with framing construction of yellow pine, using 4" x 4" posts on not more than 6'-0" centers, with three (3) rails of at least 2" x 4" size to which shall be secured boards, 3/4" x 6" tongue and groove, laid solid and surface and double nailed to each bearing. Posts shall be firmly fixed in the ground at least 30" and thoroughly braced. Top edge of fence shall be trimmed with a rabbeted edge mould. Provide on the street traffic sides of fence, observation openings as directed. The Contractor has the option of using 1/2" exterior grade plywood in lieu of the 3/4" x 6" tongue and groove boards.
3. GATES - Provide an adequate number of double gates, complete with hardware, located as approved by the Resident Engineer. Double gates shall have a total clear opening of 14'-0" with two (2) 7'-0" hinged swinging sections. Hanging posts shall be 6" x 6" and shall extend high enough to receive and be provide with tension or sag rods for the swinging sections.
4. PAINTING - The fence and gates shall be entirely painted on the street and public sides with two (2) coats of approved lead and oil paint. The below-grade section of the posts shall be first creosoted or given a coat of tar base paint. Black stenciled signs reading "POST NO BILLS" shall be painted on fence with three (3) inch high letters on 25 foot spacings for the entire length of fence on street traffic sides. Signs shall be stenciled five (5) feet above the sidewalk.
5. It shall be the obligation of the Contractor to remove all posters, advertising signs, and markings, etc., immediately.
6. Where sidewalks are used for "drive over" purposes for Contractor vehicles, a suitable wood mat or pad shall be provided for protection of sidewalks.
7. Where required, make provision for fire hydrants, lampposts, etc.
8. REMOVAL - When directed by the Resident Engineer, the fence shall be removed.

**F. PUMPING**

1. Furnish and install all necessary automatically operated pumps of adequate capacity with all required piping to run-off agencies, so as to maintain the excavation, cellar floor, pits and exterior depressions and excavations free from accumulated water during the entire period of construction and up to the date of final acceptance of work of the Contract.
2. All pumps shall be maintained at all times in proper working order.

**G. RESIDENT ENGINEER'S OFFICE**

1. OFFICE SPACE IN EXISTING BUILDING (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)
  - a. The Resident Engineer will arrange for office space for sole use in the building where work is in progress. The Contractor for General Construction Work shall provide and install a lockset

for the door to secure the equipment in the room. The Contractor for General Construction Work shall provide two (2) keys to the Resident Engineer. After completion of the project the Contractor for General Construction Work shall replace the original lockset on the door and ensure its proper operation.

- b. The Contractor for General Construction Work shall provide one (1) telephone, where directed, for the exclusive use of the Resident Engineer. The Contractor for General Construction Work shall pay all costs for telephone service for calls within New York City limits for the duration of the project. The telephone service shall continue for a period of 90 days following substantial completion.
- c. The Contractor for General Construction Work shall provide the following equipment:
  - (1) Two (2) single pedestal desks, 42" x 32"; two (2) swivel chairs with arms and three (3) side chairs without arms to match desk. Two (2) lockers, metal olive green or gray, single units, 15" x 18" x 78" overall including 6" legs. Lockers to have flat key locks with two (2) keys each, General Steel products or approved equal. Two (2) full ball bearing suspension four (4) drawer vertical legal filing cabinets with locks approximately 52"H x 28 1/2"D x 18"W in a grey finish by Art Steel No. 2904L or approved equal.
  - (2) One (1) 9000 B.T.U. air conditioner or as directed by Commissioner. Wiring for the air conditioner shall be minimum No. 12 AWG fed from individual circuits in the fuse box.
  - (3) Two (2) metal wastebaskets, 13 inches square 15 inches high with rubber feet and corners by Art Metal Company No. 168 or approved equal.
  - (4) One (1) fire extinguisher one (1) quart vaporizing liquid type, brass, wall mounted by Pyrene No. C21 or approved equal.
  - (5) One (1) Crystal Springs water cooler with bottled water, Model No. LP14058 or approved equal to be furnished for the duration of the Contract as required.

**2. TRAILER OFFICE (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

- a. The Contractor for General Construction Work shall provide at its own cost and expense a trailer and install and connect all utility services to trailer within twenty (20) days of start of work. The trailer shall have equipment having the minimum requirements hereinafter specified. Any permit required for the installation and use of said trailer shall be borne by the Contractor.
- b. The trailer shall remain the property of the Contractor for General Construction Work except that the file cabinets herein specified, shall become the property of the City of New York.
- c. Trailer shall be office type trailer of the following general minimum dimensions:
  - 1. Length, overall: 35 feet.
  - 2. Length, inside: 32 feet.
  - 3. Width, overall: 8 feet.
  - 4. Width, inside: 7 feet, 5 inches.
- d. Trailer shall be manufactured by International Trailer Company, Model No. 1 MU-35-D or Atlantic Trailer Corporation, Model No. F-36 or approved equal.
- e. The exterior of the trailer and the wheels shall be given an approved coat of exterior enamel. The enamel finish coat shall be DUPONT orange lacquer or approved equal. The trailer shall be lettered with black block lettering of the following heights with white borders:

CITY OF NEW YORK	2-1/2"
DEPARTMENT OF DESIGN AND CONSTRUCTION	3-3/4"
DIVISION OF STRUCTURES	3-1/2"
RESIDENT ENGINEER'S OFFICE	2-1/2"

NOTE: In lieu of painting letters on trailer the Contractor for General Construction Work may substitute a sign constructed of a good quality lumber with the same type and size of lettering above.

- f. All windows and doors shall have insect aluminum screens and wire mesh protective screening.
- g. The interior shall be finished in 1/4 inch plywood. Plywood shall be finished in natural color, with two (2) coats of varnish or lacquer.
- h. The interior shall be divided by partitions into one (1) large room in front of trailer, and a private office approximately 6' x 7' at rear of trailer and a washroom located adjacent to the private office.
- i. The washroom shall be equipped with a flush toilet, wash basin with two (2) faucets, medicine cabinet, complete with supplies by Hospital Supply and Watters Labs., Inc., Model No. 1 or approved equal and a toilet roll tissue holder. Plumbing and fixtures shall be approved house type, with each appliance trapped and vented and a single discharge connection. Five (5) gallon capacity automatic electric heater for domestic hot water shall be furnished.
- j. The heating system shall consist of thermostatically controlled electric baseboard heaters capable of delivering not less than 30,000 BTU per hour and heaters shall be as manufactured by Chromalox or approved equal, sized per area with individual approved thermostats.
- k. The trailer shall be equipped with an approved two-circuit, 110-120 volt armored cable wiring system of adequate capacity complete with entrance connector with provision for grounding, enclosed fused service switch and branch circuit fuse box. The circuits for lighting, water heater, heater and convenience outlets, etc. shall be two-conductor, No. 12. The circuits for the space heaters shall be sized minimum No. 12 wire led from individual circuits in the branch circuit fuse box. Metal boxes shall be provided at all outlet points. All wiring shall conform to the requirements of the Electrical Code of the City of New York for armored cable wiring systems.
- l. Lighting to be furnished by a minimum of four (4) 48 inch, single tube, fluorescent fixtures for the large rooms and an incandescent fixture for the washroom. Lighting fixtures shall be provided with built-in pull-chain switches. A minimum of six (6) duplex convenience outlets shall be installed; four (4) in the larger room and two (2) in the smaller room. These outlets shall be in addition to connections for electric space heaters and heaters for domestic hot water.
- m. In addition to the washroom and private office, the following shall be built-in to the trailer:
  - 1. The drafting or reference table at least 60 inches long by 36 inches wide with cabinet below, head shelf at each end of the trailer, wall type plan rack at least 42 inches wide and wardrobe opposite washroom.
- n. The following movable equipment shall be furnished:
  - 1. Four (4) single pedestal desks, 42" x 32"; two (2) swivel chairs with arms and three (3) side chairs without arms to match desk. Four (4) lockers, metal olive green or gray, single units, 15" x 18" x 78" overall including 6" legs. Lockers to have flat key locks with two (2) keys each, General Steel products or approved equal. Two (2) full ball bearing suspension four (4) drawer vertical legal filing cabinets with locks approximately 52" H x 28 1/2" D x 18"W in a grey finish by Art Steel No. 2904L or approved equal.
  - 2. One (1) 6000 B.T.U. and one (1) 9000 B.T.U. air conditioner. Wiring for the air conditioners shall be minimum No. 12 AWG fed from individual circuits in the fuse box.

3. Two (2) metal wastebaskets, olive green or grey finish, 13 inches square 15 inches high with rubber feet and corners by Art Metal Company No. 168 or approved equal.
  4. One (1) fire extinguisher one (1) quart vaporizing liquid type, brass, wall mounted by Pyrene No. C21 or approved equal.
  5. One (1) Crystal Springs water cooler with bottled water, Model No. LP14058 or approved equal to be furnished for the duration of the Contract as required.
- o. TRAILER TEMPORARY SERVICE - Plumbing and electrical work required for the trailer will be furnished and maintained as below.
1. PLUMBING WORK - shall include all water supply and drainage piping required for a complete installation. Contractor to provide a temporary water service from the City's water main and extend in the trailer and properly connect up all fixtures requiring water supply. Provide all necessary soil, waste, vent and drainage piping.
    - a. Plumbing Contractor to frost-proof all water pipes to prevent freezing.
    - b. REPAIRS, MAINTENANCE - The Plumbing Contractor provide repairs when and as required for a period of thirty (30) days after the date of substantial completion acceptance.
    - c. DISPOSITION OF PLUMBING WORK - At the expiration of the time limit set forth in Subparagraph 3, the water drainage connections and piping to the office trailer shall be removed and shall be plugged at the mains. All piping shall become the property of the Contractor for Plumbing Work and shall be removed from the site, all as directed. All repair work due to these removals shall be the responsibility of the Contractor for General Construction Work.
  2. ELECTRICAL WORK - The Contractor for Electrical Work shall furnish, install and maintain a temporary electric feeder to the trailer to be used by the Resident Engineer immediately after it is placed at the job site.
    - a. The temporary electric feeder shall be at least three (3) No. 6RH wire and shall be protected by a 60 Ampere fused safety switch, complying with codes and utility requirements having jurisdiction.
    - b. Make all arrangements and pay all costs to provide electric service.
    - c. Pay all costs for current consumed and for maintenance of the system in operating condition, including the furnishing of the necessary bulb replacements lamps, etc., for a period of thirty (30) days after the date of substantial completion acceptance.
    - d. Disposition of Electric Work: At the expiration of the time limit set forth, the temporary feeder, safety switch, etc., shall be removed and disposed of as directed.
    - e. All repair work due to these removals shall be the responsibility of the Contractor.
- p. MAINTENANCE
1. The Contractor for General Construction Work shall provide and pay all costs for hot and cold water, heat and fuel and regular daily janitor service. Furnish toilet paper, cloth towels and soap and maintain the field office in first-class condition, including all repairs, until 30 days after the date of substantial completion acceptance.
  2. Provide fire, extended coverage and vandalism, malicious mischief and burglary and theft

insurance coverage for the Resident Engineer's field office equipment in the amount of \$10,000. All insurance coverage shall be provided by a company licensed and authorized to do business in the State of New York. Such coverage must, under the loss payable clause or by endorsement thereon, state the following: "loss, if any, payable to the City of New York."

3. At 30 days after the date of substantial completion acceptance, or sooner as directed by the Commissioner, the Contractor for General Construction Work shall have all services disconnected and capped to the satisfaction of the Resident Engineer.
- q. The Contractor for General Construction Work shall provide and pay all costs for the following telephone services for the Resident Engineer's trailer:
  1. Two (2) desk phones
  2. One (1) wall phone (with six (6) foot extension cord) at plan table.
  3. A remote bell located on outside of trailer
  4. The telephone service shall continue for a period of 90 days following substantial completion.
- r. Should it become necessary to relocate the trailer or move the field office from one (1) location to another, Contractor for General Construction Work shall be responsible for move or moves and of reconnecting all utilities described above at new location, and shall assume all costs incurred.
- s. PERMITS - The Contractor for General Construction Work shall make the necessary arrangements and obtain all permits required for this work.
- t. The Contractor for General Construction Work has the option of providing, at its cost and expense, rented office or store space in lieu of trailer. Said space shall be in the immediate area of the Project and have adequate plumbing, heating and electrical facilities. Space chosen by the Contractor for General Construction Work must be approved by the Commissioner before the area is rented. All insurance maintenance and equipment required for trailer field office shall also apply to rented spaces.

**H. ADDITIONAL EQUIPMENT FOR THE RESIDENT ENGINEER (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

1. The Contractor for General Construction Work shall supply photo equipment not to exceed \$250. Said equipment to be specified by Resident Engineer. At the completion of the project, the equipment shall become the property of the City of New York.
2. The Contractor for General Construction Work shall provide a copy machine for paper sizes 8½ x 11 & 8½ x 14. Copier shall remain at job site 30 days beyond the Substantial Completion date.
3. The Contractor for General Construction Work shall furnish a fax machine and a telephone answering machine at commencement of the project. All materials shall be new, sealed in manufacturer's original packaging and shall have manufacturers' warranties. All items shall remain the property of the City of New York at the completion of the project.
4. Computer Workstation (Refer to the Addendum to the General Conditions for the number of Computer Workstations to be provided):

Computers shall be provided for all contracts that have a total duration of 180 Consecutive Calendar Days (CCDs) or more, as set forth in Schedule "A". Contracts that have a total duration of less than 180 CCDs shall not require computers. Computer workstations shall be provided for



the duration of the contract.

(1) Personal Computer(s) - Workstation Configuration.

- (a) Make and Model: Dell, Gateway, Toshiba, HP, IBM, or an approved equal. (Note: an approved equal requires written approval of the Assistant Commissioner of ITS.)
- (b) Processor: 3.0 GHz Pentium 4 or faster computer - Single Processor.
- (c) System RAM: Minimum of 1 GB (Gigabytes) of SDRAM or DDR.
- (d) Hard Disk Drive(s): 80 GB (Gigabytes) or larger.
- (e) CD-RW: Internal CD-RW, 48x Speed or faster.
- (f) 16xDVD+/RW: DVD Burner (with double layer write capability) 16x Speed or faster
- (g) I/O Ports: Must have at least one (1) Serial Port one, (1) Parallel Port, 2 USB Ports. Serial Ports must consist of UART 16550 Chip or better.
- (h) Video Display Card: PCI Interface with a minimum of 64 MB of RAM.
- (i) Monitor: 17" TFT LCD monitor.
- (j) Available Exp. Slots: System as configured above shall have at least two (2) full size PCI Slots available.
- (k) Fax/Modem: Internal Fax/Modem 56 Kbps speed, featuring 3COM or US Robotics Chipset and supporting a minimum of V.92 and MNP5 compliant. Integrated 10/100/1000 Ethernet.
- (l) Other Peripherals: Optical scroll Mouse, 101 Key Keyboard, Mouse Pad and all necessary cables.
- (m) Software Requirements: Microsoft Windows XP Professional, Microsoft Office 2003 Professional, Microsoft Project 2002 Professional, Adobe Acrobat reader, Anti-Virus software package with one year updates subscription, Win Zip and Auto Cad 2008 LT.

(2) All field offices requiring computers shall be provided with the following:

- (a) One (1) broad-band internet service account. This account will be active for the life of the project.
- (b) One (1) 600 DPI HP Laser Jet Printer (twelve (12) pages per minute or faster) with one (1) Extra Paper Tray (Legal Size)
- (c) All necessary Cabling
- (d) Storage Boxes for and Blank CDs/DVDs
- (e) Printer Table
- (f) UPS/Surge Suppressor combo

- (3) All Computer Hardware shall come with a three (3) year warranty for on-site repair or replacement. Additionally, and notwithstanding any terms of the warranty to the contrary, the Contractor is responsible for rectifying all computer problems or equipment failures within one (1) business day.

(4) An adequate supply of blank CD's/DVD's, and paper and toner cartridges for the printer shall be provided by the Contractor, and shall be replenished by the Contractor as required by the Engineer.

(5) It is the Contractor's responsibility to ensure that electrical service and phone connections are also available at all times; that is, the Field Office Computer(s) is to be powered and turned on twenty four (24) hours each day.

Broadband connectivity is preferred at each field office location. Please take into consideration that an extra phone line dedicated to the modem must be ordered as part of the contract unless Internet broadband connectivity, via Cable or DSL, is available at the planned field office location. Any questions regarding this policy should be directed to Raul Canabal, Assistant Commissioner of Information Technology Services at 718-391-1668.

**I. PUBLIC TELEPHONE (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

1. The Contractor shall provide a public telephone located on the site, where directed, for the duration of the Contract.

**J. HEAD PROTECTION (HARD HATS)**

1. The Contractor shall provide a minimum of 10 standard protective helmets for the exclusive use of Department of Design and Construction personnel and their visitors. Helmets shall be turned over to the Resident Engineer and kept in the office of the Resident Engineer.

2. Upon completion of the project, the helmets shall become the property of the Contractor.

**K. RODENT AND INSECT CONTROL**

1. DESCRIPTION - The General Contractor shall provide all labor, materials, plant and equipment, and incidentals required to survey and monitor rodent activity and to control any infestation or outbreak of rodents, rats, mice, water beetles, roaches and fleas within the project area. Special attention should be paid to the following conditions or areas:

a. Wet areas within the project area, including all temporary structures.

b. All exterior and interior temporary toilet structures within the project area.

c. All Field Offices and shanties within the project area of all Contractors and the Department of Design and Construction (DDC).

d. Wherever there is evidence of food waste and/or discarded food or drink containers, in quantity, that would cause breeding of rodents or the insects herein specified.

e. Any other portion of the premises requiring such special attention.

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, OSHA and the laws, ordinances and regulations of State and Federal agencies pertaining to such chemical and/or materials

3. PERSONNEL: All pest control personnel must be supervised by an exterminator licensed in categories 7A & 8.

4. METHODS

- a. Application and dosage of all materials shall be done in strict compliance with the manufacturer's recommendations.
- b. Under the Maintenance of Site item (section 1.42.L), any unsanitary conditions, such as uncollected garbage or debris, resulting from the General Contractor's activities which will provide food and shelter to the resident rodent population shall be corrected by the General Contractor immediately after notification of such condition by the Commissioner

## 5. RODENT CONTROL WORK

- a. 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 all streambanks. Live traps must be used in these seventy-five (75) foot buffer zone areas and within wetland and woodland areas.
- b. In areas outside the seventy-five (75) foot zone of protection adjacent to streams, and in areas outside wetlands and woodlands, tamper proof bait stations with poisoned bait shall be placed during the period of construction and any consumed or decomposed bait shall be replenished as directed.
- c. At least one month prior to initiation of the construction work, and periodically thereafter, live traps and/or rodenticide bait in tamper proof bait stations, as directed above, shall be placed at locations that are inaccessible to pets, human beings, children and other non-target species, particularly wildlife (for example-birds) in the project area.
- d. The General Contractor shall be responsible for collecting and disposing of all trapped and poisoned rodents found in live traps and tamper proof bait stations. The General Contractor shall also be responsible for posting and maintaining signs announcing the baiting of each particular location.

The General Contractor, under his/her Maintenance of Site operations, shall be responsible for the immediate collection and disposal of any visible rodent remains found on streets or sidewalks within the project area.

- e. It is anticipated that public complaints will be addressed to the Commissioner. The General Contractor, where directed by the Commissioner, shall take appropriate actions, like baiting, trapping, proofing, etc., to remedy the source of 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.
- f. Emergency service during the regular workday hours (Monday through Friday) shall be rendered within 24 hours, if requested by the Commissioner, at no additional cost to the City.

## 6. EDUCATION & TRAINING

- a. The General Contractor shall post notices on all Construction Bulletin Boards advising workers, employees, and residents to call the Engineer's Field Office to report any infestation or outbreak of rodents, rats, mice, water beetles, roaches and fleas within the project area. The General 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.
- b. Prior to application of any chemicals, the General Contractor shall furnish to the Commissioner copies or sample labels for each pesticide, antidote information, and Material Data Safety Sheets (MSDS) for each chemical used.

7. RECORDS AND REPORTS

- a. The General Contractor shall keep a record of all rodent and waterbug infestation surveys conducted by him/her and make available, upon request, to the Commissioner. The findings of each survey shall include, but not be limited to, recommended Integrated Pest Management (IPM) techniques, like baiting, trapping, proofing, etc., proposed for rodent and waterbug pest control.
- b. The General Contractor shall maintain records of all locations baited along with the type and quantity of rodenticide and insecticide bait used.

L. SITE SECURITY/PERIMETER SIGNAGE

1. In order to properly convey notice to persons entering upon a City construction site, the Contractor shall furnish and install a sign at the entrance (gates) as follows:

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**NO TRESPASSING**

**AUTHORIZED PERSONNEL ONLY**

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2. If no-construction fence exists at the site, this notice shall be conveyed by incorporating the above language into safety materials (barriers, tape, and signs).

M. MAINTENANCE OF SITE AND ADJOINING PROPERTY

1. Take over and maintain the site, after order to start work.
2. Until the work of the Contract is completed and accepted, the Contractor shall be responsible for the safety of the adjoining property, including sidewalks, paving, fences, sewers, water, gas, electric and other mains, pipes and conduits etc. The Contractor shall, at its own expense, except as otherwise specified, protect same and maintain them in least as good a condition as that in which the Contractor finds them.
3. All pavements, sidewalks, roads and approaches to fire hydrants shall be kept clear at all times, maintained and repaired to serviceable condition with materials to match existing.
4. Provide and keep in good repair all bridging and decking necessary to maintain vehicular and pedestrian traffic.
5. The Contractor shall also remove all snow and ice as it accumulates on the sidewalks within the Contract Limits Lines.

N. SAFETY PRECAUTIONS FOR CONTROL CIRCUITS

1. Control circuits, the failure of which will cause a hazard to life and property, shall comply with the New York City Dept. of Buildings, Bureau of Electrical Control requirements.

O. OBSTRUCTIONS IN DRAINAGE LINES

1. The Contractor shall be responsible for all obstructions occurring in all drainage lines, fittings and fixtures after the installations and cleaning of these drainage lines, fittings and fixtures as certified by the Resident Engineer. Roof drains shall be kept clear of any and all debris. Any stoppage shall be repaired immediately at the expense of the Contractor for General Construction Work.

P. MAINTENANCE OF PROJECT SITE

1. Take over and maintain all project areas, after order to start work.
2. Until the work of the Contract is completed and accepted, the Contractor shall be responsible for the safety of all project areas, including water, gas, electric and other mains and pipes and conduits and shall at the Contractor's own expense, except as otherwise specified, protect same and maintain them in at least as good condition as that in which the Contractor finds them.
3. All pavements, sidewalks, roads and approaches to fire hydrants shall be kept clear at all times, maintained, and if damaged, repaired to serviceable conditions with materials to match existing.
4. The Contractor shall keep the space for the Resident Engineer in a clean condition.

Q. PROJECT SIGN AND RENDERING  
PART A – PROJECT SIGN

1. Responsibility: The Contractor shall produce and install one (1) project sign which shall be posted and maintained upon the site of the project at a point and in a position where directed by the Commissioner. The Contractor shall protect the sign from damage during the continuance of work under the Contract and shall do all patching of lettering, painting and bracing thereof necessary to maintain same in first class condition and in proper position. Prior to fabrication, contractor shall submit an 8-1/2" x 11" color match print proof from the sign manufacturer of completed sign for approval by the Commissioner.
2. Sign Quality: The Contractor shall provide all materials required for the production of the sign as specified herein. Workmanship shall be of the best quality, free from defects and shall be produced in a timely manner.
3. Schedule: Upon project mobilization, the Contractor shall commence production and installation of the sign.
4. Removal: At the completion of all work under the Contract, the Contractor shall remove and dispose of the project sign away from the site.
5. Sign construction:
  - a. Frame: The frame shall be from quality dressed 2"x2" pine, fire retardant, pressure treated lumber, that surrounds the inside back edge of the sign. The sign shall have one (1) intermediate vertical and two (2) diagonal supports, glued and screwed for rigidity. Frame shall be painted white with two (2) coats of exterior enamel paint, prior to mounting of sign panel.
  - b. Edging: U-shaped, 22 gauge aluminum edging, with a white enameled finish to match sign background, shall run around entire edging of sign panel and frame. Corners shall be mitered for a tight fit. Channel dimensions shall be 1" inch (overlap to sign panel face) x 1 3/4" (or as required across frame depth) x 1" (back overlap).
  - c. Sign Panel: 4' x 8' panel shall be constructed in one (1) piece of 14 gauge (.0785") 6061-T6 aluminum. This panel shall be prefinished both sides with a glossy white baked-on enamel finish and be flush with edge of 2" x 2" wood frame. Samples must be submitted for approval.
  - d. Fastening: Fasten sign panel to wood frame using cadmium plated no. 8 sheet metal screws at 1/2" below edge of panel and 8" on center. The U-shaped aluminum channel shall be applied over the wood frame edge and fastened with cadmium plated no. 8 sheet metal screws at 12" on center around the entire perimeter.
6. Sign Graphics:
  - a. All visual components of the sign are in an Adobe \*.pdf file, which is provided by the

Commissioner's representative. The file is to be opened in Acrobat Professional or Acrobat Approval in order to be saved with project information. The Commissioner's representative shall insert the project name and names and titles of personnel (3 or more) and any other required information associated with the project. At no point in the update, saving or renaming of the file should it be locked by any user. The digital file shall be provided by DDC to the Contractor (on a CD or via E-mail) for printing.

- b. The DDC \*.pdf file with names provided by the commissioner shall be reproduced at the Sign Panel size of 4' x 8' on 3M High Performance Vinyl or approved equal. The sign manufacturer is required to print from the Acrobat \*.pdf provided, and must match the following colors specified by Pantone: 3025 C, 119 C, 131 C, 1805 C, 1817 C in their exact locations as indicated in the \*.pdf file, and on the DDC website: [www.nyc.gov/buildnyc](http://www.nyc.gov/buildnyc).
- c. Color shall be created in a four-color process to reproduce Pantone Colors (per Pantone formula).
  1. Pantone color 3025 C (C-100, M-17, Y-0, K-51).
  2. Pantone color 119 C (C-0, M-12, Y-100, K-49).
  3. Pantone color 131 C (C-0, M-32, Y-100, K-23).
  4. Pantone color 1805 C (C-0, M-91, Y-100, K-23).
  5. Pantone color 1817 C (C-0, M-90, Y-100, K-66).

The typeface, Helvetica shall be used in all text-fields as is specified in the settings of the Acrobat \*.pdf.

Note: 3M High Performance Vinyl or equivalent shall be guaranteed for nine (9) years. Guarantee must cover fading, peeling, chipping or cracking.

**PART B – PROJECT RENDERING (REFER TO THE ADDENDUM TO THE GENERAL CONDITIONS FOR THE APPLICABILITY OF THIS ARTICLE)**

1. **Responsibility:** In addition to the Project Sign, the Contractor shall furnish and install one (1) sign showing a rendering of the project. From an approved image file provided by the DDC, the Project Rendering is to be sized, printed, and mounted in an identical manner as described in Part A above for the Project Sign. Any area of the 4' X 8' panel area not filled by the rendering shall be printed in Pantone color 3025 (c-100, M-17, y-0, K-51). A color match print proof from the sign manufacturer of the Rendering Sign printed from the supplied file is to be submitted to DDC for approval before fabrication. The Rendering Sign is to be posted at the same height as the Project Sign. Where possible, the Rendering Sign shall be mounted with a perfect match of the short sides of the rectangle so that the Rendering Sign and the Project Sign together will create one long rectangle.
2. **Removal:** At the completion of all work under the Contract, the Contractor shall remove and dispose of the project rendering away from the site.

**R. PLANT PEST CONTROL REQUIREMENTS and TREE PROTECTION REQUIREMENTS**

1. **Plant Pest Control Requirements:** The Contractor for General Construction Work (the "Contractor") and its subcontractors, including the Certified Arborist described below, shall comply with all Federal and New York State laws and regulations concerning Asian Longhorned Beetle (ALB) management, including protocols for ALB eradication and containment promulgated by the New York State Department of Agriculture and Markets (NYSDAM). The Contractor is referred to: (1) Part 139 of Title 1 NYCRR, Agriculture and Markets Law, Sections 18, 164 and 167, as amended, and (2) State Administrative Procedure Act, Section 202, as amended.

- a. All tree work performed within the quarantine areas must be performed by New York State Department of Agriculture and Markets (NYSDAM) certified entities. Transportation of all host material, living, dead, cut or fallen, inclusive of nursery stock, logs, green lumber, stumps, roots, branches and debris of a half inch or more in diameter from the quarantine areas is prohibited unless the Contractor or its sub contractor performing tree work has entered into a compliance agreement with NYSDAM. The terms of said compliance agreement shall be strictly complied with. Any host material so removed shall be delivered to a facility approved by NYSDAM. For the purpose of this contract host material shall be ALL species of trees.
  - b. Any host material that is infested with the Asian Longhorned Beetle must be immediately reported to NYSDAM for inspection and subsequent removal by either State or City contracts, at no cost to the Contractor.
  - c. Prior to commencement of tree work, the Contractor shall submit to the Commissioner a copy of a valid Asian Longhorned Beetle compliance agreement entered into with NYSDAM and the Contractor or its sub contractor performing tree work. If any host material is transported from the quarantine area the Contractor shall immediately provide the Commissioner with a copy of the New York State 'Statement of Origin and Disposition' and a copy of the receipt issued by the NYSDAM approved facility to which the host materials are transported.
  - d. Quarantine areas, for the purpose of this contract shall be defined as all five boroughs of the City of New York. In addition, prior to the start of any tree work, the Contractor shall contact the NYC Department of Parks & Recreation's Director of Landscape Management at (718) 699-6724, to determine the limits of any additional quarantine areas that may be in effect at the time when tree work is to be performed. The quarantine area may be expanded by Federal and State authorities at any time and the Contractor is required to abide by any revisions to the quarantine legislation while working on this contract. For further information please contact: NYSDAM (631) 288-1751.
2. Tree Protection Requirements: The Contractor shall retain a Certified Arborist, as defined by New York City Department of Parks and Recreation (NYCDPR) regulations, to provide the services described below.
    - a. Surveys and Reports: The Certified Arborist shall, at the times indicated below, conduct a survey and prepare a plant material assessment report which includes: (1) identification, by species and pertinent measurements, of all plant material located on the project site, or in proximity to the project site, as described below, including all trees, significant shrubs and/or planting masses; (2) identification and plan for the containment of plant pests and pathogens, including the ALB, as described above; (3) evaluation of the general health and condition of any infected plant material.
    - b. Frequency of Reports: The Certified Arborist shall conduct a survey and provide a plant material assessment report at two (2) points in time: (1) prior to the commencement of construction work; and (2) at the time of substantial completion. In addition, for projects exceeding 24 months in duration, the Certified Arborist shall conduct a survey and prepare a report at the midpoint of construction. Copies of each plant material assessment report shall be submitted to the Resident Engineer within two (2) weeks of the survey.
    - c. Proximity to Project Site: Off-site trees, significant shrubs and/or planting masses shall be considered to be located in proximity to the project site under the circumstances described below.
      1. The tree trunk, significant shrub, or primary cluster of stems in a planting mass is within 50 (fifty) feet of the project's Contract Limit Lines (CLLs) or Property Lines (PLs).
      2. Any part of the tree or shrub stands within 50 (fifty) feet of: (a) a path for site access for vehicles and/or construction equipment; or (b) scaffolding to be erected for construction

activity, including façade remediation projects.

3. The Certified Arborist determines that the critical root zone (CRZ) of an off-site tree, significant shrub, or primary cluster of stems in a planting mass extends into the project site, whether or not that plant material is located within the 50-foot inclusionary perimeter as outlined above.

- d. Tree Protection Plan: The Certified Arborist shall prepare, and the Contractor shall implement, a Tree Protection Plan, for all trees that may be affected by any construction work, excavation or demolition activities, including without limitation, (1) on-site trees, (2) street trees, as defined below, (3) trees under NYCDPR jurisdiction as determined by the Department of Transportation, and (4) all trees that are located in proximity to the project site, as defined above. The Tree Protection Plan shall comply with the NYC DPR rules, regulations and specifications. The Contractor is referred to Chapter 5 of Title 56 of the Official Compilation of the Rules of the City of New York. Copies of the Tree Protection Plan shall be submitted to the Resident Engineer prior to the commencement of construction. Implementation of the Tree Protection Plan for street trees and trees under NYCDPR jurisdiction shall be in addition to any tree protection requirements specified or required for the project site.

For the purpose of this article, a "street tree" means the following: (1) a tree that stands in a sidewalk, whether paved or unpaved, between the curb lines or lateral lines of a roadway and the adjacent property lines of the project site, or (2) a tree that stands in a sidewalk and is located within 50 feet of the intersection of the project's site's property line with the street frontage property line.

3. No Separate Payment. No separate payment shall be made for compliance with Plant Pest Control Requirements or Tree Protection Requirements. The cost of compliance with Plant Pest Control Requirements and Tree Protection Requirements shall be deemed included in the Contractor's bid for the Project.



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FMS ID: PV467NOG4-R



**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF PUBLIC BUILDINGS**

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

**Contract for Furnishing all Labor and Material Necessary and Required for:**

**CONTRACT NO. 1                      GENERAL CONSTRUCTION**

**Noguchi Masterplan Phase IC.2  
Renovation**

**LOCATION:                      32-37 Vernon Blvd  
BOROUGH:                      Long Island City, 11101  
CITY OF NEW YORK**

N.S.P. ENTERPRISES, INC.

Contractor

Dated 9TH OF MAY, 20 14

Approved as to Form  
Certified as to Legal Authority

[Signature]

Acting Corporation Counsel

Dated May 24, 20 13

Entered in the Comptroller's Office

First Assistant Bookkeeper

Dated \_\_\_\_\_, 20 \_\_\_\_\_

JP  
5-24-13





PROJECT ID:

PV467NOG4-R

**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
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**LAW**

**VOLUME 3 OF 3**

**ADDENDUM TO THE GENERAL  
CONDITIONS**

**SPECIFICATIONS**

FOR FURNISHING ALL LABOR AND MATERIALS  
NECESSARY AND REQUIRED FOR:

**Noguchi Masterplan Phase IC.2  
Renovation**

LOCATION:  
BOROUGH:  
CITY OF NEW YORK

32-37 Vernon Blvd  
Long Island City, 11101

CONTRACT NO. 1

GENERAL CONSTRUCTION

DCA

Sage & Coombe Architects

Date:

April 26, 2013

**13-060**





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

7/12/13

**ADDENDUM No. # 1**

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

**PV467NOG4-R**

**Noguchi Masterplan Phase IC.2**

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This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

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The bidder is advised that the items listed below apply to the project:

**1. Revisions to the Bid Booklet:**

See Attachment A.

**2. Revisions to Volume 2:**

See Attachment B.

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

If additional information is required, please contact the Department of Design and Construction, Contract Section at (718) 391-2200, (718) 391-1727, or by fax at (718) 391-2615.



---

David Resnick, R.A.  
Deputy Commissioner

---

Name of Bidder

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

**DDC PROJECT #: PV467NOG4-R**

**PROJECT NAME: Noguchi Masterplan Phase IC.2**

**ATTACHMENT A – REVISIONS TO THE BID BOOKLET**

**Bid Booklet:** The Bid Booklet is amended as set forth below.

- **Table of Contents:** Delete Item #2, entitled “M/WBE Program: Subcontractor Utilization Plan”, and replace it with “M/WBE Program: M/WBE Utilization Plan”.
- **Special Notice to Bidders: Bid Submission Requirements:** Under Bid Envelope #1, delete “M/WBE Subcontractor Utilization Plan (if participation goals have been established)”, and replace it with “Schedule B: M/WBE Utilization Plan (if Participation Goals have been established)”.
- **Bid Form:** Delete the pages of Bid Form (pages 15-1, 15-2, 15-3) for insertion of the Total Bid Price, as well as signature by the bidder, and replace it with the new pages for insertion of the Total Bid Price attached to this Addendum (pages 15-1R, 15-2R, 15-3R).
- **MWBE Program: Subcontractor Utilization Plan:** Delete the section (pages 5,6,7,8 and 9) entitled “M/WBE Program: Subcontractor Utilization Plan”, and replace it with the new section entitled “M/WBE Program: M/WBE Utilization Plan” attached to this Addendum (pages 5-R, 6-R, 7-R, 8-R, 9-R, 9a).
- **Bidder’s Identification of Subcontractors:** Delete the language under the heading “PLEASE NOTE” from the form entitled “Bidder’s Identification of Subcontractors”, and replace it with the new language set forth below.

PLEASE NOTE: for any contract that is subject to M/WBE Participation Goals under Section 6-129 of the Administrative Code of the City of New York, if the bidder’s intention to use its own forces to do any of the above-referenced work would result in Bidder’s failure to attain the Participation Goals identified in the M/WBE Utilization Plan, the bid will be non-responsive unless the bidder requests and obtains a full or partial waiver of the Participation Goals (M/WBE Utilization Plan, Part III) in advance of bid submission. For more information see Notice to All Prospective Contractors, Participation by Minority-Owned and Women-Owned Business Enterprises in City Procurement.

- **ATTACHMENT 1 – BID INFORMATION:** Delete page 24 and replace it with attached page 24-R.

## M/WBE PROGRAM

### M/WBE UTILIZATION PLAN

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

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

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

**Rejection of the Bid:** The bidder must complete Schedule B: M/WBE Utilization Plan (Part II) set forth in this Bid Booklet on the pages following the section entitled "Notice to All Prospective Contractors". A Schedule B submitted by the bidder which does not include the Vendor Certification and Required Affirmations (See Section V of Part II) will be deemed to be non-responsive, unless a full waiver of the Participation Goals is granted (Schedule B, Part III). In the event that the City determines that the bidder has submitted a Schedule B where the Vendor Certification and Required Affirmations are completed but other aspects of the Schedule B are not complete, or contain a copy or computation error that is at odds with the Vendor Certification and Required Affirmations, the bidder will be notified by the Agency and will be given four (4) calendar days from receipt of notification to cure the specified deficiencies and return a completed Schedule B to the Agency. Failure to do so will result in a determination that the Bid is non-responsive. Receipt of notification is defined as the date notice is emailed or faxed (if the bidder has provided an email address or fax number), or no later than five (5) calendar

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

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

Part I to be completed by contracting agency

**Contract Overview**

APT E-Pin # 85013B0114 FMS Project ID#: PV467NOG4-R

Project Title/Agency Noguchi Masterplan Phase IC.2

PIN # 8502013PV0021C

Bid/Proposal Response Date: \_\_\_\_\_

Contracting Agency Department of Design and Construction

Agency Address 30-30 Thomson Avenue City Long Island City State NY Zip Code 11101

Contact Person Norma Negrón Title MWBE Liaison & Compliance Analyst

Telephone # (718) 391-1502 Email negronn@ddc.nyc.gov

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

This Project consists of the selective renovation of the Noguchi Museum Sculpture Garden to rebuild the perimeter garden fence, introduce outdoor exhibit lighting and irrigation systems.

**M/WBE Participation Goals for Services**

Enter the percentage amount for each goal or for the unspecified goal. Please do not include any goals for Asian Americans in Professional Services.

Prime Contract Industry: Construction

Group	Percentage	
<u>Unspecified</u>	<u>15</u>	<u>%</u>
<u>or</u>		
<u>Black American</u>	<u>Unspecified</u>	<u>%</u>
<u>Hispanic American</u>	<u>Unspecified</u>	<u>%</u>
<u>Asian American</u>	<u>Unspecified</u>	<u>%</u>
<u>Women</u>	<u>Unspecified</u>	<u>%</u>
<b>Total Participation Goals</b>	<b>15</b>	<b>%</b>

Line 1



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

Part II to be completed by the bidder/proposer:

Please note: For Non-M/WBE Prime Contractors who will NOT subcontract any services and will self-perform the entire contract, you must obtain a FULL waiver by completing the Waiver Application on pages 9 and 9a and timely submitting it to the contracting agency pursuant to the Notice to Prospective Contractors. Once a FULL WAIVER is granted, it must be included with your bid or proposal and you do not have to complete or submit this form with your bid or proposal.

**Section I: Prime Contractor Contact Information**

Tax ID # \_\_\_\_\_ FMS Vendor ID # \_\_\_\_\_  
 Business Name \_\_\_\_\_ Contact Person \_\_\_\_\_  
 Address \_\_\_\_\_  
 Telephone # \_\_\_\_\_ Email \_\_\_\_\_

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

**PRIME CONTRACTOR ADOPTING AGENCY M/WBE PARTICIPATION GOALS**

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

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

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

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

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

MBE  WBE

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

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

**Section IV: General Contract Information**

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

Line	Scope of Subcontract Work
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	

Scopes of Subcontract Work

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

I hereby:

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

Signature \_\_\_\_\_ Date \_\_\_\_\_  
 Print Name \_\_\_\_\_ Title \_\_\_\_\_

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

**Contract Overview**

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

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

\_\_\_\_\_ % Agency M/WBE Participation Goal

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

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

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

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

**References**

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

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

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

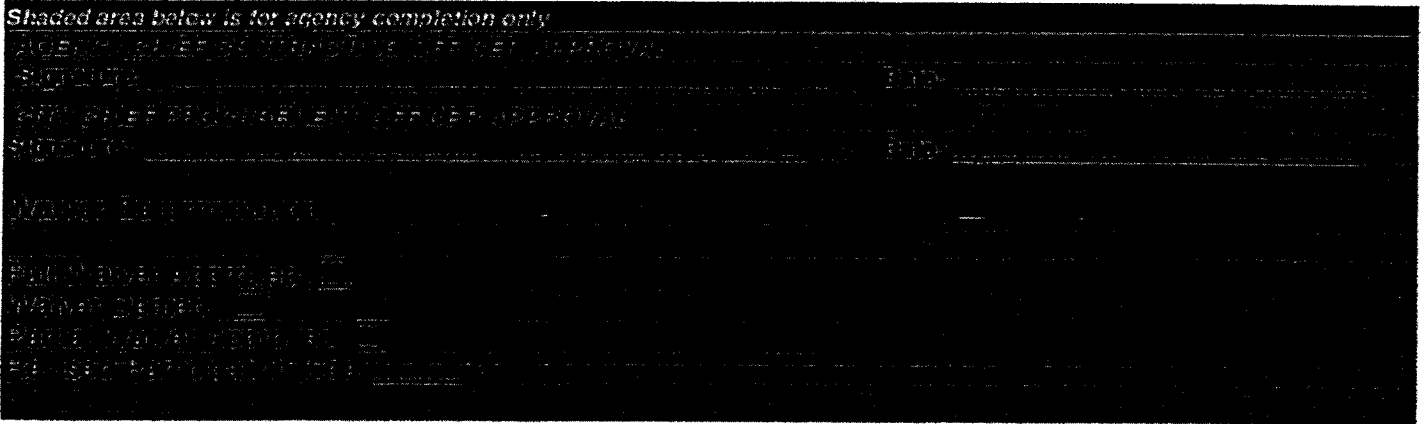
<b>TYPE OF Contract</b> _____	<b>ENTITY</b> _____	<b>DATE COMPLETED</b> _____
Manager at entity that hired vendor (Name/Phone No./Email) _____		
<b>Total Contract Amount</b> \$ _____	<b>Total Amount Subcontracted</b> \$ _____	
<b>Type of Work Subcontracted</b> _____	_____	_____

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

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

**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:** \_\_\_\_\_



**BID FORM - BID ALTERNATE 1**

**PROJECT ID: PV467NOG4-R**

**TOTAL BID PRICE:** In the space provided below, the Bidder shall indicate the total bid price in figures.

- A. **LUMP SUM PRICE** - Total price for all labor and material for all required work, excluding items (B) set forth below. Total Price shall include all costs and expenses, i.e. labor, material overhead and profit for all the Work, described and shown in the drawings and specifications.

Total Price For Labor		Total Price for Material Sold and		Total Price for Item A	
\$ _____	+	\$ _____		\$ _____	

- B. **ALLOWANCE for Incidental Asbestos Abatement** \$15,000.00  
(Section 028013 of the Specifications)

TOTAL BID PRICE (Add A + B)  
( a/k/a BID PROPOSAL) \$ \_\_\_\_\_

**BIDDER'S SIGNATURE AND AFFIDAVIT**

**WARNING!! Failure to comply with item below will result in the rejection of your bid.**

- \* **MWBE GOALS:** You **MUST** complete and submit the Affirmations contained in the Subcontractor Utilization Plan (See Page 7-R), or a pre-approved waiver (See Page 9-R), at the time you submit your bid. You must submit the Affirmations (or a pre-approved waiver) in **BID ENVELOPE #1**.

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

By: \_\_\_\_\_  
(Signature of Partner or corporate officer)

Attest: \_\_\_\_\_ Secretary of Corporate Bidder  
(Corporate Seal)

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

**BID FORM - BID ALTERNATE 2**

---

**PROJECT ID: PV467NOG4-R**

**TOTAL BID PRICE:** In the space provided below, the Bidder shall indicate the total bid price in figures.

- A. **LUMP SUM PRICE** - Total price for all labor and material for all required work, excluding items (B) set forth below. Total Price shall include all costs and expenses, i.e. labor, material overhead and profit for all the Work, described and shown in the drawings and specifications.

Total Price  
For Labor

Total Price for  
Material Sold and

\$ \_\_\_\_\_ + \$ \_\_\_\_\_ Total Price for Item A \$ \_\_\_\_\_

- B. **ALLOWANCE for Incidental Asbestos Abatement** **\$15,000.00**  
(Section 028013 of the Specifications)

TOTAL BID PRICE (Add A + B) \$ \_\_\_\_\_  
( a/k/a BID PROPOSAL)

**BIDDER'S SIGNATURE AND AFFIDAVIT**

**WARNING!! Failure to comply with item below will result in the rejection of your bid.**

- \* **MWBE GOALS:** You **MUST** complete and submit the Affirmations contained in the Subcontractor Utilization Plan (See Page 7-R), or a pre-approved waiver (See Page 9-R), at the time you submit your bid. You must submit the Affirmations (or a pre-approved waiver) in **BID ENVELOPE #1**.

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

By: \_\_\_\_\_  
(Signature of Partner or corporate officer)

Attest: \_\_\_\_\_ Secretary of Corporate Bidder  
(Corporate Seal)

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

**BID FORM - BID ALTERNATE 3**

**PROJECT ID: PV467NOG4-R**

**TOTAL BID PRICE:** In the space provided below, the Bidder shall indicate the total bid price in figures.

- A. **LUMP SUM PRICE** - Total price for all labor and material for all required work, excluding items (B) set forth below. Total Price shall include all costs and expenses, i.e. labor, material overhead and profit for all the Work, described and shown in the drawings and specifications.

Total Price  
For Labor

Total Price for  
Material Sold and

\$ \_\_\_\_\_ + \$ \_\_\_\_\_ Total Price for Item A \$ \_\_\_\_\_

- B. **ALLOWANCE** for Incidental Asbestos Abatement  
(Section 028013 of the Specifications)

\$15,000.00

TOTAL BID PRICE (Add A + B)  
( a/k/a BID PROPOSAL)

\$ \_\_\_\_\_

**BIDDER'S SIGNATURE AND AFFIDAVIT**

**WARNING!!** Failure to comply with item below will result in the rejection of your bid.

- \* **MWBE GOALS:** You **MUST** complete and submit the Affirmations contained in the Subcontractor Utilization Plan (See Page 7-R), or a pre-approved waiver (See Page 9-R), at the time you submit your bid. You must submit the Affirmations (or a pre-approved waiver) in **BID ENVELOPE #1**.

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

**ATTACHMENT 1 – BID INFORMATION**  
**PROJECT ID: PV467NOG4-R**

**DESCRIPTION AND LOCATION OF WORK:**

**Noguchi Masterplan Phase 1C.2 Renovation**  
**32-37 Vernon Blvd.**  
**Long Island City, NY 11101**  
**E-PIN: 85013B0114 / DDC PIN: 8502013PV0021C**

**DOCUMENTS AVAILABLE AT:**

Department of Design and Construction, Contract Section  
 30-30 Thomson Avenue – First Floor, Long Island City, NY 11101

**SUBMISSION OF BIDS BEFORE BID OPENING:**

**TIME TO SUBMIT:**

On or Before: **THURSDAY, JULY 25, 2013**

**BIDS MUST BE CLOCKED IN PRIOR TO BID OPENING**

**PLACE TO SUBMIT:**

Department of Design and Construction, Contract Section (located behind Security Desk)  
 30-30 Thomson Avenue – First Floor, Long Island City, NY 11101

**BID OPENING:**

<b>PLACE OF BID OPENING:</b>	Department of Design and Construction Contract Section 30-30 Thomson Avenue – First Floor Long Island City, NY 11101
<b>DATE AND HOUR:</b>	THURSDAY, JULY 25, 2013 @ 2:00 pm LATE BIDS WILL NOT BE ACCEPTED

**PRE-BID CONFERENCE:**

<b>PLACE</b>	Noguchi Sculpture Garden 32-37 Vernon Blvd. Long Island City, NY 11101
<b>DATE AND HOUR</b>	THURSDAY, JULY 25, 2013 AT 10:00 AM
<b>MANDATORY OR OPTIONAL</b>	MANDATORY

**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 excess of \$1,000,000.00. Performance and Payment Security shall each be in an amount equal to 100% of the Contract Price

**AGENCY CONTACT PERSON:**

Lorraine Holley, 30-30 Thomson Avenue – First Floor, Long Island City, Queens, NY 11101  
 Telephone (718) 391-2200 or (718) 391-2601 Fax: (718) 391-2615



**DDC PROJECT #: PV467NOG4-R**

**PROJECT NAME: Noguchi Masterplan Phase IC.2**

**ATTACHMENT B – REVISIONS TO VOLUME 2**

Contract: The Contract is amended as set forth below.

- Delete Article 77, entitled “Participation by Minority-Owned and Women-Owned Business Enterprises in City Procurement”, in its entirety, and replace it with new Article 77. New Article 77 is IDENTICAL in all respects to the section entitled “Notice to All Prospective Contractors: Participation by Minority-Owned and Women-Owned Business Enterprises in City Procurement” attached to this Addendum.
- Prevailing Wages:  
The latest Prevailing Wage Schedule is included with this Addendum.

**NOTICE TO ALL PROSPECTIVE CONTRACTORS**

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

**ARTICLE I. M/WBE PROGRAM**

Local Law No. 129 of 2005 added and Local Law 1 of 2013 amended Section 6-129 of the Administrative Code of the City of New York (hereinafter "Section 6-129"). Section 6-129 establishes the program for participation in City procurement ("M/WBE Program") by minority-owned business enterprises ("MBEs") and women-owned business enterprises ("WBEs"), certified in accordance with Section 1304 of the New York City Charter. As stated in Section 6-129, the intent of the program is to address the impact of discrimination on the City's procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are pursuant to Section 6-129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the M/WBE Program established by Section 6-129, the specific requirements of MBE and/or WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "M/WBE Utilization Plan"), and are detailed below. The Contractor must comply with all applicable MBE and WBE requirements for this Contract.

All provisions of Section 6-129 are hereby incorporated in the Contract by reference and all terms used herein that are not defined herein shall have the meanings given such terms in Section 6-129. Article I, Part A, below, sets forth provisions related to the participation goals for construction, standard and professional services contracts. Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE Program.

**PART A**

**PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD  
AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS**

1. The MBE and/or WBE Participation Goals established for this Contract or Task Orders issued pursuant to this Contract, ("Participation Goals"), as applicable, are set forth on Schedule B, Part I to this Contract (see Page 1, line 1 Total Participation Goals) or will be set forth on Schedule B, Part I to Task Orders issued pursuant to this Contract, as applicable.

The Participation Goals represent a percentage of the total dollar value of the Contract or Task Order, as applicable, that may be achieved by awarding subcontracts to firms certified with New York City Department of Small Business Services as MBEs and/or WBEs, and/or by crediting the participation of prime contractors and/or qualified joint ventures as provided in Section 3 below, unless the goals have been waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

2. If Participation Goals have been established for this Contract or Task Orders issued pursuant to this Contract, Contractor agrees or shall agree as a material term of the Contract that Contractor shall be subject to the Participation Goals, unless the goals are waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

3. If Participation Goals have been established for this Contract or Task Order issued pursuant to this Contract, a Contractor that is an MBE and/or WBE shall be permitted to count its own participation toward fulfillment of the relevant Participation Goal, provided that in accordance with Section 6-129 the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that the Contractor pays to direct subcontractors (as defined in Section 6-129(c)(13)), and provided further that a Contractor that is certified as both an MBE and a WBE may count its own participation either toward the goal for MBEs or the goal for WBEs, but not both.

A Contractor that is a qualified joint venture (as defined in Section 6-129(c)(30)) shall be permitted to count a percentage of its own participation toward fulfillment of the relevant Participation Goal. In accordance with Section 6-129, the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as

applicable, any amounts that Contractor pays to direct subcontractors, and then multiplying the remainder by the percentage to be applied to total profit to determine the amount to which an MBE or WBE is entitled pursuant to the joint venture agreement, provided that where a participant in a joint venture is certified as both an MBE and a WBE, such amount shall be counted either toward the goal for MBEs or the goal for WBEs, but not both.

4. A. If **Participation Goals** have been established for this Contract, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Utilization Plan, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. In the event that this M/WBE Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals**, the bid or proposal, as applicable, shall be deemed non-responsive, unless Agency has granted the bidder or proposer, as applicable, a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

B. (i) If this Contract is for a master services agreement or other requirements type contract that will result in the issuance of Task Orders that will be individually registered ("Master Services Agreement") and is subject to M/WBE **Participation Goals**, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Participation Requirements for Master Services Agreements That Will Require Individually Registered Task Orders, Part II (page 2) indicating the prospective contractor's certification and required affirmations to make all reasonable good faith efforts to meet participation goals established on each individual Task Order issued pursuant to this Contract, or if a partial waiver is obtained or such goals are modified by the Agency, to meet the modified **Participation Goals** by soliciting and obtaining the participation of certified MBE and/or WBE firms. In the event that the Schedule B indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals** that may be established on Task Orders issued pursuant to this Contract, the bid or proposal, as applicable, shall be deemed nonresponsive.

(ii) **Participation Goals** on a Master Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. If **Participation Goals** have been established on a Task Order, a contractor shall be required to submit a Schedule B - M/WBE Utilization Plan For Independently Registered Task Orders That Are Issued Pursuant to Master Services Agreements, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. The contractor must engage in good faith efforts to meet the **Participation Goals** as established for the Task Order unless Agency has granted the contractor a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

**C. THE BIDDER/PROPOSER MUST COMPLETE THE SCHEDULE B INCLUDED HEREIN (SCHEDULE B, PART II). A SCHEDULE B SUBMITTED BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS (SEE SECTION V OF PART II) WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART III). IN THE EVENT THAT THE CITY DETERMINES THAT THE BIDDER/PROPOSER HAS SUBMITTED A SCHEDULE B WHERE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE SCHEDULE B ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE VENDOR CERTIFICATION AND AFFIRMATIONS, THE BIDDER/PROPOSER WILL BE NOTIFIED BY THE AGENCY AND WILL BE GIVEN FOUR (4) CALENDAR DAYS FROM RECEIPT OF NOTIFICATION TO CURE THE SPECIFIED DEFICIENCIES AND RETURN A COMPLETED SCHEDULE B TO THE AGENCY. FAILURE TO DO SO WILL RESULT IN A DETERMINATION THAT THE BID/PROPOSAL IS NON-RESPONSIVE. RECEIPT OF NOTIFICATION IS DEFINED AS THE DATE NOTICE IS E-MAILED OR FAXED (IF THE BIDDER/PROPOSER HAS PROVIDED AN E-MAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) CALENDAR DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.**

5. Where an M/WBE Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multiyear contracts, such list shall also be submitted every year thereafter. The Agency may also require the Contractor to report periodically about the contracts awarded by its direct subcontractors to indirect subcontractors (as defined in Section 6-129(c)(22)). **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at**

the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work. In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.

6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the Participation Goals. Such certification must occur prior to the firms' commencement of work. A list of MBE and WBE firms may be obtained from the DSBS website at [www.nyc.gov/buycertified](http://www.nyc.gov/buycertified), by emailing DSBS at [buyer@sbs.nyc.gov](mailto:buyer@sbs.nyc.gov), by calling (212) 513-6356, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7th floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting [www.nyc.gov/getcertified](http://www.nyc.gov/getcertified), emailing [MWBE@sbs.nyc.gov](mailto:MWBE@sbs.nyc.gov), or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

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

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

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

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

(b) To apply for a full or partial waiver of the Participation Goals, a bidder, proposer, or contractor, as applicable, must complete Part III (Page 5) of Schedule B and submit such request no later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due, in writing to the Agency by email at [poped@ddc.nyc.gov](mailto:poped@ddc.nyc.gov) or via facsimile at (718) 391-1886. Bidders, proposers, or contractors, as applicable, who have submitted requests will receive an Agency response by no later than two (2) calendar days prior to the due date for bids, proposals, or Task Orders; provided, however, that if that date would fall on a weekend or holiday, an Agency response will be provided by close-of-business on the business day before such weekend or holiday date.

(c) If the Agency determines that the Participation Goals are unreasonable in light of the availability of certified firms to perform the services required, it shall revise the solicitation and extend the deadline for bids and proposals, or revise the Task Order, as applicable.

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

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

- (i) The Contractor advertised opportunities to participate in the Contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;
- (ii) The Contractor provided notice of specific opportunities to participate in the Contract, in a timely manner, to minority and women's business organizations;
- (iii) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs or WBEs that their interest in the Contract was solicited;
- (iv) The Contractor made efforts to identify portions of the work that could be substituted for portions originally designated for participation by MBEs and/or WBEs in the **M/WBE Utilization Plan**, and for which the Contractor claims an inability to retain MBEs or WBEs;
- (v) The Contractor held meetings with MBEs and/or WBEs prior to the date their bids or proposals were due, for the purpose of explaining in detail the scope and requirements of the work for which their bids or proposals were solicited;
- (vi) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts, or act as suppliers or service providers;
- (vii) Timely written requests for assistance made by the Contractor to Agency's **M/WBE liaison officer** and to **DSBS**;
- (viii) Description of how recommendations made by **DSBS** and Agency were acted upon and an explanation of why action upon such recommendations did not lead to the desired level of participation of MBEs and/or WBEs.

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

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

12. If this Contract is for an indefinite quantity of construction, standard or professional services or is a requirements type contract and the Contractor has submitted an **M/WBE Utilization Plan** and has committed to subcontract work to MBEs and/or WBEs in order to meet the **Participation Goals**, the Contractor will not be deemed in violation of the **M/WBE Program requirements** for this Contract with regard to any work which was intended to be subcontracted to an MBE and/or WBE to the extent that the Agency has determined that such work is not needed.

13. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, at least once annually during the term of the Contract or Task Order, as applicable, Agency shall review the Contractor's progress toward attainment of its **M/WBE Utilization Plan**, including but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.

14. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, Agency shall evaluate and assess the Contractor's performance in meeting those goals, and such evaluation and assessment shall become part of the Contractor's overall contract performance evaluation.

### **PART B: MISCELLANEOUS**

1. The Contractor shall take notice that, if this solicitation requires the establishment of an **M/WBE Utilization Plan**, the resulting contract may be audited by DSBS to determine compliance with Section 6-129. See §6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the **M/WBE Utilization Plan**.

2. Pursuant to DSBS rules, construction contracts that include a requirement for an **M/WBE Utilization Plan** shall not be subject to the law governing Locally Based Enterprises set forth in Section 6-108.1 of the Administrative Code of the City of New York.

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

4. Prospective contractors are encouraged to enter into qualified joint venture agreements with MBEs and/or WBEs as defined by Section 6-129(c)(30).

5. By submitting a bid or proposal the Contractor hereby acknowledges its understanding of the **M/WBE Program** requirements set forth herein and the pertinent provisions of Section 6-129, and any rules promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the **M/WBE Program** requirements of this Contract and pertinent provisions of Section 6-129, and any rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract. The Contractor hereby agrees to make all reasonable, good faith efforts to solicit and obtain the participation of MBEs and/or WBEs to meet the required **Participation Goals**.

### **ARTICLE II. ENFORCEMENT**

1. If Agency determines that a bidder or proposer, as applicable, has, in relation to this procurement, violated Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, Agency may disqualify such bidder or proposer, as applicable, from competing for this Contract and the Agency may revoke such bidder's or proposer's prequalification status, if applicable.

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

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

- (a) entering into an agreement with the Contractor allowing the Contractor to cure the violation;
- (b) revoking the Contractor's pre-qualification to bid or make proposals for future contracts;
- (c) making a finding that the Contractor is in default of the Contract;
- (d) terminating the Contract;
- (e) declaring the Contractor to be in breach of Contract;
- (f) withholding payment or reimbursement;
- (g) determining not to renew the Contract;
- (h) assessing actual and consequential damages;
- (i) assessing liquidated damages or reducing fees, provided that liquidated damages may be based on amounts representing costs of delays in carrying out the purposes of the **M/WBE Program**, or in meeting the purposes of the

Contract, the costs of meeting utilization goals through additional procurements, the administrative costs of investigation and enforcement, or other factors set forth in the Contract;

- (j) exercising rights under the Contract to procure goods, services or construction from another contractor and charge the cost of such contract to the Contractor that has been found to be in noncompliance; or
- (k) taking any other appropriate remedy.

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

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

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

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

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

LABOR LAW §220 PREVAILING WAGE SCHEDULE

Workers, Laborers and Mechanics employed on a public work project must receive not less than the prevailing rate of wage and benefits for the classification of work performed by each upon such public work. Pursuant to Labor Law §220 the Comptroller of the City of New York has promulgated this schedule solely for Workers, Laborers and Mechanics engaged by private contractors on New York City public work contracts.

Contracting agencies anticipating doing work which requires the employment of a trade or classification not included in this schedule must request the Comptroller to establish a proper classification for the work pursuant to Labor Law §220 (3-a) (a). The prevailing rate schedule as promulgated by the Comptroller, must, in compliance with law, be annexed to and form part of the contract.

Contractors are solely responsible for maintaining original payroll records which delineate, among other things, the hours each employee worked within a given classification. Contractors using rates and/or classifications not promulgated by the Comptroller do so at their own risk. Additionally, prior to bid, Agency Chief Contracting Officers must contact the Bureau of Labor Law when the need arises for a work classification not published in this schedule.

The appropriate schedule of prevailing wages and benefits must be posted at all public work sites pursuant to Labor Law §220 (3-a) (a).

This schedule is applicable for work performed during the effective period, unless otherwise noted. You will be notified of any changes to this schedule by addenda published on our web site at [www.comptroller.nyc.gov](http://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 1<sup>st</sup> of each succeeding year. Final schedules are published on or about July 1<sup>st</sup> in the City Record and on our web site at [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov).

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

Answers to questions concerning prevailing trade practices may be obtained from the Classification Unit by calling (212) 669-7974. Please direct all other compliance issues to: Bureau of Labor Law, Attn: Wasyl Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 1122, New York, N.Y. 10007; Fax (212) 669-4002.

Prevailing rates and ratios for apprentices are attached to this schedule in the Appendix. Pursuant to Labor Law §220 (3-e), only apprentices who are individually registered in a bona fide program to which the employer contractor is a participant, registered with the New York State Department of Labor, may be employed on a public work project. Workers who are not journey persons or not registered apprentices pursuant to Labor Law §220 (3-e) may not be substituted for apprentices and must be paid as journey persons.



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

Contractors are advised to review the applicable Collective Bargaining Agreements and the Comptroller's Prevailing Wage Schedule before bidding on Public Work. If there are any questions concerning prevailing wages, benefits, overtime, Holiday pay, shift differentials or any prevailing practice, please contact this office.

Public Work construction, reconstruction, demolition, excavation, rehabilitation, repair, renovation, alteration, or improvement contracts awarded pursuant to a Project Labor Agreement ("PLA") in accordance with Labor Law section 222 may have different labor standards for shift, premium and overtime work. Please refer to the PLA's pre-negotiated labor agreements for wage and benefit rates applicable to work performed outside of the regular workday. More information is available at the Mayor's Office of Contract Services (MOCS) web page at <http://www.nyc.gov/html/mocs/html/vendors/pla.shtml>.

All the provisions of Labor Law section 220 remain applicable to PLA work including, but not limited to, the enforcement of prevailing wage requirements by the Comptroller; however, we will enforce shift, premium, overtime and other non-standard rates as they appear in a project's pre-negotiated labor agreement.

Any error as to compensation under the prevailing wage law or other information as to trade classification, made by the contracting agency in the contract documents or in any other communication, will not preclude a finding against the contractor of prevailing wage violation.

In order to meet their obligation to provide prevailing supplemental benefits to each covered employee, employers must either:

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

Particular attention should be given to the supplemental benefits requirement. Although in most instances the payment or provision for supplemental benefits is for each hour worked, some classifications require the payment or provision of supplemental benefits for each hour paid. Consequently, some prevailing practices require benefits to be purchased at the overtime, shift differential, Holiday, Saturday, Sunday or other premium time rate.

**Benefits are paid for EACH HOUR WORKED unless otherwise noted.**

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

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

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## ASBESTOS HANDLER

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

### Asbestos Handler

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$35.90**

Supplemental Benefit Rate per Hour: **\$15.05**

### Overtime

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

Time and one half the regular rate for Sunday.

Time and one half the regular hourly rate after 40 hours in any work week.

### Overtime Holidays

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

New Year's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Easter

### Paid Holidays

None

(Local #78 and Local #12A)

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## BLASTER

### Blaster

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$44.40**

Supplemental Benefit Rate per Hour: **\$38.44**

### Blaster (Hydraulic)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$45.17**

Supplemental Benefit Rate per Hour: **\$38.44**

**Blaster - Trac Drill Hydraulic**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$40.04  
Supplemental Benefit Rate per Hour: \$38.44

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$39.30  
Supplemental Benefit Rate per Hour: \$38.44

**Blaster - Operators of Jack Hammers**

Chippers: Spaders: Concrete Breakers: and all other pneumatic tools of like usage: Walk Behind Self Propelled Hydraulic Asphalt and Concrete Breakers: Hydro (Water) Demolition

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$38.32  
Supplemental Benefit Rate per Hour: \$38.44

**Blaster - Powder Carriers**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$34.66  
Supplemental Benefit Rate per Hour: \$38.44

**Blaster - Hydraulic Trac Drill Chuck Tender**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$33.46  
Supplemental Benefit Rate per Hour: \$38.44

**Blaster - Chuck Tender & Nipper**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$32.75  
Supplemental Benefit Rate per Hour: \$38.44

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$19.76  
Supplemental Benefit Rate per Hour: \$38.44

**Overtime Description**

Magazine Keepers:

Time and one half for work performed in excess of forty (40) hours per week and for work performed on Saturdays, Sundays and Holidays.

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

**All Other Employees:**

Time and one-half for the first eight hours of work on Saturday and for Make-up Time. Double time for all hours over eight Monday through Friday (except make-up hours) and for all hours worked on Sunday and Holidays.

**Overtime**

Double time the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

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

New Year's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

A single shift shall be 8 hours plus an unpaid lunch, starting at 8:00 A.M (or between 6:00 A.M. and 10:00 A.M. on weekdays). When two (2) shifts are employed, each shift shall be 8 hours plus ½ hour unpaid lunch. When three (3) shifts are employed, each shift will work seven and one-half (7 ½) hours, but will be paid for eight (8) hours, since only one-half (½) hour is allowed for mealtime. When two (2) or more shifts are employed, single time will be paid for each shift. The first 8 hours of any and all work performed Monday through Friday inclusive of any off-shift shall be at the single time rate.

(Local #29)

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**BOILERMAKER**

**Boilermaker**

Effective Period: 7/1/2013 - 12/31/2013

Wage Rate per Hour: \$49.47

Supplemental Benefit Rate per Hour: \$39.78

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

Effective Period: 1/1/2014 - 6/30/2014

Wage Rate per Hour: \$50.45

Supplemental Benefit Rate per Hour: \$41.31

Supplemental Note: The above rate applies to repair or maintenance and new construction; For time and one half overtime - \$61.37; For double overtime - \$81.43.

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

### Overtime Description

For Repair and Maintenance work:  
Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.  
For New Construction work:  
Double time the regular rate after an 8 hour day.  
Double time the regular time rate for Saturday.  
Double time the regular rate for Sunday.

### Overtime Holidays

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

Quadruple time the regular rate for work on the following holiday(s).  
Labor Day

### Paid Holidays

Good Friday  
Day after Thanksgiving  
Day before Christmas  
Day before New Year's Day

### Shift Rates

When shifts are required, the first shift shall work eight (8) hours at the regular straight-time hourly rate. The second shift shall work seven and one-half (7 ½) hours and receive eight hours at the regular straight time hourly rate plus twenty-five cents (\$0.25) per hour. The third shift shall work seven (7) hours and receive eight hours at the regular straight time hourly rate plus fifty cents (\$0.50) per hour. A thirty (30) minute lunch period shall not be considered as time worked. Work in excess of the above shall be paid overtime at the appropriate new construction work or repair work overtime wage and supplemental benefit hourly rate.

(Local #5)

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## BRICKLAYER

### Bricklayer

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$46.44  
Supplemental Benefit Rate per Hour: \$27.53

### Overtime

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

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)

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## CARPENTER - BUILDING COMMERCIAL

### Building Commercial

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$48.08

Supplemental Benefit Rate per Hour: \$41.10

### 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.

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



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

**Paid Holidays**

None

**Shift Rates**

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

(Carpenters District Council)

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

**Heavy Construction Work**

Effective Period: 7/1/2013 - 7/17/2013

Wage Rate per Hour: \$46.74

Supplemental Benefit Rate per Hour: \$42.37

Effective Period: 7/18/2013 - 6/30/2014

Wage Rate per Hour: \$46.82

Supplemental Benefit Rate per Hour: \$44.97

**Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

**Overtime Holidays**

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

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

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

(Carpenters District Council)

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## **CEMENT & CONCRETE WORKER**

### **Cement & Concrete Worker**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$42.33

Supplemental Benefit Rate per Hour: \$26.17

Supplemental Note: \$28.92 on Saturdays; \$31.67 on Sundays & Holidays

### **Overtime Description**

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

### **Overtime**

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

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

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

### **Paid Holidays**

1/2 day before Christmas Day

1/2 day before New Year's Day

### **Shift Rates**

On shift work extending over a twenty-four hour period, all shifts are paid at straight time.

(Cement Concrete Workers District Council)

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## CEMENT MASON

### Cement Mason

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$38.63

Supplemental Benefit Rate per Hour: \$39.05

Supplemental Note: Overtime supplemental benefit rate per hour: \$57.55

### Overtime Description

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

### Overtime Holidays

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

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

### Paid Holidays

Any worker who reports to work on Christmas Eve or New Year's Eve pursuant to his employer's instruction shall be entitled to three (3) hours afternoon pay without working.

### Shift Rates

For an off shift day, (work at times other than the regular 7:00 A.M. to 3:30 P.M. work day) a cement mason shall be paid at the regular hourly rate plus a 25% per hour differential. Four Days a week at Ten (10)hour day.

(Local #780)

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## CORE DRILLER

### Core Driller

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$35.44

Supplemental Benefit Rate per Hour: \$19.75

### Core Driller Helper

Effective Period: 7/1/2013 - 6/30/2014

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

Wage Rate per Hour: \$28.60

Supplemental Benefit Rate per Hour: \$19.75

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$25.74

Supplemental Benefit Rate per Hour: \$19.75

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$22.88

Supplemental Benefit Rate per Hour: \$19.75

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

Effective Period: 7/1/2013 - 6/30/2014

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.

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)

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## DERRICKPERSON AND RIGGER

### Derrick Person & Rigger

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$41.00

Supplemental Benefit Rate per Hour: \$46.07

Supplemental Note: The above supplemental rate applies for work performed in Manhattan, Bronx, Brooklyn and Queens. \$47.49 - For work performed in Staten Island.

### Derrick Person & Rigger - Site Work

For site work where no rigging is involved.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$30.00

Supplemental Benefit Rate per Hour: \$31.32

### **Overtime Description**

The first two hours of overtime on weekdays and the first seven hours of work on Saturdays are paid at time and one half for wages and supplemental benefits. All additional overtimes is paid at double time for wages and supplemental benefits. Deduct \$1.42 from the Staten Island hourly benefits rate before computing overtime.

### **Overtime**

Double time the regular rate for Sunday.

### **Overtime Holidays**

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

New Year's Day

Washington's Birthday

Good Friday

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### **Paid Holidays**

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

(Local #197)

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## DIVER

### Diver (Marine)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$59.40

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

Supplemental Benefit Rate per Hour: \$44.97

**Diver Tender (Marine)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$42.05

Supplemental Benefit Rate per Hour: \$44.97

**Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

**Overtime Holidays**

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

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

(Carpenters District Council)

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**DOCKBUILDER - PILE DRIVER**

**Dockbuilder - Pile Driver**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$46.82

Supplemental Benefit Rate per Hour: \$44.97

**Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Presidential Election Day  
Thanksgiving Day  
Christmas Day

### Paid Holidays

None

### Shift Rates

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

(Carpenters District Council)

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## DRIVER: TRUCK (TEAMSTER)

### Driver - Automobile Chauffeur (Dump Truck)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$38.11

Supplemental Benefit Rate per Hour: \$40.20

### Driver - Heavy Equipment Trailer Driver

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$39.61

Supplemental Benefit Rate per Hour: \$40.20

Note: For time and one half overtime Wage Rate - \$57.16; for double time overtime Wage Rate - \$76.21

### Driver - Euclid & Turnapull Operator

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$38.67

Supplemental Benefit Rate per Hour: \$40.20

### Driver - Six Wheeler(3 Axle) Tractors & Trailers

Effective Period: 7/1/2013 - 6/30/2014

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

Wage Rate per Hour: \$39.11

Supplemental Benefit Rate per Hour: \$40.20

Note: For time and one half overtime Wage Rate - \$58.01; for double time overtime Wage Rate - \$77.34

**Driver - Boom Truck**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$39.36

Supplemental Benefit Rate per Hour: \$40.20

Note: For time and one half overtime Wage Rate - \$58.01; for double time overtime Wage Rate - \$77.34

**Overtime Description**

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

**Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$35.71



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

Supplemental Benefit Rate per Hour: \$37.27

### Overtime Description

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

### Overtime

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

### Overtime Holidays

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

President's Day  
Columbus Day  
Veteran's Day

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

New Year's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

### Paid Holidays

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

(Local #282)

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## ELECTRICIAN

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

### Electrician "A" (Regular Day)

Effective Period: 7/1/2013 - 5/13/2014

Wage Rate per Hour: \$52.00

Supplemental Benefit Rate per Hour: \$46.13

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

Effective Period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$53.00  
Supplemental Benefit Rate per Hour: \$47.54

**Electrician "A" (Regular Day Overtime)**

Effective Period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$78.00  
Supplemental Benefit Rate per Hour: \$49.39

Effective Period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$79.50  
Supplemental Benefit Rate per Hour: \$50.86

**Electrician "A" (Day Shift)**

Effective Period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$52.00  
Supplemental Benefit Rate per Hour: \$46.13

Effective Period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$53.00  
Supplemental Benefit Rate per Hour: \$47.54

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

Effective Period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$78.00  
Supplemental Benefit Rate per Hour: \$49.39

Effective Period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$79.50  
Supplemental Benefit Rate per Hour: \$50.86

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

Effective Period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$61.01  
Supplemental Benefit Rate per Hour: \$52.47

Effective Period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$62.19  
Supplemental Benefit Rate per Hour: \$54.07

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

Effective Period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$91.52  
Supplemental Benefit Rate per Hour: \$56.30

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

Effective Period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$93.29  
Supplemental Benefit Rate per Hour: \$57.97

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

Effective Period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$68.34  
Supplemental Benefit Rate per Hour: \$57.83

Effective Period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$69.66  
Supplemental Benefit Rate per Hour: \$59.59

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

Effective Period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$102.51  
Supplemental Benefit Rate per Hour: \$62.11

Effective Period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$104.49  
Supplemental Benefit Rate per Hour: \$63.96

**Overtime**

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

**Overtime Holidays**

Time and one half the regular rate for work on a holiday.  
New Year's Day  
Martin Luther King Jr. Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

When so elected by the Employer, one or more shifts of at least five days duration may be scheduled as follows:  
Day Shift: 8:00 am to 4:30 pm, Swing Shift 4:30 pm to 12:30 am, Graveyard Shift: 12:30 am to 8:00 am.

For multiple shifts of temporary light and/or power, the temporary light and/or power employee shall be paid for 8 hours at the straight time rate.

### Electrician "M" (First 8 hours)

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2013 - 5/13/2014

Wage Rate per Hour: **\$26.50**

Supplemental Benefit Rate per Hour: **\$19.56**

First and Second Year "M" Wage Rate Per Hour - Hired on or before 5/10/07: **\$25.80**

First and Second Year "M" Supplemental Rate- Hired on or before 5/10/07: **\$19.21**

First and Second Year "M" Wage Rate Per Hour - Hired after 5/10/07: **\$22.00**

First and Second Year "M" Supplemental Rate- Hired after 5/10/07: **\$17.30**

Effective Period: 5/14/2014 - 6/30/2014

Wage Rate per Hour: **\$27.00**

Supplemental Benefit Rate per Hour: **\$20.32**

First and Second Year "M" Wage Rate Per Hour - Hired on or before 5/10/07: **\$26.30**

First and Second Year "M" Supplemental Rate- Hired on or before 5/10/07: **\$19.96**

First and Second Year "M" Wage Rate Per Hour - Hired after 5/10/07: **\$22.50**

First and Second Year "M" Supplemental Rate- Hired after 5/10/07: **\$18.06**

### Electrician "M" (Overtime After First 8 hours)

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2013 - 5/13/2014

Wage Rate per Hour: **\$39.75**

Supplemental Benefit Rate per Hour: **\$21.23**

First and Second Year "M" Wage Rate Per Hour - Hired on or before 5/10/07: **\$38.70**

First and Second Year "M" Supplemental Rate- Hired on or before 5/10/07: **\$20.83**

First and Second Year "M" Wage Rate Per Hour - Hired after 5/10/07: **\$33.00**

First and Second Year "M" Supplemental Rate- Hired after 5/10/07: **\$18.68**

Effective Period: 5/14/2014 - 6/30/2014

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

Supplemental Benefit Rate per Hour: **\$21.01**

First and Second Year "M" Wage Rate Per Hour - Hired on or before 5/10/07: **\$39.45**

First and Second Year "M" Supplemental Rate- Hired on or before 5/10/07: **\$21.61**

First and Second Year "M" Wage Rate Per Hour - Hired after 5/10/07: **\$33.75**

First and Second Year "M" Supplemental Rate- Hired after 5/10/07: **\$19.47**

### **Overtime**

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

Time and one half the regular rate for Saturday.

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

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)

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## ELECTRICIAN - ALARM TECHNICIAN

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

### Alarm Technician

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$30.40

Supplemental Benefit Rate per Hour: \$13.90

Supplemental Note: \$12.40 only after 8 hours worked in a day

### Overtime Description

Time and one half the regular rate for work on the following holidays: Columbus Day, Veterans Day, Day after Thanksgiving.

Double time the regular rate for work on the following holidays: New Year's day, Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day.

### Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### Paid Holidays

New Year's Day  
Martin Luther King Jr. Day

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

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

(Local #3)

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**ELECTRICIAN-STREET LIGHTING WORKER**

**Electrician - Electro Pole Electrician**

Effective Period: 7/1/2013 - 5/20/2014

Wage Rate per Hour: \$52.00

Supplemental Benefit Rate per Hour: \$47.90

Effective Period: 5/21/2014 - 6/30/2014

Wage Rate per Hour: \$53.00

Supplemental Benefit Rate per Hour: \$49.34

**Electrician - Electro Pole Foundation Installer**

Effective Period: 7/1/2013 - 5/20/2014

Wage Rate per Hour: \$39.42

Supplemental Benefit Rate per Hour: \$36.46

Effective Period: 5/21/2014 - 6/30/2014

Wage Rate per Hour: \$40.18

Supplemental Benefit Rate per Hour: \$37.73

**Electrician - Electro Pole Maintainer**

Effective Period: 7/1/2013 - 5/20/2014

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

Wage Rate per Hour: **\$33.75**  
Supplemental Benefit Rate per Hour: **\$32.83**

Effective Period: 5/21/2014 - 6/30/2014  
Wage Rate per Hour: **\$34.40**  
Supplemental Benefit Rate per Hour: **\$34.00**

### Overtime Description

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

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

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

### Overtime Holidays

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

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

### Paid Holidays

None

(Local #3)

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## ELEVATOR CONSTRUCTOR

### Elevator Constructor

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: **\$57.01**  
Supplemental Benefit Rate per Hour: **\$34.48**

### Overtime Description

For New Construction: work performed after 7 or 8 hour day, Saturday, Sunday or between 4:30pm and 7:00am shall be paid at double time rate.

Existing buildings: work performed after an 8 hour day, Saturday, Sunday or between 5:30pm and 7:00 am shall be paid time and one half.

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

**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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$45.14

Supplemental Benefit Rate per Hour: \$33.02

**Overtime Description**

For Service Work: Double time - all work performed on Sundays, Holidays, and between midnight and 7:00am.

**Overtime**

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

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

**Paid Holidays**

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



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

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)

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## ENGINEER

### Engineer - Heavy Construction Operating Engineer I

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$61.05**

Supplemental Benefit Rate per Hour: **\$31.93**

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: **\$97.68**

### Engineer - Heavy Construction Operating Engineer II

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$59.24**

Supplemental Benefit Rate per Hour: **\$31.93**

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: **\$94.78**

### Engineer - Heavy Construction Operating Engineer III

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

Minor Equipment such as Tractors, Post Hole Diggers, Ditch Witch (Walk Behind), Road Finishing Machines, Rollers five tons and under, Tugger Hoists, Dual Purpose Trucks, Fork Lifts, and Dempsey Dumpers, Fireperson.

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$56.22  
Supplemental Benefit Rate per Hour: \$31.93  
Supplemental Note: \$57.46 on overtime  
Shift Wage Rate: \$89.95

**Engineer - Heavy Construction Maintenance Engineer I**

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$58.97  
Supplemental Benefit Rate per Hour: \$31.93  
Supplemental Note: \$57.46 on overtime  
Shift Wage Rate: \$94.35

**Engineer - Heavy Construction Maintenance Engineer II**

On Base Mounted Tower Cranes

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$77.30  
Supplemental Benefit Rate per Hour: \$31.93  
Supplemental Note: \$57.46 on overtime  
Shift Wage Rate: \$123.68

**Engineer - Heavy Construction Maintenance Engineer III**

On Generators, Light Towers

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$39.10  
Supplemental Benefit Rate per Hour: \$31.93  
Supplemental Note: \$57.46 on overtime  
Shift Wage Rate: \$62.56

**Engineer - Heavy Construction Maintenance Engineer IV**

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

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$40.11

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$64.18

**Engineer - Heavy Construction Oilers I**

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$53.22

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$85.15

**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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$36.97

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$59.15

**Engineer - Steel Erection Maintenance Engineers**

Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$57.05

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$91.28

**Engineer - Steel Erection Oiler I**

On a Truck Crane

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$53.43

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$85.49

**Engineer - Steel Erection Oiler II**

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

On a Crawler Crane

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$40.84

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: \$65.34

### Overtime Description

On jobs of more than one shift, if the next shift employee fails to report for work through any cause over which the employer has no control, the employee on duty who works the next shift continues to work at the single time rate.

### Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

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

### Paid Holidays

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

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

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### Engineer - Building Work Maintenance Engineers I

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$54.04

Supplemental Benefit Rate per Hour: \$31.93

Supplemental Note: \$57.46 on overtime

### Engineer - Building Work Maintenance Engineers II

On Pumps, Generators, Mixers and Heaters

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$42.10  
Supplemental Benefit Rate per Hour: \$31.93  
Supplemental Note: \$57.46 on overtime

### Engineer - Building Work Oilers I

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$51.40  
Supplemental Benefit Rate per Hour: \$31.93  
Supplemental Note: \$57.46 on overtime

### Engineer - Building Work Oilers II

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$38.31  
Supplemental Benefit Rate per Hour: \$31.93  
Supplemental Note: \$57.46 on overtime

### **Overtime Description**

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

### **Overtime**

Double time the regular rate after an 8 hour day.  
Double time the regular time rate for Saturday.  
Double time the regular rate for Sunday.  
Double time the regular rate for work on the following holiday(s).

### **Paid Holidays**

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

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

### **Shift Rates**

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

Off Shift: double time the regular hourly rate.

(Local #15)

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## ENGINEER - CITY SURVEYOR AND CONSULTANT

### Party Chief

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$35.55**

Supplemental Benefit Rate per Hour: **\$17.65**

### Instrument Person

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$29.41**

Supplemental Benefit Rate per Hour: **\$17.65**

### Rodperson

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$25.54**

Supplemental Benefit Rate per Hour: **\$17.65**

### Overtime Description

Overtime Benefit Rate - **\$23.63** per hour (time & one half) **\$29.95** per hour (double time).

Time and one half the regular rate after an 8 hour day, Time and one half the regular rate for Saturday for the first eight hours worked, Double time the regular time rate for Saturday for work performed in excess of eight hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

### Paid Holidays

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

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

(Operating Engineer Local #15-D)

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

**Field Engineer - BC Party Chief**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$55.40

Supplemental Benefit Rate per Hour: \$30.62

Supplemental Note: Overtime Benefit Rate - \$42.73 per hour (time & one half) \$54.84 per hour (double time).

**Field Engineer - BC Instrument Person**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$43.10

Supplemental Benefit Rate per Hour: \$30.62

Supplemental Note: Overtime Benefit Rate - \$42.73 per hour (time & one half) \$54.84 per hour (double time).

**Field Engineer - BC Rodperson**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$27.96

Supplemental Benefit Rate per Hour: \$30.62

Supplemental Note: Overtime Benefit Rate - \$42.73 per hour (time & one half) \$54.84 per hour (double time).

**Overtime Description**

Time and one half the regular rate after a 7 hour work and time and one half the regular rate for Saturday for the first seven hours worked, Double time the regular time rate for Saturday for work performed in excess of seven hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

**Paid Holidays**

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

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

(Operating Engineer Local #15-D)

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

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

**Field Engineer - HC Party Chief**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$62.61

Supplemental Benefit Rate per Hour: \$30.62

Supplemental Note: Overtime benefit rate - \$42.73 per hour (time & one half), \$54.84 per hour (double time).

**Field Engineer - HC Instrument Person**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$46.00

Supplemental Benefit Rate per Hour: \$30.62

Supplemental Note: Overtime benefit rate - \$42.73 per hour (time & one half), \$54.84 per hour (double time).

**Field Engineer - HC Rodperson**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$38.61

Supplemental Benefit Rate per Hour: \$30.62

Supplemental Note: Overtime benefit rate - \$42.73 per hour (time & one half), \$54.84 per hour (double time).

**Overtime Description**

Time and one half the regular rate after an 8 hour day, Time and one half the regular rate for Saturday for the first eight hours worked, Double time the regular time rate for Saturday for work performed in excess of eight hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

**Paid Holidays**

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

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

(Operating Engineer Local #15-D)

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**ENGINEER - FIELD (STEEL ERECTION)**

**Field Engineer - Steel Erection Party Chief**

Effective Period: 7/1/2013 - 6/30/2014



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

Wage Rate per Hour: \$58.50

Supplemental Benefit Rate per Hour: \$30.62

Supplemental Note: Overtime benefit rate - \$42.73 per hour (time & one half), \$54.84 per hour (double time).

**Field Engineer - Steel Erection Instrument Person**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$45.53

Supplemental Benefit Rate per Hour: \$30.62

Supplemental Note: Overtime benefit rate - \$42.73 per hour (time & one half), \$54.84 per hour (double time).

**Field Engineer - Steel Erection Rodperson**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$30.43

Supplemental Benefit Rate per Hour: \$30.62

Supplemental Note: Overtime benefit rate - \$42.73 per hour (time & one half), \$54.84 per hour (double time).

**Overtime Description**

Time and one half the regular rate for Saturday for the first eight hours worked.

Double time the regular rate for Saturday for work performed in excess of eight hours.

**Overtime**

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

Double time the regular rate for Sunday.

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

**Paid Holidays**

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

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

(Operating Engineer Local #15-D)

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**ENGINEER - OPERATING**

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

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

Effective Period: 7/1/2013 - 6/30/2014

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

Wage Rate per Hour: \$67.70  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$108.32

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

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$70.10  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: 51.75 overtime hours  
Shift Wage Rate: \$112.16

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

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$72.34  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$115.74

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

Gradealls, Keystones, Cranes on land or water (with digging buckets), Bridge Cranes, Vermeer Cutter and machines of a similar nature, Trenching Machines.

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$70.63  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$113.01

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

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$69.23  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$110.77

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

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

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$65.76  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$105.22

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

Barrier Movers , Barrier Transport and Machines of a Similar Nature.

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$53.08  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$84.93

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

Utility Compressors

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$41.18  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$51.93

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

Horizontal Boring Rig

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$62.53  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$100.05

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

Elevators (manually operated as personnel hoist).

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$57.46  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$91.94

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

Compressors (Portable 3 or more in battery), Driving of Truck Mounted Compressors, Well-point Pumps, Tugger Machines Well Point Pumps, Churn Drill.

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$44.63  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$71.41

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

All Drills and Machines of a similar nature.

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$66.45  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$106.32

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

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$64.34  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$102.94

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

Concrete Mixer

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$61.53  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$98.45

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

Compressors (Portable Single or two in Battery, not over 100 feet apart), Pumps (River Cofferdam) and Welding Machines, Push Button Machines, All Engines Irrespective of Power (Power-Pac) used to drive auxiliary equipment, Air, Hydraulic, etc.

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$41.44  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$66.30

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

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

Concrete Breaking Machines, Hoists (Single Drum), Load Masters, Locomotives (over ten tons) and Dinkies over ten tons, Hydraulic Crane-Second Engineer.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$58.74

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.85 overtime hours

Shift Wage Rate: \$93.98

### Operating Engineer - Road & Heavy Construction XVII

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

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$59.21

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$94.74

### Operating Engineer - Road & Heavy Construction XVIII

Tower Crane

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$85.00

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$136.00

### Operating Engineer - Paving I

Asphalt Spreaders, Autogrades (C.M.I.), Roto/Mil

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$65.76

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$105.22

### Operating Engineer - Paving II

Asphalt Roller

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$64.04

Supplemental Benefit Rate per Hour: \$28.60

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: \$102.46

### Operating Engineer - Paving III

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

Asphalt Plants

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$54.17  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$86.67

Operating Engineer - Concrete I

Cranes

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$70.32  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours

Operating Engineer - Concrete II

Compressors

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$41.76  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours

Operating Engineer - Concrete III

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$56.16  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours

Operating Engineer - Steel Erection I

Three Drum Derricks

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$73.37  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$117.39

Operating Engineer - Steel Erection II

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$70.50

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

Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$112.80

**Operating Engineer - Steel Erection III**

Compressors, Welding Machines.

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$41.84  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$66.94

**Operating Engineer - Steel Erection IV**

Compressors - Not Combined with Welding Machine.

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$39.85  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: \$63.76

**Operating Engineer - Building Work I**

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$57.82  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours

**Operating Engineer - Building Work II**

Compressors, Welding Machines (Cutting Concrete-Tank Work), Paint Spraying, Sandblasting, Pumps (with the exclusion of Concrete Pumps), All Engines irrespective of Power (Power-Pac) used to drive Auxiliary Equipment, Air, Hydraulic, Jacking System, etc.

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$43.28  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours

**Operating Engineer - Building Work III**

Double Drum

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$65.83

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours

**Operating Engineer - Building Work IV**

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$69.74  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours

**Operating Engineer - Building Work V**

Dismantling and Erection of Cranes, Relief Engineer.

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$64.26  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours

**Operating Engineer - Building Work VI**

4 Pole Hoist, Single Drum Hoists.

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$63.58  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours

**Operating Engineer - Building Work VII**

Rack & Pinion and House Cars

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$50.53  
Supplemental Benefit Rate per Hour: \$28.60  
Supplemental Note: \$51.75 overtime hours  
For New House Car projects started after 7/1/11 only: Wage Rate per Hour \$40.31

**Overtime Description**

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

For House Cars and Rack & Pinion only: Overtime paid at time and one-half for all hours in excess of eight hours in a day, Saturday, Sunday and Holidays worked.

**Overtime**

Double time the regular rate after an 8 hour day.  
Double time the regular time rate for Saturday.  
Double time the regular rate for Sunday.  
Double time the regular rate for work on the following holiday(s).



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

**Paid Holidays**

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

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

**Shift Rates**

For Steel Erection Only: Shifts may be worked at the single time rate at other than the regular working hours (8:00 A.M. to 4:30 P.M.) on the following work ONLY: Heavy construction jobs on work below the street level, over railroad tracks and on building jobs.

(Operating Engineer Local #14)

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**FLOOR COVERER**

(Interior vinyl composition tile, sheath vinyl linoleum and wood parquet tile including site preparation and synthetic turf not including site preparation)

**Floor Coverer**

Effective Period: 7/1/2013 - 6/30/2014

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.

**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

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

Christmas Day

### **Paid Holidays**

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

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

### **Shift Rates**

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

(Carpenters District Council)

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## **GLAZIER**

**(New Construction, Remodeling, and Alteration)**

### **Glazier**

Effective Period: 7/1/2013 - 10/31/2013

Wage Rate per Hour: **\$42.00**

Supplemental Benefit Rate per Hour: **\$33.24**

Supplemental Note: Supplemental Benefit Overtime Rate: \$41.24

Effective Period: 11/1/2013 - 6/30/2014

Wage Rate per Hour: **\$42.00**

Supplemental Benefit Rate per Hour: **\$34.09**

Supplemental Note: Supplemental Benefit Overtime Rate: \$42.59

### **Overtime Description**

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

### **Overtime**

Double time the regular rate after a 7 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

## **Paid Holidays**

None

## **Shift Rates**

Shifts shall be any 7 hours beyond 4:00 P.M. for which the glazier shall receive 8 hours pay for 7 hours worked.

(Local #1281)

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## **GLAZIER - REPAIR & MAINTENANCE**

(For the Installation of Glass - All repair and maintenance work on a particular building, whenever performed, where the total cumulative contract value is under \$105,000. Except where enumerated (i.e. plate glass windows) does not apply to non-residential buildings.)

### **Craft Jurisdiction for repair, maintenance and fabrication**

Plate glass replacement, Residential glass replacement, Residential mirrors and shower doors, Storm windows and storm doors, Residential replacement windows, Herculite door repairs, Door closer repairs, Retrofit apartment house (non commercial buildings), Glass tinting.

Effective Period: 7/1/2013 - 4/30/2014

Wage Rate per Hour: \$23.50

Supplemental Benefit Rate per Hour: \$18.54

Effective Period: 5/1/2014 - 6/30/2014

Wage Rate per Hour: \$23.60

Supplemental Benefit Rate per Hour: \$19.04

## **Overtime**

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

Double time the regular rate for Sunday.

Time and one half the regular hourly rate after 40 hours in any work week.

## **Paid Holidays**

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

(Local #1281)

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## HEAT AND FROST INSULATOR

### Heat & Frost Insulator

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$56.48

Supplemental Benefit Rate per Hour: \$33.31

### Overtime Description

Double time shall be paid for supplemental benefits during overtime work.  
8th hour paid at time and one half.

### Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

### Overtime Holidays

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

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

Labor Day

### Paid Holidays

None

### Shift Rates

The first shift shall work seven hours at the regular straight time rate. The second and third shift shall work seven hours the regular straight time hourly rate plus a fourteen percent wage and benefit premium. Off hour work in occupied or retail buildings may be worked on weekdays with an increment of \$1.00 per hour and eight hours pay for seven (7) hours worked. Double time will apply for over seven (7) hours worked on weekdays, weekends or holidays.

(Local #12)

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## HOUSE WRECKER (TOTAL DEMOLITION)

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

**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: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$34.01  
Supplemental Benefit Rate per Hour: \$25.14

**House Wrecker - Tier B**

On all work sites the first, second, eleventh and every third House Wrecker thereafter shall be Tier A House Wreckers (i.e. 1st, 2nd, 11th, 14th etc). The 10th and 20th House Wrecker shall be apprentices. Other House Wreckers shall be Tier B House Wreckers.

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$23.75  
Supplemental Benefit Rate per Hour: \$18.62

**Overtime**

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

**Overtime Holidays**

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

**Paid Holidays**

None

(Mason Tenders District Council)

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**IRON WORKER - ORNAMENTAL**

**Iron Worker - Ornamental**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$42.30  
Supplemental Benefit Rate per Hour: \$43.54

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

Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect.

### Overtime Description

Time and one half the regular rate after a 7 hour day for a maximum of two hours on any regular work day (the 8th and 9th hour) and double time shall be paid for all work on a regular work day thereafter, time and one half the regular rate for Saturday for the first seven hours of work and double time shall be paid for all work on a Saturday thereafter.

### Overtime

Double time the regular rate for Sunday.

### Overtime Holidays

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

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

### Paid Holidays

None

### Shift Rates

For off shift work - 8 hours pay for 7 hours of work. When two or three shifts are employed on a job, Monday through Friday, the workday for each shift shall be seven hours and paid for ten and one-half hours at the single time rate. When two or three shifts are worked on Saturday, Sunday or holidays, each shift shall be seven hours and paid fifteen and three-quarters hours.

(Local #580)

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## IRON WORKER - STRUCTURAL

### Iron Worker - Structural

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$46.75

Supplemental Benefit Rate per Hour: \$62.48

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.

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

### Overtime

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

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).  
New Year's Day  
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)

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## LABORER

(Foundation, Concrete, Excavating, Street Pipe Layer and Common)

### Laborer

Excavation and foundation work for buildings, heavy construction, engineering work, and hazardous waste removal in connection with the above work. Landscaping tasks in connection with heavy construction work, engineering work and building projects. Projects include, but are not limited to pollution plants, sewers, parks, subways, bridges, highways, etc.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$39.25

Supplemental Benefit Rate per Hour: \$33.25

### Overtime

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

### Overtime Holidays

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

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)

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## **LANDSCAPING**

(Landscaping tasks, as well as tree pruning, tree removing, spraying and maintenance in connection with the planting of street trees and the planting of trees in city parks but not when such activities are performed as part of, or in connection with, other construction or reconstruction projects.)

### **Landscaper (Above 6 years experience)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$24.25

Supplemental Benefit Rate per Hour: \$12.30

### **Landscaper (3 - 6 years experience)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$23.25

Supplemental Benefit Rate per Hour: \$12.30

### **Landscaper (up to 3 years experience)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$20.75

Supplemental Benefit Rate per Hour: \$12.30

### **Groundperson**



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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$20.75  
Supplemental Benefit Rate per Hour: \$12.30

**Tree Remover / Pruner**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$29.25  
Supplemental Benefit Rate per Hour: \$12.30

**Landscaper Sprayer (Pesticide Applicator)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$19.25  
Supplemental Benefit Rate per Hour: \$12.30

**Watering - Plant Maintainer**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$14.25  
Supplemental Benefit Rate per Hour: \$12.30

**Overtime Description**

For all overtime work performed, supplemental benefits shall include an additional seventy-five (\$0.75) cents per hour.

**Overtime**

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.  
Time and one half the regular rate for work on a holiday plus the day's pay.

**Paid Holidays**

New Year's Day  
Memorial Day  
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)

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**MARBLE MECHANIC**

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

**Marble Setter**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$49.19

Supplemental Benefit Rate per Hour: \$32.24

**Marble Finisher**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$39.05

Supplemental Benefit Rate per Hour: \$31.43

**Marble Polisher**

Effective Period: 7/1/2013 - 6/30/2014

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

(Local #7)

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**MASON TENDER**

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

**Mason Tender**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$35.00

Supplemental Benefit Rate per Hour: \$25.74

**Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

**Overtime Holidays**

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

The Employer may work two (2) shifts with the first shift at the straight time wage rate and the second shift receiving eight (8) hours paid for seven (7) hours work at the straight time wage rate.

(Local #79)

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**MASON TENDER (INTERIOR DEMOLITION WORKER)**

(The erection, building, moving, servicing and dismantling of enclosures, scaffolding, barricades, protection and site safety structures etc., on Interior Demolition jobs.)

**Mason Tender Tier A**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$34.07

Supplemental Benefit Rate per Hour: \$19.77

**Mason Tender Tier B**

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

On Interior Demolition job sites 33 1/3 % of the employees shall be classified as Tier A Interior Demolition Workers and 66 2/3 % shall be classified as Tier B Interior Demolition Workers; provided that the employer may employ more than 33 1/3 % Tier A Interior Demolition Workers on the job site. Where the number of employees on a job site is not divisible by 3, the first additional employee (above the number of employees divisible by three) shall be a Tier B Interior Demolition Worker, and the second additional employee shall be a Tier A Interior Demolition Worker.

Effective Period: 7/1/2013 - 6/30/2014

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

(Local #79)

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## METALLIC LATHER

### Metallic Lather

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$41.43

Supplemental Benefit Rate per Hour: \$40.15

Supplemental Note: Supplemental benefits for overtime are paid at the appropriate overtime rate.

### Overtime Description

Overtime would be time and one half the regular rate after a seven (7) or eight (8) hours workday, which would be set at the start of the job.

### Overtime

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### Overtime Holidays

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

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

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 (½) 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)

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## **MILLWRIGHT**

### **Millwright**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$47.69

Supplemental Benefit Rate per Hour: \$48.87

### **Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

### **Overtime Holidays**

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

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

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

### **Paid Holidays**

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

### **Shift Rates**

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

(Local #740)

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## **MOSAIC MECHANIC**

### **Mosaic Mechanic - Mosaic & Terrazzo Mechanic**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$44.39**

Supplemental Benefit Rate per Hour: **\$35.11**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.08 per hour.

### **Mosaic Mechanic - Mosaic & Terrazzo Finisher**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Benefit Rate per Hour: **\$35.11**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.08 per hour.

### **Mosaic Mechanic - Machine Operator Grinder**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Benefit Rate per Hour: **\$35.11**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$46.08 per hour.

### **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

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

Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

(Local #7)

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**PAINTER**

**Painter - Brush & Roller**

Effective Period: 7/1/2013 - 4/30/2014  
Wage Rate per Hour: \$37.50  
Supplemental Benefit Rate per Hour: \$25.62  
Supplemental Note: \$30.25 on overtime

Effective Period: 5/1/2014 - 6/30/2014  
Wage Rate per Hour: \$39.50  
Supplemental Benefit Rate per Hour: \$26.12  
Supplemental Note: \$30.75 on overtime

**Spray & Scaffold / Decorative / Sandblast**

Effective Period: 7/1/2013 - 4/30/2014  
Wage Rate per Hour: \$40.50  
Supplemental Benefit Rate per Hour: \$25.62  
Supplemental Note: \$30.25 on overtime

Effective Period: 5/1/2014 - 6/30/2014  
Wage Rate per Hour: \$42.50  
Supplemental Benefit Rate per Hour: \$26.12  
Supplemental Note: \$30.75 on overtime

**Overtime**

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

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).  
New Year's Day  
President's Day  
Memorial Day  
Independence Day

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

Labor Day  
Columbus Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

None

(District Council of Painters #9)

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**PAINTER - SIGN**

**Designer**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$36.15

Supplemental Benefit Rate per Hour: \$9.66

**Journey person**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$33.62

Supplemental Benefit Rate per Hour: \$9.66

**Overtime**

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

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

**Paid Holidays**

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Shift Rates**

All work performed outside the regular 8 hour work day (either 7:00 A.M to 3:30 P.M or 8:00 A.M. to 4:30 P.M) shall be paid at time and one half the regular hourly rate.

(Local #8A-28A)



## PAINTER - STRIPER

### Striper (paint)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$33.50

Supplemental Benefit Rate per Hour: \$11.62

Supplemental Note: Overtime Supplemental Benefit rate - \$7.42; New Hire Rate (0-3 months) - \$0.00

### Lineperson (thermoplastic)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$37.50

Supplemental Benefit Rate per Hour: \$11.62

Supplemental Note: Overtime Supplemental Benefit rate - \$7.42; New Hire Rate (0-3 months) - \$0.00

### Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

### Paid Holidays

New Year's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### Shift Rates

Employees hired before April 1, 2003: 15% night shift premium differential for work commenced at 9:00 PM or later.

### Vacation

Employees with one to two years service shall accrue vacation based on hours worked: 250 hours worked - 1 day vacation; 500 hours worked - 2 days vacation; 750 hours worked - 3 days vacation; 900 hours worked - 4 days vacation; 1,000 hours worked - 5 days vacation. Employees with two to five years service receive two weeks vacation. Employees with five to twenty years service receive three weeks vacation. Employees with twenty to twenty-five years service receive four weeks vacation. Employees with 25 or more years service receive five weeks vacation. Vacation must be taken during winter months. 2 Personal Days except employees hired after 4/1/12 who do not have 2 years of service.

(Local #917)

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## **PAINTER - STRUCTURAL STEEL**

### **Painters on Structural Steel**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$47.00

Supplemental Benefit Rate per Hour: \$32.08

### **Painter - Power Tool**

Effective Period: 7/1/2013 - 6/30/2014

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

### **Paid Holidays**

None

### **Shift Rates**

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

(Local #806)

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## **PAPERHANGER**

### **Paperhanger**

Effective Period: 7/1/2013 - 4/30/2014

Wage Rate per Hour: \$39.00

Supplemental Benefit Rate per Hour: \$29.23

Supplemental Note: Supplemental benefits are to be paid at the appropriate straight time and overtime rate.

Effective Period: 5/1/2014 - 6/30/2014

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

Wage Rate per Hour: \$41.08

Supplemental Benefit Rate per Hour: \$29.23

Supplemental Note: Supplemental benefits are to be paid at the appropriate straight time and overtime rate.

### Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

### Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### Paid Holidays

None

### Shift Rates

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

(District Council of Painters #9)

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## PAVER AND ROADBUILDER

### Paver & Roadbuilder - Formsetter

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$43.54

Supplemental Benefit Rate per Hour: \$33.55

### Paver & Roadbuilder - Laborer

Paving and road construction work, regardless of material used, including but not limited to preparation of job sites, removal of old surfaces, asphalt and/or concrete, by whatever method, including but not limited to milling; laying of concrete; laying of asphalt for temporary, patchwork, and utility paving (but not production paving); site preparation and incidental work before the installation of rubberized materials and similar surfaces; installation and repair of temporary construction fencing; slurry seal coating, maintenance of safety surfaces; play equipment installation, and other related work.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$39.67

Supplemental Benefit Rate per Hour: \$33.55

### Production Paver & Roadbuilder - Screed Person

(Production paving is asphalt paving when using a paving machine or on a project where a paving machine is traditionally used)

Adjustment of paving machinery on production paving jobs.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$45.12**

Supplemental Benefit Rate per Hour: **\$33.55**

### Production Paver & Roadbuilder - Raker

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$44.61**

Supplemental Benefit Rate per Hour: **\$33.55**

### Production Paver & Roadbuilder - Shoveler

General laborer (except removal of surfaces - see Paver and Roadbuilder-Laborer) including but not limited to tamper, AC paint and liquid tar work.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$41.32**

Supplemental Benefit Rate per Hour: **\$33.55**

### **Overtime Description**

Veteran's Day is a Paid Holiday for employees working on production paving.

If an employee works New Year's Day or Christmas Day, they receive the single time rate plus 25%.

Employees who work on a holiday listed below receive the straight time rate plus one day's pay for the holiday.

### **Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### **Paid Holidays**

Memorial Day

Independence Day

Labor Day

Presidential Election Day

Thanksgiving Day

### **Shift Rates**

When two shifts are employed, the work period for each shift shall be a continuous eight (8) hours. When three shifts are employed, each shift will work seven and one half (7 ½) hours but will be paid for eight (8) hours since only one half (1/2) hour is allowed for meal time.

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

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

Night Work - On night work, the first eight (8) hours of work will be paid for at the single time rate, except that production paving work shall be paid at 20% over the single time rate for the screed person, rakers and shovelers directly involved only. All other workers will be exempt. Hours worked over eight (8) hours during said shift shall be paid for at the time and one-half rate.

(Local #1010)

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## PLASTERER

### Plasterer

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$41.13

Supplemental Benefit Rate per Hour: \$24.95

### Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

### Overtime Holidays

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

When it is not possible to conduct alteration work during regular work hours, in a building occupied by tenants, said work shall proceed on a shift basis: however work over seven (7) hours in any twenty four (24) hour period, the time after seven (7) hours shall be considered overtime.

The second shift shall start at a time between 3:30 p.m. and 7:00 p.m. and shall consist of seven (7) working hours and shall receive eight (8) hours of wages and benefits at the straight time rate. The workers on the second shift shall be allowed one-half (½) hour to eat with this time being included in the seven (7) hours of work.

(Local #530)

## PLASTERER - TENDER

### Plasterer - Tender

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$35.00**

Supplemental Benefit Rate per Hour: **\$25.74**

### Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

### Overtime Holidays

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

New Year's Day

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Presidential Election Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

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

(Mason Tenders District Council)

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## PLUMBER

### Plumber

Effective Period: 7/1/2013 - 6/30/2014

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

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

Double time the regular rate after a 7 hour day - unless for new construction site work where the plumbing contract price is \$1.5 million or less, the hours of labor can be 8 hours per day at the employers option. On Alteration jobs when other mechanical trades at the site are working an eighth hour at straight time, then the plumber shall also work an eighth hour at straight time.

### Overtime

Double time the regular time rate for Saturday.  
Double time the regular rate for Sunday.

### Overtime Holidays

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

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

### Shift Rates

Shift work, when directly specified in public agency or authority documents where plumbing contract is \$8 million or less, will be permitted. 30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday. 50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

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**PLUMBER (MECHANICAL EQUIPMENT AND SERVICE)**  
(Mechanical Equipment and Service work shall include any repair and/or replacement of the present plumbing system.)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$33.46

Supplemental Benefit Rate per Hour: \$16.93

### 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

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

Memorial Day  
Independence Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

(Plumbers Local # 1)

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**PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME  
CONSTRUCTION)**

Effective Period: 7/1/2013 - 6/30/2014

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

**Shift Rates**

30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday.

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

(Plumbers Local #1)

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**PLUMBER: PUMP & TANK  
(Installation and Maintenance)**

**Plumber - Pump & Tank**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$53.01

Supplemental Benefit Rate per Hour: \$31.86

**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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$45.41

Supplemental Benefit Rate per Hour: \$23.29

**Overtime**

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

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Time and one half the regular rate for Sunday.  
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

### Overtime Holidays

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

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

### Paid Holidays

None

### Shift Rates

All work outside the regular work day (an eight hour workday between the hours of 6:00 A.M. and 4:30 P.M.) is to be paid at time and one half the regular rate.

(Bricklayer District Council)

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## ROOFER

### Roofer

Effective Period: 7/1/2013 - 6/30/2014 .

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

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

**Paid Holidays**

None

**Shift Rates**

Second shift - Regular hourly rate plus a 10% differential. Third shift - Regular hourly rate plus a 15% differential.

(Local #8)

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**SANDBLASTER - STEAMBLASTER  
(Exterior Building Renovation)**

**Sandblaster / Steamblaster**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$45.41

Supplemental Benefit Rate per Hour: \$23.29

**Overtime**

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

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

**Overtime Holidays**

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

All work outside the regular work day (an eight hour workday between the hours of 6:00 A.M. and 4:30 P.M.) is to be paid at time and one half the regular rate.

(Bricklayer District Council)

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## **SHEET METAL WORKER**

### **Sheet Metal Worker**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$45.96

Supplemental Benefit Rate per Hour: \$43.19

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

### **Sheet Metal Worker - Duct Cleaner**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$12.90

Supplemental Benefit Rate per Hour: \$8.07

### **Sheet Metal Worker - Fan Maintenance**

(The temporary operation of fans or blowers in new or existing buildings for heating and/or ventilation, and/or air conditioning prior to the completion of the project.)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$36.77

Supplemental Benefit Rate per Hour: \$43.19

### **Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### **Paid Holidays**

None

### **Shift Rates**

Work that can only be performed outside regular working hours (seven hours of work between 7:30 A.M. and 3:30 P.M.) - First shift (work between 3:30 P.M. and 11:30 P.M.) - 10% differential above the established hourly rate.

Second shift (work between 11:30 P.M. and 7:30 A.M.) - 15% differential above the established hourly rate.

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

For Fan Maintenance: On all full shifts of fan maintenance work the straight time hourly rate of pay will be paid for each shift, including nights, Saturdays, Sundays, and holidays. No journey person engaged in fan maintenance shall work in excess of forty (40) hours in any work week.

(Local #28)

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**SHEET METAL WORKER - SPECIALTY  
(Decking & Siding)**

**Sheet Metal Specialty Worker**

The first worker to perform this work must be paid at the rate of the Sheet Metal Worker. The second and third workers shall be paid the Specialty Worker Rate. The ratio of One Sheet Metal Worker, then Two Specialty Workers shall be utilized thereafter.

Effective Period: 7/1/2013 - 7/31/2013

Wage Rate per Hour: \$41.28

Supplemental Benefit Rate per Hour: \$22.88

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

Effective Period: 8/1/2013 - 6/30/2014

Wage Rate per Hour: \$40.78

Supplemental Benefit Rate per Hour: \$23.38

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

**Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

(Local #28)

**SIGN ERECTOR**  
(Sheet Metal, Plastic, Electric, and Neon)

**Sign Erector**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$42.80

Supplemental Benefit Rate per Hour: \$42.17

**Overtime**

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

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

**Paid Holidays**

New Year's Day

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Shift Rates**

Time and one half the regular hourly rate is to be paid for all hours worked outside the regular workday either (7:00 A.M. through 2:30 P.M.) or (8:00 A.M. through 3:30 P.M.)

(Local #137)

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**STEAMFITTER**

**Steamfitter I**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$52.50

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.

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  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

### Paid Holidays

None

### Shift Rates

Work performed between 3:30 P.M. and 7:00 A.M. and on Saturdays, Sundays and Holidays shall be at double time the regular hourly rate and paid at the overtime supplemental benefit rate above.

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## Steamfitter II

For heating, ventilation, air conditioning and mechanical public works contracts with a dollar value not to exceed \$15,000,000 and for fire protection/sprinkler public works contracts not to exceed \$1,500,000.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: **\$52.50**

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**

None

## **Shift Rates**

May be performed outside of the regular workday except Saturday, Sunday and Holidays. A shift shall consist of eight working hours. All work performed in excess of eight hours shall be paid at double time. No shift shall commence after 7:00 P.M. on Friday or 7:00 P.M. the day before holidays. All work performed after 12:01 A.M. Saturday or 12:01 A.M. the day before a Holiday will be paid at double time. When shift work is performed the wage rate for regular time worked is a thirty percent premium together with fringe benefits.

On Transit Authority projects, where work is performed in the vicinity of tracks all shift work on weekends and holidays may be performed at the regular shift rates.

Local #638

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

### **Refrigeration and Air Conditioner Mechanic**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$38.05

Supplemental Benefit Rate per Hour: \$12.26

### **Refrigeration and Air Conditioner Service Person V**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$31.26

Supplemental Benefit Rate per Hour: \$11.13

### **Refrigeration and Air Conditioner Service Person IV**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$25.90

Supplemental Benefit Rate per Hour: \$10.16

### **Refrigeration and Air Conditioner Service Person III**

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$22.23

Supplemental Benefit Rate per Hour: \$9.44



## Refrigeration and Air Conditioner Service Person II

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$18.44

Supplemental Benefit Rate per Hour: \$8.78

## Refrigeration and Air Conditioner Service Person I

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$13.48

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**

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: 7/1/2013 - 6/30/2014

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

Thanksgiving Day

Christmas Day

### Paid Holidays

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

### Shift Rates

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

(Bricklayers District Council)

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## TAPER

### Drywall Taper

Effective Period: 7/1/2013 - 12/31/2013

Wage Rate per Hour: \$44.32

Supplemental Benefit Rate per Hour: \$21.66

Effective Period: 1/1/2014 - 6/24/2014

Wage Rate per Hour: \$44.82

Supplemental Benefit Rate per Hour: \$21.66

Effective Period: 6/25/2014 - 6/30/2014

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

Wage Rate per Hour: \$45.32

Supplemental Benefit Rate per Hour: \$21.66

### Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

### Overtime Holidays

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Christmas Day

### Paid Holidays

Any worker who reports to work on Christmas Eve or New Year's Eve pursuant to his employer's instruction shall be entitled to three (3) hours afternoon pay without working.

### Shift Rates

Time and one half the regular rate outside the regular work hours (8:00 A.M. through 3:30 P.M.)

(Local #1974)

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## TELECOMMUNICATION WORKER (Voice Installation Only)

### Telecommunication Worker

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$35.94

Supplemental Benefit Rate per Hour: \$13.19

Supplemental Note: The above rate applies for Manhattan, Bronx, Brooklyn, Queens. \$12.64 for Staten Island only.

### Overtime

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

### Overtime Holidays

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

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

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

**Paid Holidays**

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

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

**Shift Rates**

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

**Vacation**

- After 6 months.....one week.
- After 12 months but less than 7 years.....two weeks.
- After 7 or more but less than 15 years.....three weeks.
- After 15 years or more but less than 25 years.....four weeks.

(C.W.A.)

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**TILE FINISHER**

**Tile Finisher**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$38.49  
Supplemental Benefit Rate per Hour: \$27.40

**Overtime**

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

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

Double time the regular rate for Sunday.

### Overtime Holidays

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

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

### Paid Holidays

None

### Shift Rates

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

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## TILE LAYER - SETTER

### Tile Layer - Setter

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$48.35

Supplemental Benefit Rate per Hour: \$31.44

### 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

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

Christmas Day

### Shift Rates

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

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## TIMBERPERSON

### Timberperson

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$42.63

Supplemental Benefit Rate per Hour: \$44.54

### Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

Time and one half the regular hourly rate after 40 hours in any work week.

### Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

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

(Local #1536)

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## TUNNEL WORKER

### Blasters, Mucking Machine Operators (Compressed Air Rates)

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$54.20  
Supplemental Benefit Rate per Hour: \$48.20

### Tunnel Workers (Compressed Air Rates)

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$52.31  
Supplemental Benefit Rate per Hour: \$46.59

### Top Nipper (Compressed Air Rates)

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$51.35  
Supplemental Benefit Rate per Hour: \$45.78

### Outside Lock Tender, Outside Gauge Tender, Muck Lock Tender (Compressed Air Rates)

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$50.42  
Supplemental Benefit Rate per Hour: \$44.91

### Bottom Bell & Top Bell Signal Person: Shaft Person (Compressed Air Rates)

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$50.42  
Supplemental Benefit Rate per Hour: \$44.92

### Changehouse Attendant: Powder Watchperson (Compressed Air Rates)

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$43.94  
Supplemental Benefit Rate per Hour: \$42.55

### Blasters (Free Air Rates)

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$51.72  
Supplemental Benefit Rate per Hour: \$46.03

### Tunnel Workers (Free Air Rates)

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$49.48

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

Supplemental Benefit Rate per Hour: \$44.06

All Others (Free Air Rates)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$45.73

Supplemental Benefit Rate per Hour: \$40.75

Microtunneling (Free Air Rates)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$39.58

Supplemental Benefit Rate per Hour: \$35.25

**Overtime Description**

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

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

**Overtime**

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

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

**Paid Holidays**

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

Veteran's Day

Thanksgiving Day

Christmas Day

(Local #147)

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**WELDER**

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



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**OFFICE OF THE COMPTROLLER**

**CITY OF NEW YORK**

**220 APPRENTICESHIP PREVAILING WAGE SCHEDULE**

**APPENDIX**

Pursuant to Labor Law §220 (3-e), only apprentices who are individually registered in a bona fide program to which the employer contractor is a participant and registered with the New York State Department of Labor, may be employed on a public work project.

Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the journey person wage rate for the classification of work he actually performed.

Apprentice ratios are established to ensure the proper safety, training and supervision of apprentices. A ratio establishes the number of journey workers required for each apprentice in a program and on a job site. Ratios are interpreted as follows: in the case of a 1:1, 1:4 ratio, there must be one journey worker for the first apprentice, and four additional journey workers for each subsequent apprentice.

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## **ASBESTOS HANDLER**

**(Ratio of Apprentice Journeyman: 1 to 1, 1 to 3)**

### **Asbestos Handler (First 1000 Hours)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 78% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$15.05

### **Asbestos Handler (Second 1000 Hours)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$15.05

### **Asbestos Handler (Third 1000 Hours)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 83% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$15.05

### **Asbestos Handler (Fourth 1000 Hours)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 89% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$15.05

(Local #78)

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## **BOILERMAKER**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)**

### **Boilermaker (First Year)**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$28.75

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$29.74

### **Boilermaker (Second Year: 1st Six Months)**

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

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$30.33

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$31.40

**Boilermaker (Second Year: 2nd Six Months)**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$31.91

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$33.05

**Boilermaker (Third Year: 1st Six Months)**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$33.49

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$34.69

**Boilermaker (Third Year: 2nd Six Months)**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate Per Hour: 85% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$35.05

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate Per Hour: 85% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$36.34

**Boilermaker (Fourth Year: 1st Six Months)**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate Per Hour: 90% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$36.63

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate Per Hour: 90% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$38.00

**Boilermaker (Fourth Year: 2nd Six Months)**

Effective Period: 7/1/2013 - 12/31/2013

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

Wage Rate Per Hour: 95% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$38.19

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate Per Hour: 95% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$39.65

(Local #5)

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

**Bricklayer (First 750 Hours)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$16.60

**Bricklayer (Second 750 Hours)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$16.60

**Bricklayer (Third 750 Hours)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$16.60

**Bricklayer (Fourth 750 Hours)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$16.60

**Bricklayer (Fifth 750 Hours)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$16.60

**Bricklayer (Sixth 750 Hours)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 95% of Journeyperson's rate

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

Supplemental Benefit Rate Per Hour: \$16.60

(Bricklayer District Council)

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**CARPENTER**

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

**Carpenter (First Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$30.29

**Carpenter (Second Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$30.29

**Carpenter (Third Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$30.29

**Carpenter (Fourth Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$30.29

(Carpenters District Council)

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**CEMENT MASON**

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

**Cement Mason (First Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage and Supplemental Rate Per Hour: 50% of Journeyman's Rate

**Cement Mason (Second Year)**

Effective Period: 7/1/2013 - 6/30/2014

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

**Cement Mason (Third Year)**

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 70% of Journeyperson's Rate

(Local #780)

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**CEMENT AND CONCRETE WORKER**

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

**Cement & Concrete Worker (0 - 500 hours)**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Benefit Rate Per Hour: \$18.04

**Cement & Concrete Worker (501 - 1000 hours)**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Benefit Rate Per Hour: \$18.87

**Cement & Concrete Worker (1001 - 2000 hours)**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Benefit Rate Per Hour: \$24.25

**Cement & Concrete Worker (2001 - 4000 hours)**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Benefit Rate Per Hour: \$25.07

(Cement Concrete Workers District Council)

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**DERRICKPERSON & RIGGER (STONE)**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 6)

**Derrickperson & Rigger (stone) - First Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: 50% of Journeyman's rate

**Derrickperson & Rigger (stone) - Second Year: 1st Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
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: 7/1/2013 - 6/30/2014  
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: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 90% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: 75% of Journeyman's rate

(Local #197)

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**DOCKBUILDER/PILE DRIVER**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 6)

**Dockbuilder/Pile Driver (First Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$30.29

**Dockbuilder/Pile Driver (Second Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$30.29

**Dockbuilder/Pile Driver (Third Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$30.29

**Dockbuilder/Pile Driver (Fourth Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$30.29

(Carpenters District Council)

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**ELECTRICIAN**

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

**Electrician (First Term: 0-6 Months)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$12.50  
Supplemental Benefit Rate per Hour: \$10.86  
Overtime Supplemental Rate per Hour: \$11.68

Effective period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$12.50  
Supplemental Benefit Rate per Hour: \$11.10  
Overtime Supplemental Rate per Hour: \$11.93

**Electrician (First Term: 7-12 Months)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$13.50  
Supplemental Benefit Rate per Hour: \$11.37  
Overtime Supplemental Rate per Hour: \$12.26

Effective period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$13.50  
Supplemental Benefit Rate per Hour: \$11.62  
Overtime Supplemental Rate per Hour: \$12.51

**Electrician (Second Term: 0-6 Months)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$14.50

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

Supplemental Benefit Rate per Hour: \$11.88  
Overtime Supplemental Rate per Hour: \$12.83

Effective period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$14.50  
Supplemental Benefit Rate per Hour: \$12.13  
Overtime Supplemental Rate per Hour: \$13.08

**Electrician (Second Term: 7-12 Months)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$15.50  
Supplemental Benefit Rate per Hour: \$12.39  
Overtime Supplemental Rate per Hour: \$13.41

Effective period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$15.50  
Supplemental Benefit Rate per Hour: \$12.64  
Overtime Supplemental Rate per Hour: \$13.66

**Electrician (Third Term: 0-6 Months)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$16.50  
Supplemental Benefit Rate per Hour: \$12.90  
Overtime Supplemental Rate per Hour: \$13.98

Effective period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$16.50  
Supplemental Benefit Rate per Hour: \$13.15  
Overtime Supplemental Rate per Hour: \$14.23

**Electrician (Third Term: 7-12 Months)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$17.50  
Supplemental Benefit Rate per Hour: \$13.40  
Overtime Supplemental Rate per Hour: \$14.56

Effective period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$17.50  
Supplemental Benefit Rate per Hour: \$13.65  
Overtime Supplemental Rate per Hour: \$14.81

**Electrician (Fourth Term: 0-6 Months - Hired on or after 5/10/07)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$18.50  
Supplemental Benefit Rate per Hour: \$13.91  
Overtime Supplemental Rate per Hour: \$15.13

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

Effective period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$18.50  
Supplemental Benefit Rate per Hour: \$14.16  
Overtime Supplemental Rate per Hour: \$15.38

**Electrician (Fourth Term: 7-12 Months - Hired on or after 5/10/07)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$20.25  
Supplemental Benefit Rate per Hour: \$14.80  
Overtime Supplemental Rate per Hour: \$16.14

Effective period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$20.50  
Supplemental Benefit Rate per Hour: \$15.18  
Overtime Supplemental Rate per Hour: \$16.53

**Electrician (Fifth Term: 0-12 Months - Hired on or after 5/10/07)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$22.00  
Supplemental Benefit Rate per Hour: \$17.30  
Overtime Supplemental Rate per Hour: \$18.68

Effective period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$22.50  
Supplemental Benefit Rate per Hour: \$18.06  
Overtime Supplemental Rate per Hour: \$19.47

**Electrician (Fifth Term: 13-18 Months - Hired on or after 5/10/07)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$26.50  
Supplemental Benefit Rate per Hour: \$19.56  
Overtime Supplemental Rate per Hour: \$21.23

Effective period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$27.00  
Supplemental Benefit Rate per Hour: \$20.32  
Overtime Supplemental Rate per Hour: \$22.01

**Electrician (Fourth Term: 0-6 Months - Hired before 5/10/07)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$22.10  
Supplemental Benefit Rate per Hour: \$15.74  
Overtime Supplemental Rate per Hour: \$17.20

Effective period: 5/14/2014 - 6/30/2014

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Wage Rate per Hour: \$22.10  
Supplemental Benefit Rate per Hour: \$15.99  
Overtime Supplemental Rate per Hour: \$17.45

**Electrician (Fourth Term: 7-12 Months - Hired before 5/10/07)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$23.95  
Supplemental Benefit Rate per Hour: \$16.69  
Overtime Supplemental Rate per Hour: \$18.26

Effective period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$24.20  
Supplemental Benefit Rate per Hour: \$17.06  
Overtime Supplemental Rate per Hour: \$18.66

**Electrician (Fifth Term: 0-18 Months - Hired before 5/10/07)**

Effective period: 7/1/2013 - 5/13/2014  
Wage Rate per Hour: \$25.80  
Supplemental Benefit Rate per Hour: \$19.21  
Overtime Supplemental Rate per Hour: \$20.83

Effective period: 5/14/2014 - 6/30/2014  
Wage Rate per Hour: \$26.30  
Supplemental Benefit Rate per Hour: \$19.96  
Overtime Supplemental Rate per Hour: \$21.61

**Overtime Description**

Overtime Wage paid at time and one half the regular rate  
For "A" rated Apprentices (work in excess of 7 hours per day)  
For "M" rated Apprentices (work in excess of 8 hours per day)

(Local #3)

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**ELEVATOR CONSTRUCTOR  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)**

**Elevator (Constructor) - First Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$26.87

**Elevator (Constructor) - Second Year**

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$27.92

**Elevator (Constructor) - Third Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$29.38

**Elevator (Constructor) - Fourth Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$30.84

(Local #1)

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**ELEVATOR REPAIR & MAINTENANCE**  
**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)**

**Elevator Service/Modernization Mechanic (First Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$26.79

**Elevator Service/Modernization Mechanic (Second Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$27.12

**Elevator Service/Modernization Mechanic (Third Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$28.43

**Elevator Service/Modernization Mechanic (Fourth Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Benefit Per Hour: \$29.74

(Local #1)

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**ENGINEER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 5)

**Engineer - First Year**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$22.49

Supplemental Benefit Rate per Hour: \$20.68

**Engineer - Second Year**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$28.11

Supplemental Benefit Rate per Hour: \$20.68

**Engineer - Third Year**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$20.92

Supplemental Benefit Rate per Hour: \$20.68

**Engineer - Fourth Year**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$33.73

Supplemental Benefit Rate per Hour: \$20.68

(Local #15)

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**ENGINEER - OPERATING**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 5)

**Operating Engineer - First Year**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate Per Hour 40% of Journeyman's Rate

Supplemental Benefit Per Hour: \$18.60

**Operating Engineer - Second Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyperson's Rate  
Supplemental Benefit Per Hour: \$18.60

**Operating Engineer - Third Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 60% of Journeyperson's Rate  
Supplemental Benefit Per Hour: \$18.60

(Local #14)

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**FLOOR COVERER**

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

**Floor Coverer (First Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Rate Per Hour: \$25.75

**Floor Coverer (Second Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$25.75

**Floor Coverer (Third Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$25.75

**Floor Coverer (Fourth Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$25.75

(Carpenters District Council)

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## GLAZIER

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

### Glazier (First Year)

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Rate Per Hour: \$11.97

### Glazier (Second Year)

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$21.13

### Glazier (Third Year)

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$23.54

### Glazier (Fourth Year)

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Rate Per Hour: \$28.34

(Local #1281)

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## HEAT & FROST INSULATOR

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

### Heat & Frost Insulator (First Year)

Effective Period: 7/1/2013 - 6/30/2014  
Wage and Supplemental Rate Per Hour: 40% of Journeyman's rate

### Heat & Frost Insulator (Second Year)

Effective Period: 7/1/2013 - 6/30/2014  
Wage and Supplemental Rate Per Hour: 60% of Journeyman's rate

### Heat & Frost Insulator (Third Year)

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Effective Period: 7/1/2013 - 6/30/2014  
Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

**Heat & Frost Insulator (Fourth Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #12)

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**HOUSE WRECKER  
(TOTAL DEMOLITION)  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)**

**House Wrecker - First Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: **\$20.36**  
Supplemental Benefit Rate per Hour: **\$16.35**

**House Wrecker - Second Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: **\$21.46**  
Supplemental Benefit Rate per Hour: **\$16.35**

**House Wrecker - Third Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: **\$23.01**  
Supplemental Benefit Rate per Hour: **\$16.35**

**House Wrecker - Fourth Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: **\$25.36**  
Supplemental Benefit Rate per Hour: **\$16.35**

(Local #79)

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**IRON WORKER - ORNAMENTAL**

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

**Iron Worker (Ornamental) - 1st Four Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$35.78

**Iron Worker (Ornamental) 5 - 10 Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Rate Per Hour: \$36.75

**Iron Worker (Ornamental) 11 - 16 Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Rate Per Hour: \$37.72

**Iron Worker (Ornamental) 17 - 22 Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Rate Per Hour: \$39.66

**Iron Worker (Ornamental) 23 - 28 Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 85% of Journeyman's rate  
Supplemental Rate Per Hour: \$40.63

**Iron Worker (Ornamental) 29 - 36 Months - Hired on or Before 8/1/08**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 95% of Journeyman's rate  
Supplemental Rate Per Hour: \$42.57

**Iron Worker (Ornamental) - 1st Ten Months - Hired After 8/1/08**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$33.84

**Iron Worker (Ornamental) - 11 - 16 Months - Hired After 8/1/08**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 55% of Journeyman's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Supplemental Rate Per Hour: \$34.81

**Iron Worker (Ornamental) - 17 - 22 Months - Hired After 8/1/08**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$35.78

**Iron Worker (Ornamental) - 23 - 28 Months - Hired After 8/1/08**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$37.72

**Iron Worker (Ornamental) - 29 - 36 Months - Hired After 8/1/08**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$39.66

(Local #580)

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**IRON WORKER - STRUCTURAL**  
**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)**

**Iron Worker (Structural) - 1st Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$24.48  
Supplemental Benefit Rate per Hour: \$43.87

**Iron Worker (Structural) - 7- 18 Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$25.08  
Supplemental Benefit Rate per Hour: \$43.87

**Iron Worker (Structural) - 19 - 36 months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$25.68  
Supplemental Benefit Rate per Hour: \$43.87

(Local #40 and #361)

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

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

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - First 1000 hours**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$33.25

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Second 1000 hours**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$33.25

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Third 1000 hours**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Rate Per Hour: \$33.25

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Fourth 1000 hours**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 90% of Journeyman's rate  
Supplemental Rate Per Hour: \$33.25

(Local #731)

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**MARBLE MECHANICS**

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

**Cutters & Setters - First 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

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

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

**Cutters & Setters - Second 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

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

**Cutters & Setters - Third 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

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

**Cutters & Setters - Fourth 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

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

**Cutters & Setters - Fifth 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

**Cutters & Setters - Sixth 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

**Polishers & Finishers - First 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

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

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

**Polishers & Finishers - Second 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

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

**Polishers & Finishers - Third 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

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

**Polishers & Finishers - Fourth 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 90% of Journeyperson's rate

(Local #7)

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**MASON TENDER**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

**Mason Tender - First Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$20.63  
Supplemental Benefit Rate per Hour: \$17.06

**Mason Tender - Second Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$21.73  
Supplemental Benefit Rate per Hour: \$17.06

**Mason Tender - Third Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$23.33  
Supplemental Benefit Rate per Hour: \$17.06

**Mason Tender - Fourth Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$25.93  
Supplemental Benefit Rate per Hour: \$17.06

(Local #79)

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**METALLIC LATHER**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

**Metallic Lather (First Year -Called Prior to 6/29/11)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$28.11

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Supplemental Benefit Rate per Hour: \$22.79

**Metallic Lather (Second Year - Called Prior to 6/29/11)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$32.71

Supplemental Benefit Rate per Hour: \$24.44

**Metallic Lather (Third Year - Called Prior to 6/29/11)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$37.77

Supplemental Benefit Rate per Hour: \$25.59

**Metallic Lather (First Year -Called On Or After 6/29/11)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$17.71

Supplemental Benefit Rate per Hour: \$19.85

**Metallic Lather (Second Year - Called On Or After 6/29/11)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$22.81

Supplemental Benefit Rate per Hour: \$19.85

**Metallic Lather (Third Year - Called On Or After 6/29/11)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$27.91

Supplemental Benefit Rate per Hour: \$19.85

(Local #46)

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**MILLWRIGHT**

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

**Millwright (First Year)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$26.23

Supplemental Benefit Rate per Hour: \$31.51



**Millwright (Second Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$31.00  
Supplemental Benefit Rate per Hour: \$34.77

**Millwright (Third Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$35.77  
Supplemental Benefit Rate per Hour: \$39.19

**Millwright (Fourth Year)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$45.30  
Supplemental Benefit Rate per Hour: \$44.63

(Local #740)

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**PAVER AND ROADBUILDER  
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)**

**Paver and Roadbuilder - First Year (Minimum 1000 hours)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$26.19  
Supplemental Benefit Rate per Hour: \$16.20

**Paver and Roadbuilder - Second Year (Minimum 1000 hours)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$27.77  
Supplemental Benefit Rate per Hour: \$16.20

(Local #1010)

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

**Painter - Brush & Roller - First Year**

Effective Period: 7/1/2013 - 4/30/2014  
Wage Rate per Hour: \$15.00  
Supplemental Benefit Rate per Hour: \$11.38

Effective Period: 5/1/2014 - 6/30/2014  
Wage Rate per Hour: \$15.80  
Supplemental Benefit Rate per Hour: \$11.88

**Painter - Brush & Roller - Second Year**

Effective Period: 7/1/2013 - 4/30/2014  
Wage Rate per Hour: \$18.75  
Supplemental Benefit Rate per Hour: \$15.23

Effective Period: 5/1/2014 - 6/30/2014  
Wage Rate per Hour: \$19.75  
Supplemental Benefit Rate per Hour: \$15.73

**Painter - Brush & Roller - Third Year**

Effective Period: 7/1/2013 - 4/30/2014  
Wage Rate per Hour: \$22.50  
Supplemental Benefit Rate per Hour: \$18.14

Effective Period: 5/1/2014 - 6/30/2014  
Wage Rate per Hour: \$23.70  
Supplemental Benefit Rate per Hour: \$18.64

**Painter - Brush & Roller - Fourth Year**

Effective Period: 7/1/2013 - 4/30/2014  
Wage Rate per Hour: \$30.00  
Supplemental Benefit Rate per Hour: \$23.52

Effective Period: 5/1/2014 - 6/30/2014  
Wage Rate per Hour: \$31.60  
Supplemental Benefit Rate per Hour: \$24.02

(District Council of Painters)

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**PAINTER - STRUCTURAL STEEL**  
**(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)**

**Painters - Structural Steel (First Year)**

Effective Period: 7/1/2013 - 6/30/2014

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

**Painters - Structural Steel (Second Year)**

Effective Period: 7/1/2013 - 6/30/2014

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

**Painters - Structural Steel (Third Year)**

Effective Period: 7/1/2013 - 6/30/2014

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

(Local #806)

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**PLASTERER**

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

**Plasterer - First Year: 1st Six Months**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Rate Per Hour: \$12.76

**Plasterer - First Year: 2nd Six Months**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate Per Hour: 45% of Journeyperson's rate

Supplemental Rate Per Hour: \$13.24

**Plasterer - Second Year: 1st Six Months**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Rate Per Hour: \$15.21

**Plasterer - Second Year: 2nd Six Months**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Rate Per Hour: \$16.29

**Plasterer - Third Year: 1st Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$18.46

**Plasterer - Third Year: 2nd Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$19.54

(Local #530)

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**PLUMBER**

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

**Plumber - First Year: 1st Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$14.00  
Supplemental Benefit Rate per Hour: \$0.71

**Plumber - First Year: 2nd Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$14.00  
Supplemental Benefit Rate per Hour: \$2.96

**Plumber - Second Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$18.26  
Supplemental Benefit Rate per Hour: \$16.32

**Plumber - Third Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$20.36  
Supplemental Benefit Rate per Hour: \$16.32

**Plumber - Fourth Year**

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Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$23.21  
Supplemental Benefit Rate per Hour: \$16.32

**Plumber - Fifth Year: 1st Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$24.61  
Supplemental Benefit Rate per Hour: \$16.32

**Plumber - Fifth Year: 2nd Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$36.68  
Supplemental Benefit Rate per Hour: \$16.32

(Plumbers Local #1)

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**POINTER - WATERPROOFER, CAULKER MECHANIC (EXTERIOR BUILDING  
RENOVATION)**

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

**Pointer - Waterproofer, Caulker Mechanic - First Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$25.00  
Supplemental Benefit Rate per Hour: \$3.64

**Pointer - Waterproofer, Caulker Mechanic - Second Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$27.25  
Supplemental Benefit Rate per Hour: \$8.59

**Pointer - Waterproofer, Caulker Mechanic - Third Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate per Hour: \$32.23  
Supplemental Benefit Rate per Hour: \$11.34

**Pointer - Waterproofer, Caulker Mechanic - Fourth Year**

Effective Period: 7/1/2013 - 6/30/2014

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

Wage Rate per Hour: \$38.66

Supplemental Benefit Rate per Hour: \$11.34

(Bricklayer District Council)

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## ROOFER

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)

### Roofer - First Year

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 35% of Journeyman's Rate

### Roofer - Second Year

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 50% of Journeyman's Rate

### Roofer - Third Year

Effective Period: 7/1/2013 - 6/30/2014

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

### Roofer - Fourth Year

Effective Period: 7/1/2013 - 6/30/2014

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

(Local #8)

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## SHEET METAL WORKER

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

### Sheet Metal Worker - First Year

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate Per Hour: 30% of Journeyman's rate

Supplemental Rate Per Hour: \$15.37

### Sheet Metal Worker - Second Year

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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 35% of Journeyperson's rate  
Supplemental Rate Per Hour: \$18.24

**Sheet Metal Worker - Third Year (1st Six Months)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Rate Per Hour: \$20.06

**Sheet Metal Worker - Third Year (2nd Six Months)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 45% of Journeyperson's rate  
Supplemental Rate Per Hour: \$21.87

**Sheet Metal Worker - Fourth Year (1st Six Months)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$23.69

**Sheet Metal Worker - Fourth Year (2nd Six Months)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$25.33

**Sheet Metal Worker - Fifth Year (1st Six Months)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$27.47

**Sheet Metal Worker - Fifth Year(2nd Six Months)**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$31.23

(Local #28)

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**SIGN ERECTOR**

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

**Sign Erector - First Year: 1st Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 35% of Journeyperson's rate  
Supplemental Rate Per Hour: \$5.96

**Sign Erector - First Year: 2nd Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Rate Per Hour: \$6.75

**Sign Erector - Second Year: 1st Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 45% of Journeyperson's rate  
Supplemental Rate Per Hour: \$7.55

**Sign Erector - Second Year: 2nd Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$8.34

**Sign Erector - Third Year: 1st Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$9.13

**Sign Erector - Third Year: 2nd Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$9.92

**Sign Erector - Fourth Year: 1st Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$10.72

**Sign Erector - Fourth Year: 2nd Six Months**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$11.51

**Sign Erector - Fifth Year**



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

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Rate Per Hour: \$12.30

**Sign Erector - Sixth Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Rate Per Hour: \$12.30

(Local #137)

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**STEAMFITTER**

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

**Steamfitter - First Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate and Supplemental Per Hour: 40% of Journeyman's rate

**Steamfitter - Second Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate and Supplemental Rate Per Hour: 50% of Journeyman's rate.

**Steamfitter - Third Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate and Supplemental Rate per Hour: 65% of Journeyman's rate.

**Steamfitter - Fourth Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate and Supplemental Rate Per Hour: 80% of Journeyman's rate.

**Steamfitter - Fifth Year**

Effective Period: 7/1/2013 - 6/30/2014  
Wage Rate and Supplemental Rate Per Hour: 85% of Journeyman's rate.

(Local #638)

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**STONE MASON - SETTER**

(Ratio Apprentice of Journeyman: 1 to 1, 1 to 2)

**Stone Mason - Setters - First 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

**Stone Mason - Setters - Second 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Rate Per Hour: 50% of Journeyman's rate

**Stone Mason - Setters - Third 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate Per Hour: 70% of Journeyman's rate

Supplemental Rate Per Hour: 50% of Journeyman's rate

**Stone Mason - Setters - Fourth 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate Per Hour: 80% of Journeyman's rate

Supplemental Rate Per Hour: 50% of Journeyman's rate

**Stone Mason - Setters - Fifth 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate Per Hour: 90% of Journeyman's rate

Supplemental Rate Per Hour: 50% of Journeyman's rate

**Stone Mason - Setters - Sixth 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate Per Hour: 100% of Journeyman's rate

Supplemental Rate Per Hour: 50% of Journeyman's rate

(Bricklayers District Council)

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**TAPER**

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

**Drywall Taper - First Year**

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

Effective Period: 7/1/2013 - 6/30/2014

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

**Drywall Taper - Second Year**

Effective Period: 7/1/2013 - 6/30/2014

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

**Drywall Taper - Third Year**

Effective Period: 7/1/2013 - 6/30/2014

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

(Local #1974)

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**TILE LAYER - SETTER**

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

**Tile Layer - Setter - First 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

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

**Tile Layer - Setter - Second 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

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

**Tile Layer - Setter - Third 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

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

**Tile Layer - Setter - Fourth 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

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

**Tile Layer - Setter - Fifth 750 Hours**

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

**Tile Layer - Setter - Sixth 750 Hours**

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

Effective Period: 7/1/2013 - 6/30/2014

Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

(Local #7)

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**TIMBERPERSON**

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

**Timberperson - First Year**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Rate Per Hour: \$30.04

**Timberperson - Second Year**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Rate Per Hour: \$30.04

**Timberperson - Third Year**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Rate Per Hour: \$30.04

**Timberperson - Fourth Year**

Effective Period: 7/1/2013 - 6/30/2014

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

Supplemental Rate Per Hour: \$30.04

(Local #1536)

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LABOR LAW § 230 AND NYC ADMINISTRATIVE CODE § 6-130  
BUILDING SERVICE EMPLOYEES

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PREVAILING WAGE FOR BUILDING SERVICE EMPLOYEES ON NYC CONTRACTS PURSUANT TO  
LABOR LAW § 230 ET-SEQ.

Building-service employees on public contracts must receive not less than the prevailing rate of wage and supplements for the classification of work performed. In accordance with Labor Law §230 et seq. the Comptroller of the City of New York has promulgated this schedule of prevailing wages and supplemental benefits for building service employees engaged on New York City public building service contracts in excess of \$1,500.00. Prevailing rates are required to be annexed to and form part of the contract pursuant to §231 (4).

Contracting agencies that anticipate doing work that may require building service trades or classifications not included in this schedule may request the Comptroller to establish a proper classification and wage determination for the work. Contractors using trades and/or classifications for which the Comptroller has not promulgated wages and benefits do so at their own risk.

Contractors are advised to review the applicable Comptroller's Prevailing Wage Schedule before bidding on public work. Any Prevailing Wage Rate error made by the Contracting Agency, whether in a contract document or other communication, will not preclude a finding against the contractor of a prevailing-wage violation.

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PREVAILING WAGE FOR BUILDING SERVICE EMPLOYEES IN NEW YORK CITY LEASED OR  
FINANCIALLY ASSISTED FACILITIES PURSUANT TO NYC ADMINISTRATIVE CODE § 6-130

Covered landlords & covered financial assistance recipients shall ensure that all building service employees performing building service work at the premises to which a lease or financial assistance pertains are paid no less than the prevailing wage listed in the Labor Law §230 Prevailing Wage Schedule.

Covered Landlords include:

Businesses (other than not-for-profit organizations) leasing to New York City agencies commercial office space or commercial office facilities of 10,000 square feet or more where the City leases or rents no less than 51% of the total square footage of the building to which the lease applies (no less than 80% in Staten Island or in an area not defined as an exclusion area pursuant to section 421-a of the real property tax law on the date of enactment of the local law).

Covered Financial Assistance Recipients include:

Businesses (other than not-for-profit organizations) with annual gross revenues of five million dollars or more who have received financial assistance from the City of New York (as defined in New York City Administrative Code §6-130) with a total value of one million dollars or more.

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

Exemptions: Business Improvement Districts and employers with manufacturing operations at the premises to which the financial assistance pertains.

The information is intended to assist you in meeting your prevailing wage obligation. You should consult New York City Administrative Code §6-130 to determine whether you are covered by this prevailing wage law. New York City Administrative Code § 6-130 requires the City to maintain an updated list of covered landlords and financial assistance recipients who are subject to the prevailing wage requirement.

Labor Law § 231 (6) and NYC Administrative Law §6-130 require contractors to post on the site of the work a current copy of this schedule of wages and supplements.

This schedule is applicable to work performed during the effective period, unless otherwise noted. Changes to this schedule are published on our web site [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov). Contractors must pay the wages and supplements in effect when the building service employee performs the work. Preliminary schedules for future one-year periods appear in the City Record on or about June 1 each succeeding year. Final schedules appear on or about July 1 in the City Record and on our web site [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov).

Contractors are solely responsible for maintaining original payroll records delineating, among other things, the hours worked by each employee within a given classification.

Some of the rates in this schedule are based on collective bargaining agreements. 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: Wasył Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 1122, New York, N.Y. 10007; Fax (212) 669-4002.

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.

Benefits are paid for EACH HOUR WORKED unless otherwise noted.

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



Office of the Comptroller  
BUREAU OF LABOR LAW

CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
JOHN C. LIU

BUREAU OF LABOR LAW

MUNICIPAL BUILDING  
ONE CENTRE STREET, ROOM 1120  
NEW YORK, N.Y. 10007-2341

TEL: (212) 669-4443  
FAX: (212) 669-4002

If you are a Covered Building Service Employee and you have been paid less than the Prevailing Wage and Benefits, please contact us at 212-669-4443 or download our complaint form from our website at [WWW.COMPTROLLER.NYC.GOV](http://WWW.COMPTROLLER.NYC.GOV) (click on the Bureau of Labor Law).

Si es un empleado de servicios a edificios elegible y recibió menos del sueldo prevalente y beneficios, por favor contáctenos en 212-669-4443 o descarga un formulario de reclamo del sitio del Internet [WWW.COMPTROLLER.NYC.GOV](http://WWW.COMPTROLLER.NYC.GOV) (oprime "Oficina de Derecho Laboral").

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



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**BOILER SERVICEPERSON/TANK CLEANER MECHANIC (LOW PRESSURE)**

**Boiler Service Person/Tank Cleaner Mechanic (Low Pressure)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$11.37

Supplemental Benefit Rate per Hour: \$5.57

**Overtime Description**

Work in excess of 8 hours performed on a Sunday or Holiday shall be paid two and one half times the regular rate.

**Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

**Paid Holidays**

New Year's Day

Martin Luther King Jr. Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

Employee's Birthday

**Vacation**

1 year service.....	five (5) days
3 years service or more.....	ten (10) days
8 years service or more.....	fifteen (15) days
13 years service or more.....	twenty (20) days

**SICK LEAVE:**

1-2 years employment.....	4 days
2-3 years employment.....	5 days
3-4 years employment.....	6 days
4-5 years employment.....	8 days
6 years or more employment.....	10 days

(Local #32 B/J)

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**BUILDING CLEANER AND MAINTAINER (OFFICE)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$230-PREVAILING WAGE SCHEDULE

Office Building Class "A" Handyperson (Over 280,000 square feet gross area)

Effective Period: 7/1/2013 - 12/31/2013

Wage Rate per Hour: \$25.10

Supplemental Benefit Rate per Hour: \$9.51

Effective Period: 1/1/2014 - 6/30/2014

Wage Rate per Hour: \$25.55

Supplemental Benefit Rate per Hour: \$9.91

Office Building Class "A" Foreperson, Starter (Over 280,000 square feet gross area)

Effective Period: 7/1/2013 - 12/31/2013

Wage Rate per Hour: \$24.99

Supplemental Benefit Rate per Hour: \$9.51

Effective Period: 1/1/2014 - 6/30/2014

Wage Rate per Hour: \$25.44

Supplemental Benefit Rate per Hour: \$9.91

Office Building Class "A" Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director (Over 280,000 square feet gross area)

Effective Period: 7/1/2013 - 12/31/2013

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.

Effective Period: 1/1/2014 - 6/30/2014

Wage Rate per Hour: \$23.42

Supplemental Benefit Rate per Hour: \$9.91

Supplemental Note: for new employee 0-12 months of employment - \$7.22; for new employee 13-24 months of employment - \$9.58

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" Handyperson (Over 120,000 and less than 280,000 square feet gross area)

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$25.07  
Supplemental Benefit Rate per Hour: \$9.51

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$25.52  
Supplemental Benefit Rate per Hour: \$9.91

Office Building Class "B" Foreperson, Starter (Over 120,000 and less than 280,000 square feet gross area)

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$24.95  
Supplemental Benefit Rate per Hour: \$9.51

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$25.40  
Supplemental Benefit Rate per Hour: \$9.91

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: 7/1/2013 - 12/31/2013  
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.

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$23.39  
Supplemental Benefit Rate per Hour: \$9.91  
Supplemental Note: for new employee 0-12 months of employment - \$7.22; for new employee 13-24 months of employment - \$9.58

**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 OF THE COMPTROLLER, CITY OF NEW YORK  
§230 PREVAILING WAGE SCHEDULE

Office Building Class "C" Handyman (Less than 120,000 square feet gross area)

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$25.02  
Supplemental Benefit Rate per Hour: \$9.51

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$25.47  
Supplemental Benefit Rate per Hour: \$9.91

Office Building Class "C" Foreperson, Starter (Less than 120,000 square feet gross area)

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$24.91  
Supplemental Benefit Rate per Hour: \$9.51

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$25.36  
Supplemental Benefit Rate per Hour: \$9.91

Office Building Class "C" Cleaner/Porter, Elevator Operator, Exterminator, Fire Safety Director (Less than 120,000 square feet gross area)

Effective Period: 7/1/2013 - 12/31/2013  
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.

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$23.35  
Supplemental Benefit Rate per Hour: \$9.91  
Supplemental Note: for new employee 0-12 months of employment - \$7.22; for new employee 13-24 months of employment - \$9.58

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 OF THE COMPTROLLER, CITY OF NEW YORK  
§230 PREVAILING WAGE SCHEDULE

**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)

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**BUILDING CLEANER AND MAINTAINER (RESIDENTIAL)**

**Residential Building Class "A" Handyperson**

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$23.57

Supplemental Benefit Rate per Hour: \$9.43

Supplemental Note: Effective 1/1/2014 - \$9.83

**Residential Building Class "A" Cleaner/Porter**

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

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: 7/1/2013 - 12/31/2013

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.

Effective Period: 1/1/2014 - 6/30/2014

Wage Rate per Hour: \$21.34

Supplemental Benefit Rate per Hour: \$9.83

Supplemental Note: for new employee 0-12 months of employment - \$7.22; for new employee 13-24 months of employment - \$9.58

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" Handyperson

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$23.51

Supplemental Benefit Rate per Hour: \$9.43

Supplemental Note: Effective 1/1/2014 - \$9.83

### 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: 7/1/2013 - 12/31/2013

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.

Effective Period: 1/1/2014 - 6/30/2014

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

Wage Rate per Hour: \$21.28

Supplemental Benefit Rate per Hour: \$9.83

Supplemental Note: for new employee 0-12 months of employment - \$7.22; for new employee 13-24 months of employment - \$9.58

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 "C" Handyperson

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: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$23.45

Supplemental Benefit Rate per Hour: \$9.43

Supplemental Note: Effective 1/1/2014 - \$9.83

### 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: 7/1/2013 - 12/31/2013

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.

Effective Period: 1/1/2014 - 6/30/2014

Wage Rate per Hour: \$21.23

Supplemental Benefit Rate per Hour: \$9.83

Supplemental Note: for new employee 0-12 months of employment - \$7.22; for new employee 13-24 months of employment - \$9.58

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



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

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.

**SICK LEAVE**

After 1 year of service.....ten (10) days per year  
(Local #32 B/J)

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**BUILDING HVAC SERVICES OPERATOR**

**Engineer (Refrigeration)**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$35.18  
Supplemental Benefit Rate per Hour: \$15.78

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$36.73  
Supplemental Benefit Rate per Hour: \$16.35

**Fireperson**

Fireperson (Helper): Assist the Engineer  
Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$27.39  
Supplemental Benefit Rate per Hour: \$15.41

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$28.60

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

Supplemental Benefit Rate per Hour: \$15.97

### Overtime Description

All hours worked on a holiday shall be paid at two and one half times the regular wage rate in lieu of the paid day off.

### 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.

### Paid Holidays

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Plus six (6) floating Holidays

### 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
3 years .....	twenty-three (23) days
4 years .....	twenty-four (24) days
25 years .....	twenty-five (25) days

(Local #94)

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## CLEANER (PARKING GARAGE)

### Garage Cleaner

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$11.20

Supplemental Benefit Rate per Hour: \$1.72

### 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.

(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics)

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

**FUEL OIL**

**Fuel Oil, Coal, Fuel Gas, Petroleum Product Chauffeur (5th Year and above)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$30.61

Supplemental Benefit Rate per Hour: \$20.42

**Fuel Oil, Coal, Fuel Gas, Petroleum Product Chauffeur (4th Year)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$28.00

Supplemental Benefit Rate per Hour: \$20.42

**Fuel Oil, Coal, Fuel Gas, Petroleum Product Chauffeur (3rd Year)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$26.00

Supplemental Benefit Rate per Hour: \$20.42

**Fuel Oil, Coal, Fuel Gas, Petroleum Product Chauffeur (2nd Year)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$24.00

Supplemental Benefit Rate per Hour: \$20.42

**Fuel Oil, Coal, Fuel Gas, Petroleum Product Chauffeur (1st Year)**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$22.00

Supplemental Benefit Rate per Hour: \$20.42

**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).

Martin Luther King Jr. Day

Lincoln's Birthday

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

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

Veteran's Day

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

New Year's Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

New Year's Day  
Martin Luther King Jr. Day  
Lincoln's Birthday  
Washington's Birthday  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Election Day  
Veteran's Day  
Thanksgiving Day  
Christmas Day

**Vacation**

Less than 75 days worked.....no vacation.  
75 days worked, but less than 110 days worked in a calendar year.....five (5) days the following year.  
110 days or more worked in a calendar year.....ten (10) days the following year.

**SICK LEAVE:**

1 day sick leave earned for each 40 days worked in the preceding calendar year for a maximum of five (5) days per calendar year.

(Local #553)

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**GARDENER**

**Gardener**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$17.16

Supplemental Benefit Rate per Hour: \$1.72

**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.

(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics)

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

## LOCKSMITH

### Locksmith

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$19.63

Supplemental Benefit Rate per Hour: \$6.20

### 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.

(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics)

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## MEDICAL WASTE REMOVAL

### Driver

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$18.00

Supplemental Benefit Rate per Hour: \$9.34

### Helper

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$14.25

Supplemental Benefit Rate per Hour: \$9.34

### Tractor Trailer Driver

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$20.50

Supplemental Benefit Rate per Hour: \$9.34

### Overtime Description

Time and one half the regular hourly rate after an 8 hour day or after 40 hours in any work week. The seventh day of work in a workweek is paid at double time the regular hourly rate. Time and one-half the regular hourly rate for work on a holiday plus days pay for below paid holidays.

### Paid Holidays

President's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day

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

Christmas Day

**Vacation**

1 year of service but less than five years.....	ten (10) days
5 years of service but less than ten years.....	fifteen (15) days
10 years of service.....	sixteen (16) days
11 years.....	seventeen (17) days
12 years.....	eighteen (18) days
13 years.....	nineteen (19) days
14 years.....	twenty (20) days
20 years.....	twenty-one (21) days
21 years.....	twenty-two (22) days
22 years.....	twenty-three (23) days
23 years.....	twenty-four (24) days
24 years.....	twenty-five (25) days
Plus 5 Personal Days	

(Local #813)

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**MOVER - OFFICE FURNITURE AND EQUIPMENT**

**Heavy and Tractor Trailer Truck Driver**

Tractor-trailer combination or a truck with a capacity of at least 26,000 pounds Gross Vehicle Weight (GVW)

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$22.57

Supplemental Benefit Rate per Hour: \$4.49

**Light Truck Driver**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$19.81

Supplemental Benefit Rate per Hour: \$4.49

**Laborer and Freight, Stock, and Material Movers, Hand**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$17.51

Supplemental Benefit Rate per Hour: \$4.49

**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.

(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics)

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

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**REFUSE REMOVER**

**Refuse Remover**

Effective Period: 7/1/2013 - 6/30/2014

Wage Rate per Hour: \$29.27

Supplemental Benefit Rate per Hour: \$4.49

**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.

(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics)

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**SECURITY GUARD (ARMED)**

**Security Guard (Armed)**

Effective Period: 7/1/2013 - 12/31/2013

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

Effective Period: 1/1/2014 - 6/30/2014

Wage Rate per Hour: \$28.25

Supplemental Benefit Rate per Hour: \$5.02

Supplemental Note: for new employee 0-30 days of employment - \$4.44; for new employee 31-120 days of employment - \$4.61; for new employee 121 days - 2 years of employment - \$4.63

Months of employment shall be defined as an Employee's length of service with the Employer or at the Facility, whichever is greater.

**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**

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

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day  
Personal 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)

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## SECURITY GUARD (UNARMED)

### Security Guard (Unarmed) 0 - 6 months

Effective Period: 7/1/2013 - 12/31/2013

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

Effective Period: 1/1/2014 - 6/30/2014

Wage Rate per Hour: \$13.10

Supplemental Benefit Rate per Hour: \$4.63

Supplemental Note: for new employee 0-30 days of employment - \$4.44; for new employee 31-120 days of employment - \$4.61

### Security Guard (Unarmed) 7 - 12 months

Effective Period: 7/1/2013 - 12/31/2013

Wage Rate per Hour: \$13.35

Supplemental Benefit Rate per Hour: \$4.54

Effective Period: 1/1/2014 - 6/30/2014

Wage Rate per Hour: \$13.60

Supplemental Benefit Rate per Hour: \$4.63



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
\$230 PREVAILING WAGE SCHEDULE

**Security Guard (Unarmed) 13 - 18 months**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$13.85  
Supplemental Benefit Rate per Hour: \$4.54

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$14.10  
Supplemental Benefit Rate per Hour: \$4.63

**Security Guard (Unarmed) 19 - 24 months**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$14.35  
Supplemental Benefit Rate per Hour: \$4.54

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$14.60  
Supplemental Benefit Rate per Hour: \$4.63

**Security Guard (Unarmed) 25 - 30 months**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$14.85  
Supplemental Benefit Rate per Hour: \$4.90

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$15.10  
Supplemental Benefit Rate per Hour: \$5.02

**Security Guard (Unarmed) 31 months or more**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$15.15  
Supplemental Benefit Rate per Hour: \$4.90

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$15.60  
Supplemental Benefit Rate per Hour: \$5.02

Months of employment shall be defined as an Employee's length of service with the Employer or at the Facility, whichever is greater.

**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.

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

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  
Personal 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)

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## **WINDOW CLEANER**

### **Window Cleaner**

Effective Period: 7/1/2013 - 12/31/2013

Wage Rate per Hour: \$26.44

Supplemental Benefit Rate per Hour: \$9.51

Effective Period: 1/1/2014 - 6/30/2014

Wage Rate per Hour: \$26.90

Supplemental Benefit Rate per Hour: \$9.91

## **Power Operated Scaffolds, Manual Scaffolds, and Boatswain Chairs**

Effective Period: 7/1/2013 - 12/31/2013

Wage Rate per Hour: \$28.69

Supplemental Benefit Rate per Hour: \$9.51

Effective Period: 1/1/2014 - 6/30/2014

Wage Rate per Hour: \$29.27

Supplemental Benefit Rate per Hour: \$9.91

**Window Cleaner Apprentice (0 - 3 months)**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$19.59  
Supplemental Benefit Rate per Hour: None

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$19.92  
Supplemental Benefit Rate per Hour: None

**Window Cleaner Apprentice (4 - 7 months)**

Employee must be a registered apprentice with the New York State Department of Labor

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$21.18  
Supplemental Benefit Rate per Hour: \$9.51

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$21.54  
Supplemental Benefit Rate per Hour: \$9.91

**Window Cleaner Apprentice (8 - 11 months)**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$22.44  
Supplemental Benefit Rate per Hour: \$9.51

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$22.82  
Supplemental Benefit Rate per Hour: \$9.91

**Window Cleaner Apprentice (12 - 15 months)**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$23.72  
Supplemental Benefit Rate per Hour: \$9.51

Effective Period: 1/1/2014 - 6/30/2014  
Wage Rate per Hour: \$24.12  
Supplemental Benefit Rate per Hour: \$9.91

**Window Cleaner Apprentice (16 - 17 months)**

Effective Period: 7/1/2013 - 12/31/2013  
Wage Rate per Hour: \$25.01  
Supplemental Benefit Rate per Hour: \$9.51

Effective Period: 1/1/2014 - 6/30/2014

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

Wage Rate per Hour: \$25.44

Supplemental Benefit Rate per Hour: \$9.91

**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
- Martin Luther King Jr. Day
- President's Day
- 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.....	five (5) days
1 year but less than 5 years of service.....	ten (10) days
5 years of service but less than 15 years of service.....	fifteen (15) days
15 years of service but less than 21 years of service.....	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 or more of service.....	twenty-five (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)



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

7/17/13

**ADDENDUM No. # 2**

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

**PV467NOG4-R**

**Noguchi Masterplan Phase IC.2**

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This addendum is issued for the purpose of amending the requirements of the Bid and Contract Documents and is hereby made a part of said Bid and Contract Documents to the same extent as though it were originally included therein.

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The bidder is advised that the items listed below apply to the project:

**1. Revised Bid Opening Date:**

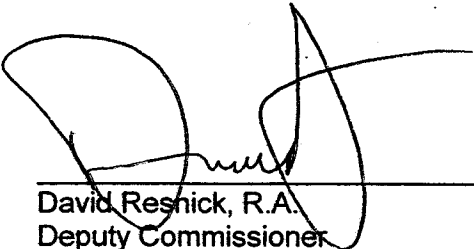
The Bid Opening for the Contract described below scheduled for July 25<sup>th</sup>, 2013, at 2:00pm is rescheduled to August 1<sup>st</sup>, 2013 at 2:00pm.

Contract 1 – General Construction Work.

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

If additional information is required, please contact the Department of Design and Construction, Contract Section at (718) 391-2200, (718) 391-1727, or by fax at (718) 391-2615.



\_\_\_\_\_  
David Resnick, R.A.  
Deputy Commissioner

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

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

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

ADDENDUM TO THE GENERAL CONDITIONS

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The General Conditions are hereby amended in accordance  
with the terms and conditions set forth in this Addendum.

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I. PROJECT DESCRIPTION

FMS #: **PV467NOG4-R**

PROJECT NAME: **Noguchi Masterplan Phase IC.2**

PROJECT DESCRIPTION: This Project consists of the selective renovation of the Noguchi Museum Sculpture Garden to rebuild the perimeter garden fence, introduce outdoor exhibit lighting and irrigation systems.

PROJECT LOCATION: **32-37 Vernon Boulevard**  
BOROUGH: **Long Island City, Queens**  
CITY OF NEW YORK  
ZIP CODE: **11106**  
COMMUNITY BOARD #: **401**

PROJECT MANAGEMENT:

- DDC shall publicly bid and enter into a single Contract for the Project. DDC shall manage the Project using its own personnel.
- DDC shall publicly bid and enter into a single Contract for the Project. A Construction Management firm (the "CM") hired by DDC shall manage the Project. The Contractor is advised that the CM shall serve as the representative of the Commissioner at the site and shall, subject to review by the Commissioner, be responsible for the inspection, management, coordination and administration of the required construction work, as delineated in the article of the Standard Construction Contract (September 2008) entitled "The Resident Engineer".
- DDC has entered into CM/Build Contract for the Project. The CM/Build Contractor shall be responsible for conducting a competitive bid process and entering into the contract(s) for the Project.

II. CM / BUILD CONTRACT: REVISIONS TO THE GENERAL CONDITIONS

Not Used

### III. CONTRACTS FOR THE PROJECT

The Project consists of a single contract, the Contract for General Construction Work. The Contractor for General Construction Work is responsible for the performance of all required work for the Project as set forth in the Contract Documents (General Conditions, Drawings and Specifications), including all responsibilities and obligations assigned to separate Contractors for the following subdivisions of the work: Plumbing Work and Electrical Work. All responsibilities and obligations in the Contract Documents assigned to separate Contractors for such subdivisions of the work are the responsibility of the Contractor for General Construction Work.

### IV. SCHEDULES

The Contractor is advised that Schedules A through F are attached to, and incorporated as part of, this Addendum to the General Conditions. These schedules contain important information that is specific to this Project. The Contractor is advised to carefully review these schedules.

### V. APPLICABILITY OF ARTICLES AND AMENDED ARTICLES

The Contractor is advised that various Articles in the General Conditions may not apply to this Project or may apply as amended. Such Articles advise the Contractor to "Refer to the Addendum to the General Conditions for the applicability of this Article." Such Articles are set forth below. A check mark indicates whether the Article (1) applies to the Project, (2) does not apply to the Project, or (3) applies to the Project as amended. If no box is checked, the Article, as set forth in the General Conditions, applies to the Project. Amended Articles, if any, are set forth following this list of Articles.

<u>Article No.</u>	<u>Article</u>	<u>Sub-Article or PART</u> (if applicable)	Applies	Does not Apply	Applies as Amended
1.04	Contract Drawings	C )	PRINTS		X
1.05	Shop Drawings and Record Drawings	B )	INTEGRATED DRAWINGS	X	
1.09	Surveys		X		
1.13	Sleeves and Hangers		X		
1.15	Temporary Heat		X		
1.20	Progress Photographs		X		
1.26	Security Guards/Fire Guards on the Site			X	
1.29	Sleeve and Penetration Drawings		X		
1.30	Location of Partitions		X		
1.34	Temporary Services		PART A	X	
			PART B	X	
1.35	Temporary Use, Operation and Maintenance of Elevators during Construction		PART A – For New Buildings Up to 15 Stories	X	
			PART B – For New Buildings Over 15 Stories	X	
			PART C – Existing Buildings	X	



1.36	General Mechanical Requirements					X	
1.37	General Electrical Requirements		PART B – Section A) Temporary Lighting	X			
			PART B – Section B) Site Security Lighting (New Construction)			X	
			PART D – Electrical Conduit System Including Boxes	X			
			PART E – Electrical Wiring Devices	X			
			PART F – Electrical Conductors and Terminators	X			
			PART G – Circuit Protective Devices	X			
			PART H – Distribution Centers			X	
			PART I – Motors			X	
			PART J – Motor Control Equipment			X	
1.40	Separation Between Trades						
1.42	Specific Requirements	C )	BORINGS			X	
		E )	WORK FENCE ENCLOSURE	X			
		G )	RESIDENT ENGINEER'S OFFICE				
			1. OFFICE SPACE IN EXISTING BUILDING	X			
			2. TRAILER OFFICE			X	
		H )	ADDITIONAL EQUIPMENT FOR THE RESIDENT ENGINEER	X			
		I )	PUBLIC TELEPHONE			X	
		Q )	PROJECT SIGN AND RENDERING				
			PART B – PROJECT RENDERING	X			

### COMPUTER WORKSTATIONS

H) Number of Computer Workstations to be provided as outlined in Article 1.42 H, item 4: 1

### VI. ADDITIONAL ARTICLES

Not Used

## VII. SPECIAL EXPERIENCE REQUIREMENTS FOR THE PROJECT

- (1) **GENERAL:** Special Experience Requirements applicable to the contractor or subcontractor that will perform specific areas of work are set forth below.
- (2) **REVISION OF SPECIFICATIONS AND DRAWINGS:** In the event the Specifications and/or the Contract Drawings contain any Special Experience Requirement that is not set forth below, such Special Experience Requirement is deemed deleted, except as otherwise expressly provided in Section VI of this Addendum.
- (3) **SPECIAL EXPERIENCE REQUIREMENTS FOR SPECIFIC AREAS OF WORK:** The special experience requirements set forth below apply to the contractor or subcontractor that will perform specific areas of work. Compliance with such experience requirements will be evaluated after an award of contract. Within two (2) weeks of such award, the contractor will be required to submit the qualifications of the contractor or subcontractor that will perform these specific areas of work. If the contractor intends to perform these specific areas of work with its own forces, it must demonstrate compliance with the special experience requirements. If the contractor intends to subcontract these specific areas of work, the proposed subcontractor(s) 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.
  - (a) **Special Experience Requirement #1:** The contractor or subcontractor performing the work of this section must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work. In addition, the contractor or subcontractor must demonstrate that it has in its employ, and will assign to this project, a Supervisor who is an I.S.A. Certified Arborist and has a minimum of three (3) years of supervisory experience as a Certified Arborist. The resume of such Supervisor must be submitted. This Special Experience Requirement applies to the contractor or subcontractor that will perform specific areas of work specified in the section set forth below.

### General Construction Work:

- (1) Section 329300: Plants (Landscaping)
- (b) **Special Experience Requirement #2:** The contractor or subcontractor performing the work of this section must, within the last five (5) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work. This Special Experience Requirement applies to the contractor or subcontractor that will perform specific areas of work specified in the sections set forth below.

### General Construction Work:

- (1) Section 328400: Planting Irrigation
- (2) Section 329600: Transplanting
- (3) Section 015639: Temporary Tree & Plant Protection
- (4) Section 015700: Temporary Sculpture Protection & Removal

## VIII. REVISIONS: SPECIFICATIONS AND CONTRACT DRAWINGS

The Specifications and the Contract Drawings for the Project are revised in accordance with the provisions set forth below.

- (1) Owner: Wherever the term "Owner" is used in the Specifications and/or the Contract Drawings, such term shall mean the City of New York.
- (2) Other Entities: In the event any entity other than the City of New York is referred to or named as the "Owner" in the Specifications and/or the Contract Drawings, the name of such other entity is deemed deleted and replaced with the "City of New York".
- (3) Architect / Engineer: Wherever the words "Architect", "Engineer", "Architect / Engineer" or "Architect and/or Engineer" are used in the Specifications and/or the Contract Drawings, such words are deemed deleted and replaced with the word "Commissioner".
- (4) Products / Manufacturers: Wherever the Specifications and/or the Contract Drawings require the contractor to provide a particular product (i.e., material and/or equipment) from a designated manufacturer and/or vendor, the term "or approved equal" is deemed inserted, even if only one product and/or manufacturer is specified, except as otherwise provided below.
  - (a) Proprietary Items: If the Bid Booklet contains a Notice which identifies a particular product from a designated manufacturer as a "Proprietary Item", the Contractor shall be required to provide such specified product. In such case, no substitution or "approved equal" will be permitted.
- (5) Special Experience Requirements: Special Experience Requirements for the Project, if any, are set forth in the Bid Booklet. Special Experience Requirements may apply to contractors, subcontractors, installers, manufacturers and/or suppliers. If the Specifications and/or the Contract Drawings contain any Special Experience Requirement that is not set forth in the Bid Booklet, such Special Experience Requirement is deemed deleted, except as otherwise provided below.
  - (a) Any Special Experience Requirement that provides that the entity performing the work or supplying the material must have more than three (3) years of experience, is revised to provide that the entity performing the work or supplying the material must have three (3) years of experience, except as described in paragraph (b) below.
  - (b) Any Special Experience Requirement that pertains to the abatement of hazardous materials shall not be subject to the deletion and/or revision set forth above. Such Special Experience Requirement shall remain in full force and effect.
  - (c) Any Special Experience Requirement that provides that the entity performing the work must be licensed, authorized, certified, approved by or acceptable to the manufacturer, is deemed deleted and replaced with the requirement that such entity must be properly trained for the specified work.
  - (d) Any Special Experience Requirement that provides that the individual workers performing the work must be licensed, authorized, certified, approved by or acceptable to the manufacturer, is deemed deleted and replaced with the requirement that such individual workers must be properly trained for the specified work.
- (6) Alternate Bids: If the agency is requesting the submission of Alternate Bids, a Notice regarding such Alternate Bids is set forth in the Bid Booklet. In the event of any conflict or inconsistency between (1) the Notice regarding Alternate Bids set forth in the Bid Booklet and (2) a provision in the Specifications and/or the Contract Drawings regarding Alternate Bids, the Notice set forth in the Bid Booklet shall prevail. If the agency is not requesting the submission of Alternate Bids, as indicated by the absence of a Notice in the Bid Booklet, and the Specifications and/or the Contract Drawings contain any provision regarding Alternate Bids, such provision is deemed deleted.
- (7) Contractor Retained Engineer: If the Specifications and/or the Contract Drawings require the Contractor to retain an Engineer to provide engineering services for the Project, the following sentence is deemed inserted: "Such Engineer must be a Professional Engineer, licensed in the State of New York."

- (8) LEED Related Provisions: If the Specifications and/or the Contract Drawings require the Contractor to purchase FSC certified wood, rapidly renewable materials, or materials within 500 miles, such provisions are deemed deleted and replaced with the requirement that if the contractor has purchased FSC certified wood, rapidly renewable materials, or materials within 500 miles, the contractor shall submit such forms or documentation as may be required by the City in order for the USGBC to certify that the Project qualifies for the related LEED credit(s).
- (9) Guarantees: Requirements for Guarantees and Maintenance are set forth in Schedule B, which is included in the Addendum to the General Conditions. In the event of any conflict or inconsistency between (1) a guarantee and/or maintenance requirement set forth in the Specifications and/or the Contract Drawings and (2) a guarantee and/or maintenance requirement set forth in Schedule B, the guarantee and/or maintenance requirement set forth in Schedule B shall prevail.
- (10) Warranties: Requirements for Warranties are set forth in Schedule B, which is included in the Addendum to the General Conditions.
- (a) In the event of any conflict or inconsistency between (1) a warranty requirement set forth in the Specifications and/or the Contract Drawings and (2) a warranty requirement set forth in Schedule B, the warranty requirement set forth in Schedule B shall prevail.
- (b) In the event a warranty requirement set forth in the Specifications and/or the Contract Drawings is omitted from Schedule B, such omission from Schedule B shall have no effect and the Contractor's obligation to provide the manufacturer's warranty, as set forth in the Specifications and/or the Contract Drawings, shall remain in full force and effect.
- (c) In the event a warranty requirement for a particular item of material or equipment is omitted from Schedule B, as well as from the Specifications or the Contract Drawings, and the manufacturer of such item actually provides a warranty, the Contractor shall be obligated to obtain and deliver to the Commissioner the highest level of warranty actually provided by that manufacturer.
- (11) Exculpatory Provisions: In the event the Specifications and/or the Contract Drawings contain any provision whereby the consultant and/or any of its officers, employees or agents, including subconsultants, is absolved of responsibility for any act or omission, such provision is deemed deleted.
- (12) Insurance: Provisions regarding insurance coverage the Contractor is required to provide are set forth in Article 22 of the City of New York Standard Construction Contract and Schedule A, which is included in the Addendum to the General Conditions. In the event the Specifications and/or the Contract Drawings contain any provision regarding insurance requirements, such provision is deemed deleted.
- (13) Indemnification: Provisions regarding indemnification are set forth in Articles 7, 12, 22 and 57 of the City of New York Standard Construction Contract. In the event the Specifications and/or the Contract Drawings contain any provision regarding indemnification, such provision is deemed deleted.
- (14) Dispute Resolution: Provisions regarding dispute resolution are set forth in Article 27 of the City of New York Standard Construction Contract. In the event the Specifications and/or the Contract Drawings contain any provision regarding dispute resolution, such provision is deemed deleted.
- (15) Payment to Other Entities: In the event the Specifications and/or the Contract Drawings contain any provision which requires the Contractor to make payments to an entity other than a subcontractor and/or supplier providing services and/or material for the project, such provision is deemed deleted.
- (16) General Conditions: In the event of any conflict or inconsistency between (1) the Specifications and/or the Contract Drawings and (2) the General Conditions, the General Conditions shall prevail.
- (17) Standard Construction Contract: In the event of any conflict or inconsistency between (1) the Specifications and/or the Contract Drawings and (2) the City of New York Standard Construction Contract, the City of New York Standard Construction Contract shall prevail.

**SCHEDULE A (FOR PUBLICLY BID PROJECTS)**

**Contract Requirements**

Various Articles of the Contract refer to requirements which are set forth in Schedule A of the General Conditions. The Schedule set forth below specifies the following: (1) the referenced Articles of the Contract, and (2) the specific requirements applicable to the contract.

REFERENCE	ITEM	REQUIREMENTS	CONTRACT FOR GENERAL CONSTRUCTION
Article 14 Contract	Time of Completion	Consecutive Calendar Days	480 ccds
Article 15 Contract	Liquidated Damages	For each consecutive calendar day over completion time	\$ 400
Article 17 Contract	Sub- contracts	Not to exceed percent of Contract Price	60%
Article 21 Contract	Retainage	Percent of voucher	If 100% bonds are required 5% If 100% bonds are not required, and Contract Price is less than \$1,000,000 10% If 100% bonds are not required, and Contract Price is more than \$1,000,000 10%
Article 24 Contract	Maintenance & Guaranty	Percent of Contract Price	1%
Article 77 Contract	MWBE Program	See Subcontractor Utilization Plan in the Bid Booklet	

**SCHEDULE A (FOR PUBLICLY BID PROJECTS)**

**Relating to Article 22 - Insurance**

**PART I. Minimum Limits and Special Conditions**

Insurance indicated by a blackened box (■) or by (X) in the  to left will be required under this contract.

Types of Insurance (per Article 22 in its entirety, including listed paragraph)	Minimum Limits and Special Conditions
<p>■ Commercial General Liability      Art. 22.1.1</p>	<p>\$ 1,000,000 per occurrence \$ 2,000,000 aggregate (applicable separately to this Project)</p> <p>Additional Insureds: 1. City of New York, including its officials and employees, and 2. NYC Department of Cultural Affairs 3. Noguchi Foundation and Garden Museum</p>
<p>■ Workers' Compensation              Art. 22.1.2</p> <p>■ Disability Benefits Insurance        Art. 22.1.2</p> <p>■ Employers' Liability                    Art. 22.1.3</p> <p><input type="checkbox"/> Jones Act                                  Art. 22.1.4</p> <p><input type="checkbox"/> U.S. Longshoremen's and Harbor Workers Compensation Act Art. 22.1.4</p>	<p>Workers' Compensation: Statutory per New York State law without regard to jurisdiction</p> <p>Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction</p> <p>Employers' Liability: \$1,000,000 each accident</p>
<p><input type="checkbox"/> Builders' Risk                              Art 22.1.5</p> <p>■ Installation Floater</p>	<p>Applicable to Builders' Risk or Installation Floater:</p> <p>_____ 100 _____ % of total value of Work</p> <p>City of New York and the Contractor named as Loss Payee for the Work in order of precedence, as their interests may appear.</p> <p><u>Note:</u> Article 22.1.5 is revised by deleting the following sentence: "Such policy shall name as insureds the City, the Contractor, and its Subcontractors". This deletion applies to Builders' Risk and Installation Floater.</p>

**SCHEDULE A (FOR PUBLICLY BID PROJECTS)**

**Relating to Article 22 - Insurance**

**PART I. Minimum Limits and Special Conditions (Continued)**

Insurance indicated by a blackened box (■) or by (X) in the  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 checked="" type="checkbox"/> Comprehensive Business Auto Coverage Art. 22.1.6	\$ <u>1,000,000</u> per accident  If vehicles are used for transporting hazardous materials, the <b>Contractor</b> shall provide pollution liability broadened coverage for covered autos (endorsement CA 99 48) as well as proof of MCS 90  Additional Insured: 1. City of New York, including its officials and employees
<input type="checkbox"/> Pollution/Environmental Liability Art. 22.1.7	\$ _____ per occurrence  \$ _____ aggregate  Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
<input type="checkbox"/> Marine Protection and Indemnity Art. 22.1.8(a)	\$ _____ per occurrence  \$ _____ aggregate  Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____

**SCHEDULE A (FOR PUBLICLY BID PROJECTS)**

**Relating to Article 22 - Insurance**

**PART I. Minimum Limits and Special Conditions (Continued)**

Insurance indicated by a blackened box (■) or by (X) in the  to left will be required under this contract.

<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. City of New York, including its officials and employees, and 2. _____ 3. _____
<input type="checkbox"/> Marine Pollution Liability      Art. 22.1.8(d)	\$ _____ each occurrence  Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
[OTHER]      Art. 22.1.9  <input type="checkbox"/> Railroad Protective Liability      _____	\$ _____ per occurrence. \$ _____ aggregate  Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____



**SCHEDULE A (FOR PUBLICLY BID PROJECTS)**

**Relating to Article 22 - Insurance**

**PART I. Minimum Limits and Special Conditions (Continued)**

Insurance indicated by a blackened box (■) or by (X) in the  to left will be required under this contract.

<p>[OTHER]</p> <p align="center">Art. 22.1.9</p> <p><input type="checkbox"/> Asbestos Liability</p>	<p>Only required of the Contractor or Subcontractor performing any required asbestos removal.</p> <p>\$1,000,000 each occurrence, \$2,000,000 aggregate (Combined Single Limit);</p> <p>Additional Insureds: 1. City of New York, including its officials and employees, and 2. NYC Department of Cultural Affairs 3. Noguchi Foundation and Garden Museum</p>
<p>[OTHER]</p> <p align="center">Art. 22.1.9</p> <p>Boiler Insurance</p>	<p>\$200,000</p>
<p>[OTHER]</p> <p align="center">Art. 22.1.9</p> <p>■ Professional Liability</p> <p>In the event any section of the Specifications requires the Contractor to engage a Professional Engineer to provide design and/or engineering services, the Engineer engaged by the Contractor, as well as any sub consultant(s) performing professional services, shall provide Professional Liability Insurance.</p>	<p>\$1,000,000 per occurrence</p> <p>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 Agreement 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>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>

**SCHEDULE A (FOR PUBLICLY BID PROJECTS)**

**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 \_\_\_\_\_, 201\_\_

\_\_\_\_\_  
NOTARY PUBLIC

**SCHEDULE A (FOR PUBLICLY BID PROJECTS)**

**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**.

ACCO's Office, Insurance Unit

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30-30 Thomson Avenue, 4<sup>th</sup> Floor

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Long Island City, New York 11101

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**SCHEDULE B**

**Guarantees and Warranties**

(Reference: Article 1.22 of the General Conditions)

**GUARANTY FROM CONTRACTOR**

(1) **Contractor's Guaranty Obligation:** 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 the Contract), except for the areas of Work set forth below:

- Roofing, Waterproofing, and Joint Sealant Work. For these types of work, the guarantee period shall be (2) two years.
- Trees and/or Plant Material. For trees and/or plant material furnished and installed, the guarantee period shall be (2) two years. During the guarantee period, the Contractor shall provide all maintenance services set forth in the Specifications.

(2) **Guaranty Period:** The obligation of the Contractor, and its Surety under the Performance Bond, is limited to the period(s) of time specified above.

(3) **Other Provisions Deemed Deleted:** In the event the Specifications and/or the Contract Drawings contain any provisions regarding guaranty requirements, such provisions are deemed deleted and replaced with the guaranty requirements set forth in this Schedule B.

\*\*\*\*\*

**WARRANTY FROM MANUFACTURER**

(1) **Contractor's Obligation to Provide Warranties:** The items of material and/or equipment for which manufacturer warranties are required are listed below. For each item of material and/or equipment listed below, the Contractor shall obtain a written warranty from the manufacturer. Such warranty shall provide that the material or equipment is free from defects for the period set forth below and will be replaced or repaired within such specified period. The Contractor shall deliver all required warranties to the Commissioner.

(2) **Required Warranties:**

Specification Number	Material or Equipment	Warranty Period
071900	Elastomeric Sheet Waterproofing	3 years
071990	Water Repellents	2 years
079200	Joint Sealants	2 years
221000	RPZ	2 years
260500	Common Work Results for Electrical	1 year
263353	Emergency Lighting Central Inverter	1 year
265600	Exterior Lighting – Luminaires	3 years
	Metal Corrosion	3 years
	Color Retention	3 years
	Lamps	1 year
Specification Number	Material or Equipment	Warranty Period
328400	Plant Irrigation System	1 year
328400	Pressure Reducing Valve	1 year minimum
328400	Pressure Regulator	1 year minimum
328400	Manual Valves	1 year minimum

328400	Automatic Control Valves	1 year minimum
328400	Quick Couplers	1 year minimum
328400	Sprinklers	1 year minimum
328400	Drip Irrigation Lines	1 year minimum
328400	Drip Irrigation	1 year minimum
328400	Drip Irrigation Components	1 year minimum
328400	Flow Sensor	1 year minimum
328400	Master Valve	1 year minimum
328400	Moisture Sensor	1 year minimum
328400	Rain sensor	1 year minimum
328400	Quick Couplers	1 year minimum
328400	Controller Unit	1 year minimum
329300	Plants	Until Substantial Completion
329600	Transplanting	60 days

**(3) Application:** The obligations under the warranty for the periods specified above shall apply only to the manufacturer of the material or equipment, and not to the Contractor or its Surety; provided, however, the Contractor retains responsibility for obtaining all required warranties from the manufacturers and delivering the same to the Commissioner.

**(4) Other Provisions:** The warranty requirements set forth in this Schedule B are also included in the Specifications.

- (a) In the event of any conflict between a warranty requirement set forth in the Specifications and a warranty requirement set forth in Schedule B, the warranty requirement set forth in Schedule B shall take precedence.
- (b) In the event a warranty requirement set forth in the Specifications is omitted from Schedule B, such omission from Schedule B shall have no effect and the Contractor's obligation to provide the manufacturer's warranty, as set forth in the Specifications, shall remain in full force and effect
- (c) In the event a warranty requirement for a particular item of material or equipment is omitted from both Schedule B and the Specifications, and the manufacturer of such item actually provides a warranty, the Contractor shall be obligated to obtain and deliver to the Commissioner the highest level of warranty actually provided by that manufacturer.
- (d) In the event a warranty requirement is provided for a particular item of material or equipment, and such requirement specifies a warranty period that is longer than that which is actually provided by any of the specified manufacturers, the Contractor shall be obligated to obtain and deliver to the Commissioner the highest level of warranty actually provided by any of the specified manufacturers, unless otherwise directed in writing by the Commissioner.

**SCHEDULE C**

**Contract Drawings**

**(Reference: Article 1.04(A) of the General Conditions)**

The Schedule set forth below lists all Contract Drawings for the Project.

T-001.00	Legend, Index, Plot Plan
V-001.0.0	Partial Boundary and Topographic Survey
A005.00	Landscape Protection and Removals Plan
A006.00	Irrigation Plan
A007.00	Landscape Planting Plan
A008.00	Site Details
A009.00	Irrigation Details
A010.00	Demolition Removals and Protection – First Floor Plan
A101.00	First Floor Plan
A201.00	Garden Lighting Layout
A401.00	Exterior Elevations
A402.00	Exterior Elevations
A801.00	Garden Wall Details
A802.00	Garden Wall Details
A803.00	Details
A804.00	Garden Wall Details
A805.00	Garden Wall Details
S100.00	General Notes and Details
S200.00	First Floor Plan
S300.00	Sections
E001.00	Electrical Symbol List, Abbreviations and Partial Plan
E201.00	Garden Power and Lighting Plan – First Floor
P001.00	Plumbing Symbols and Notes
P100.00	Cellar and Roof Garden Plumbing Plan
P200.00	Plumbing Riser Diagram and Details

**SCHEDULE D**

**Not Used**

**SCHEDULE E**

Not Used





REPORT DATE		FMS ID #/PROJECT ID #: CONTRACT REGISTRATION #: PROJECT NAME:					TRADE: SHOP DRAWING LOG SHEET #					USE SEPARATE SHEET FOR EACH TRADE							
SPEC. SECT. #	DESCRIPTION	COORD. WITH CONTR.	SUBMITTAL			SUB. DATE	REQ'D DEL.	FABRIC. TIME	SUBMISSIONS										
			SHOP DWG.	SAMPLE	CAT. CUTS				REC'D	RET'D	ACTION	REC'D	RET'D	ACTION	REC'D	RET'D	ACTION		
015639	Plant Maintenance Schedule		X																
015639	Plant Service Firm Quals		X																
015639	Arborist Certification Letter		X																
015639	Arborist Maintenance Recommendations		X																
015639	Existing Condition Photos		X																
015639	Existing Condition Plans		X																
015639	ALB Compliance Agreement		X																
015700	Informational Data		X																
015700	Crate Design		X	X															
015700	Schedule		X																
015700	Qualification Data		X																
015700	Certification		X																
015700	Maintenance Recommendations		X																
015700	Documentation of Existing Conditions		X																
017300	Qualification for Land Survey & Prof Engineer		X																
017300	Certificates		X																
017300	Cutting & Patching Plan		X																
017300	Landfill Receipts & Records		X																
017300	Certified Survey		X																



USE SEPARATE SHEET FOR EACH TRADE

REPORT DATE		FMS ID #/PROJECT ID #: CONTRACT REGISTRATION #: PROJECT NAME:			TRADE: SHOP DRAWING LOG SHEET #													
SPEC. SECT. #	DESCRIPTION	COORD. WITH CONTR.	SUBMITTAL	SAMPLE	CAT. CUTS	SUB. DATE	REC'D DEL.	FABRIC. TIME	SUBMISSIONS									
			SHOP DWG.						REC'D	RET'D	ACTION	REC'D	RET'D	ACTION	REC'D	RET'D	ACTION	
040120	Cleaning Program		X															
040120	Cold & Hot Weather Procedures		X															
042200	Product Data				X													
042200	Shop Drawings		X															
042200	Samples - Initial			X	X													
042200	Samples - Verif			X	X													
042200	Materials List		X															
042200	Material Certs				X													
042200	Mix Designs		X															
042200	Statement of Compressive Strength of Masonry		X															
042200	Cold & Hot Weather Procedures		X															
055000	Product Data			X	X													
055000	Shop Drawings		X															
055000	Samples - Verif			X	X													
055000	Qualif Data		X															
055000	Mill Certs		X															
055000	Welding Certs		X															
055000	Paint Compatibility Certs		X															
064013	Exterior Arch Woodwork		X	X	X													







REPORT DATE		FMS ID #/PROJECT ID #: CONTRACT REGISTRATION #: PROJECT NAME:				TRADE: SHOP DRAWING LOG SHEET #										USE SEPARATE SHEET FOR EACH TRADE									
SPEC. SECT. #	DESCRIPTION	COORD. WITH CONTR.	SUBMITTAL			SUB. DATE	REQ'D DEL.	FABRIC. TIME	SUBMISSIONS		SUBMISSIONS		SUBMISSIONS		SUBMISSIONS		SUBMISSIONS		SUBMISSIONS		SUBMISSIONS				
			SHOP DWG.	SAMPLE	CAT. CUTS				REC'D	RET'D	ACTION	REC'D	RET'D	ACTION	REC'D	RET'D	ACTION	REC'D	RET'D	ACTION	REC'D	RET'D	ACTION		
265600	Samples-verif			X																					
265600	Qualif Data				X																				
265600	Field Qual Control Test Reports		X																						
265600	Operation and Maintenance Data		X																						
265600	Warranty				X																				
311000	Product Data				X																				
311000	Samples - Verif			X																					
311000	Existing Conditions		X																						
311000	Record Drawings		X																						
311000	Proposed Protection Measures		X																						
311000	Schedule of Demolition		X																						
311000	Inventory		X																						
311000	Pre-Demo Photos or Video		X																						
312000	Product Data								X																
312000	Samples - Verif			X																					
312000	Qual Data									X															
312000	Material Test Rps										X														
312000	Pre-exav photos or videotapes		X																						
315000	Shop Drawings		X																						









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END OF SECTION

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**CONTRACT # 1**  
**GENERAL CONSTRUCTION WORK**

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**SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

**1.2 SUMMARY**

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities. Included but not limited is:
  - 1. Protection of existing Siamese standpipe that must remain protected and active during the entire course of the project.
  - 2. Temporary fencing as shown within the site.
  - 3. Temporary fencing as required by local jurisdiction for the protection of the work and the public.
- B. Related Requirements:
  - 1. Division 01 Section "Temporary Tree and Plant Protection" for work.
  - 2. Division 01 Section "Temporary Sculpture Protection and Removals"
  - 3. Division 01 Section "Execution"
  - 4. Division 10 Section "Visual Display Surfaces"
  - 5. Divisions 22 and 26 for Plumbing, Electrical and Lighting Work
  - 6. Division 31 Section "Excavation Support and Protection".

**1.3 USE CHARGES**

- A. **General:** Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, The City of New York's construction forces, The Commissioner, occupants of Project, testing agencies, and authorities having jurisdiction.

- B. Sewer Service: Pay sewer-service use charges for sewer usage by all entities for construction operations.
- C. Water Service: Pay water-service use charges for water used by all entities for construction operations.
- D. Electric Power Service: Pay electric-power-service use charges for electricity used by all entities for construction operations.
- E. Water and Sewer Service from Existing System: Water from The Museum's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- F. Electric Power Service from Existing System: Electric power from The Museum's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

#### 1.4 ACTION SUBMITTALS

- A. Mobilization Plan: Showing sequence of operations and plan.
- B. Shop Drawings: Submit a plan showing the layout, post locations, materials and details for temporary fencing for review and coordination with landscape contractor and approval by the Commissioner. Provide calculations by a licensed professional engineer documenting structural stability and resistance to intrusion. Show temporary facilities, utility hookups, staging areas with connections to adjacent construction and detail to convey all aspects of protection provided.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Erosion- and Sedimentation-Control Plan: Show compliance with requirements of EPA Construction General Permit or authorities having jurisdiction, whichever is more stringent.
- B. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.
- C. Moisture-Protection Plan: Describe procedures and controls for protecting materials and construction from water absorption and damage.
  - 1. Describe delivery, handling, and storage provisions for materials subject to water absorption or water damage.
  - 2. Indicate procedures for discarding water-damaged materials, protocols for mitigating water intrusion into completed Work, and replacing water-damaged Work.

3. Indicate sequencing of work that requires water, such as sprayed fire-resistive materials, plastering, and terrazzo grinding, and describe plans for dealing with water from these operations. Show procedures for verifying that wet construction has dried sufficiently to permit installation of finish materials.
- D. **Dust-Control Plan:** Submit coordination drawing and narrative that indicates the dust-control measures proposed for use, proposed locations, and proposed time frame for their operation. Identify further options if proposed measures are later determined to be inadequate. Include the following:
1. Locations of dust-control partitions at each phase of work.
  2. Location of proposed air-filtration system discharge.
  3. Waste handling procedures.
  4. Other dust-control measures.

## 1.6 QUALITY ASSURANCE

- A. **Electric Service:** Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. **Tests and Inspections:** Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- C. **Accessible Temporary Egress:** Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.

## 1.7 PROJECT CONDITIONS

- A. **Temporary Use of Permanent Facilities:** Engage Installer of each permanent service to assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before The City of New York's acceptance, regardless of previously assigned responsibilities.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. **Chain-Link Fencing as shown:** Maximum grid dimension suitable to prevent a foot-hold for climbing, minimum 0.148-inch- thick, galvanized-steel, chain-link fabric fencing; minimum 12 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch- OD line posts and 2-7/8-inch- OD corner and pull posts driven into ground, with 1-5/8-inch- OD top and bottom rails.

- B. Wood Enclosure Fence: Plywood as shown in the drawings, framed with four 2-by-4-inch rails, with preservative-treated wood posts and lateral supporting numbers suitable to resist intrusion at all times. Provide heavy timber bases on each side of fence. Plywood facing shall be exterior paint grade, smooth enough to accept applied vinyl adhesive artwork.
- C. Polyethylene Sheet as may be required to provide protection to areas adjacent to construction: Reinforced, fire-resistive sheet, 10-mil minimum thickness, with flame-spread rating of 15 or less per ASTM E 84 and passing NFPA 701 Test Method 2.
- D. Dust-Control Adhesive-Surface Walk-off Mats: Provide mats minimum 36 by 60 inches.
- E. Insulation: Unfaced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.

## 2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. HVAC Equipment: Unless The Museum authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
  - 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
  - 2. Heating Units: Listed and labeled for type of fuel being consumed, by a qualified testing agency acceptable to authorities having jurisdiction, and marked for intended location and application.
  - 3. Permanent HVAC System: If The Museum authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return-air grille in system and remove at end of construction. and clean HVAC system as required in General Conditions.
- C. Air-Filtration Units: Primary and secondary HEPA-filter-equipped portable units with four-stage filtration. Provide single switch for emergency shutoff. Configure to run continuously.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.

- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

### 3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
  - 1. Arrange with utility company, The City of New York, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
  - 1. Connect temporary sewers to municipal system as directed by authorities having jurisdiction.
- C. Water Service: Coordinate connection to The Museum's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to The Museum. At Substantial Completion, restore these facilities to condition existing before initial use.
- D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
- E. Heating: Provide temporary heating required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.
- F. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.
  - 1. Prior to commencing work, isolate the HVAC system in area where work is to be performed according to coordination drawings.
    - a. Disconnect supply and return ductwork in work area from HVAC systems servicing occupied areas.
    - b. Maintain negative air pressure within work area using HEPA-equipped air-filtration units, starting with commencement of temporary partition construction, and continuing until removal of temporary partitions is complete.
  - 2. Maintain dust partitions during the Work. Use vacuum collection attachments on dust-producing equipment. Isolate limited work within occupied areas using portable dust-containment devices.
  - 3. Perform daily construction cleanup and final cleanup using approved, HEPA-filter-equipped vacuum equipment.

- G. **Ventilation and Humidity Control:** Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.
- H. **Electric Power Service:** Connect to The Museum's existing electric power service. Maintain equipment in a condition acceptable to The Museum.
- I. **Lighting:** Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
  2. Install lighting for Project identification sign.
- J. **Traffic Controls:** Comply with requirements of authorities having jurisdiction.
1. Protect existing site improvements to remain including curbs, pavement, and utilities.
  2. Maintain access for fire-fighting equipment and access to fire hydrants.
- K. **Dewatering Facilities and Drains:** Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
  2. Remove snow and ice as required to minimize accumulations.
- L. **Project Signs:** Provide Project signs as indicated in the General Conditions. Unauthorized signs are not permitted.
1. **Identification Signs:** Provide Project identification signs as indicated on Drawings.
  2. **Temporary Signs:** Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.
    - a. Provide temporary, directional signs for construction personnel and visitors.
  3. Maintain and touchup signs so they are legible at all times.
- M. **Waste Disposal Facilities:** Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Division 01 Section "Execution."
- N. **Lifts and Hoists:** Provide facilities necessary for hoisting materials and personnel.
1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.



- O. **Temporary Elevator Use:** Use of elevators is not permitted.
- P. **Existing Stair Usage:** Use of The Museum's existing stairs will be permitted, provided stairs are cleaned and maintained in a condition acceptable to The Museum. At Substantial Completion, restore stairs to condition existing before initial use.
  - 1. Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If stairs become damaged, restore damaged areas so no evidence remains of correction work.

### 3.3 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. **Protection of Existing Facilities:** Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. **Environmental Protection:** Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
  - 1. Comply with work restrictions specified in the General Condition and the Addendum to the General Conditions.
- C. **Stormwater Control:** Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- D. **Tree and Plant Protection:** Comply with requirements specified in Division 01 Section "Temporary Tree and Plant Protection."
- E. **Pest Control:** Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using environmentally safe materials.
- F. **Site Enclosure Fence:** Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
  - 1. **Extent of Fence:** As indicated on the drawings and required to enclose entire Project site or portion determined sufficient to accommodate construction operations.
  - 2. **Maintain security by limiting number of keys and restricting distribution to authorized personnel.** Furnish one set of keys to The Museum.
- G. **Security Enclosure and Lockup:** Install temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security. Lock entrances at end of each work day.

- H. **Barricades, Warning Signs, and Lights:** Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- I. **Temporary Egress:** Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.
- J. **Covered Walkway:** Erect protective, covered walkway for passage of individuals through or adjacent to Project site. Coordinate with entrance gates, other facilities, and obstructions. Comply with regulations of authorities having jurisdiction and requirements indicated on Drawings.
1. Construct covered walkways using scaffold or shoring framing.
  2. Provide overhead decking, protective enclosure walls, handrails, barricades, warning signs, exit signs, lights, safe and well-drained walkways, and similar provisions for protection and safe passage.
  3. Paint and maintain appearance of walkway for duration of the Work.
- K. **Temporary Enclosures:** Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
1. Where heating or cooling is needed and permanent enclosure is incomplete, insulate temporary enclosures.
- L. **Temporary Partitions:** Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by The Museum from fumes and noise.
1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant-treated plywood on construction operations side.
  2. Construct dustproof partitions with two layers of 6-mil polyethylene sheet on each side. Cover floor with two layers of 6-mil polyethylene sheet, extending sheets 18 inches up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant-treated plywood.
    - a. Construct vestibule and airlock at each entrance through temporary partition with not less than 48 inches between doors. Maintain water-dampened foot mats in vestibule.
  3. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
  4. Insulate partitions to control noise transmission to occupied areas.
  5. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are required.
  6. Protect air-handling equipment.
  7. Provide walk-off mats at each entrance through temporary partition.

- M. **Temporary Fire Protection:** Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.
1. Prohibit smoking in construction areas.
  2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
  3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
  4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

### 3.4 MOISTURE AND MOLD CONTROL

- A. **Contractor's Moisture-Protection Plan:** Avoid trapping water in finished work. Document visible signs of mold that may appear during construction.
- B. **Exposed Construction Phase:** Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
1. Protect porous materials from water damage.
  2. Protect stored and installed material from flowing or standing water.
  3. Keep porous and organic materials from coming into prolonged contact with concrete.
  4. Remove standing water from working areas and existing surfaces.
- C. **Partially Enclosed Construction Phase:** After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
1. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
  2. Keep interior spaces reasonably clean and protected from water damage.
  3. Periodically collect and remove waste containing cellulose or other organic matter.
  4. Discard or replace water-damaged material.
  5. Do not install material that is wet.
  6. Discard, replace, or clean stored or installed material that begins to grow mold.
  7. Perform work in a sequence that allows any wet materials adequate time to dry before enclosing the material in drywall or other interior finishes.
- D. **Controlled Construction Phase of Construction:** After completing and sealing of the building enclosure but prior to the full operation of permanent HVAC systems, maintain as follows:
1. Control moisture and humidity inside building by maintaining effective dry-in conditions.
  2. Use permanent HVAC system to control humidity.

3. Comply with manufacturer's written instructions for temperature, relative humidity, and exposure to water limits.
  - a. Hygroscopic materials that may support mold growth, including wood and gypsum-based products, that become wet during the course of construction and remain wet for 48 hours are considered defective.
  - b. Measure moisture content of materials that have been exposed to moisture during construction operations or after installation. Record readings beginning at time of exposure and continuing daily for 48 hours. Identify materials containing moisture levels higher than allowed. Report findings in writing to The Commissioner.
  - c. Remove materials that can not be completely restored to their manufactured moisture level within 48 hours.

### 3.5 OPERATION, TERMINATION, AND REMOVAL

- A. **Supervision:** Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. **Maintenance:** Maintain facilities in good operating condition until removal.
  1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Operate Project-identification-sign lighting daily from dusk until 12:00 midnight.
- D. **Temporary Facility Changeover:** Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- E. **Termination and Removal:** Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
  1. Materials and facilities that constitute temporary facilities are property of Contractor. The City of New York reserves right to take possession of Project identification signs.
  2. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in the General Conditions.

END OF SECTION 015000

## SECTION 015639 - TEMPORARY TREE AND PLANT PROTECTION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

##### A. Section includes:

1. Services of an ISA Certified Arborist
2. Services of a Plant Service Firm
3. Plant Protection Fencing
4. General protection and care of all existing plants within the Project limits.
5. General protection and care of all existing site elements.
6. Crown and root and pruning of existing trees and plants that are affected by execution of the Work, whether temporary or permanent construction.
7. Decompaction of Soils
8. Plant and Pest Control

##### B. Related Sections:

1. Section 311000 "Site Clearing" for removing existing trees and shrubs.
2. Section 329300 "Plants"
3. Section 329600 "Transplanting" for removing existing plants to be salvaged for transplanting.

#### 1.3 DEFINITIONS

- A. **Caliper:** Diameter of a trunk measured by a diameter tape at 6 inches above the ground for trees up to, and including, 4-inch size; and 12 inches above the ground for trees larger than 4-inch size.
- B. **Plant-Protection Zone:** Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and indicated on Drawings.

- C. **Tree-Protection Zone:** Area surrounding individual trees or groups of trees to be protected during construction, and indicated on Drawings.
- D. **Vegetation:** Trees, shrubs, groundcovers, grass, and other plants.

#### 1.4 ACTION SUBMITTALS

- A. **Product Data:** For each type of product indicated.
- B. **Samples for Verification:** For each type of the following:
  - 1. **Organic Mulch:** 1-quart volume of organic mulch; in sealed plastic bags labeled with composition of materials by percentage of weight and source of mulch.
  - 2. **Protection-Zone Fencing:** One Full size picket and 1 18" x 18" section of coated wire mesh.
- C. **Plant Maintenance Schedule (During Construction):** Written schedule detailing scope and extent of maintenance of all plant material within the project limit including groundcovers, shrubs and trees.
  - 1. **Species and size of plant.**
  - 2. **Specific maintenance requirements for each plant.**
  - 3. **Location on site plan. Include unique identifier for each.**
  - 4. **Reason for pruning if (required.)**
  - 5. **Description of pruning to be performed (if required).**
  - 6. **Description of maintenance following pruning.**

#### 1.5 INFORMATIONAL SUBMITTALS

- A. **Qualification Data:** For qualified arborist and plant service firm.
- B. **Certification:** From arborist, certifying that groundcovers, shrubs and trees indicated to remain have been protected during construction according to recognized standards and that plants were promptly and properly treated and repaired when damaged.
- C. **Maintenance Recommendations:** From arborist, for care and protection of trees and shrubs affected by construction during and after completing the Work.
- D. **Existing Conditions:** Documentation of existing trees and plantings indicated to remain, which establishes preconstruction conditions that might be misconstrued as damage caused by construction activities.
  - 1. **Use sufficiently detailed photographs or videotape.**
  - 2. **Include plans and notations to indicate specific wounds and damage conditions of each tree or other plants designated to remain.**

## 1.6 QUALITY ASSURANCE

- A. **Arborist Qualifications:** Certified Arborist as certified by ISA. Arborist must have previous experience similar to the specific project site and be familiar with all existing plant materials. Arborist or a member of the arborists firm must also have experience with deciduous and evergreen shrubs.
- B. **Plant Service Firm Qualifications:** An experienced plant service firm that has successfully completed temporary tree and plant protection work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site during execution of the Work.
- C. **Preinstallation Conference:** Conduct conference at Project site.
  - 1. Review methods and procedures related to temporary tree and plant protection including, but not limited to, the following:
    - a. Construction schedule. Verify availability of materials, personnel, and equipment needed to make progress and avoid delays.
    - b. Enforcing requirements for protection zones.
    - c. Arborist's responsibilities.
    - d. Field quality control.

## 1.7 PLANT PEST CONTROL REQUIREMENTS

- A. The Contractor for General Construction Work (the "Contractor") and its subcontractors shall comply with all Federal and New York State laws and regulations concerning Asian Longhorned Beetle management. The Contractor is referred to Part 139 to Title 1 NYCRR, Agriculture and Markets Law section 18, 164 and 167, as amended; and, State Administrative Procedure Act, section 202, as amended.
- B. All tree work performed within the quarantine areas must be performed by New York State Department of Agriculture and Markets (NYSDAM) certified entities. Transportation of all host material, living, dead, cut or fallen, inclusive of nursery stock, logs, green lumber, stumps, roots, branches and debris of a half inch or more in diameter from the quarantine areas is prohibited unless the Contractor or its sub contractor performing tree work has entered into a compliance agreement with NYSDAM. The terms of said compliance agreement shall be strictly complied with. Any host material so removed shall be delivered to a facility approved by NYSDAM. For the purpose of this contract host material shall be ALL species of trees.
- C. Any host material that is infected with the Asian Longhorned Beetle must be immediately reported to NYSDAM for inspection and subsequent removal by either State or City contracts, at no cost to the Contractor.
- D. Prior to commencement of tree work, the Contractor shall submit to the Commissioner a copy of a valid Asian Longhorned Beetle compliance agreement entered into with NYSDAM and the Contractor or its sub contractor performing tree work. If any host material is transported from the quarantine area the Contractor shall immediately provide the Commissioner with a copy of the New York State 'Statement of Origin and Disposition' and a copy of the receipt issued by the NYSDAM approved facility to which the host materials are transported.

- E. Quarantine areas, for the purpose of this contract shall be defined as all five boroughs of the City of New York. In addition, prior to the start of any tree work, the Contractor shall contact the NYC Department of Parks & Recreation's Director of Landscape Management at (718) 699-6724, to determine the limits of any additional quarantine areas that may be in effect at the time when tree work is to be performed. The quarantine area may be expanded by Federal and State authorities at any time and the Contractor is required to abide by any revisions to the quarantine legislation while working on this contract. For further information please contact: NYSDAM (631) 288-1751.
- F. No Separate Payment. No separate payment shall be made for Plant Pest Control. The cost for Plant Pest Control shall be deemed included in the Contractor's bid for the Project.

## 1.8 PROJECT CONDITIONS

- A. The following practices are prohibited within protection zones:
1. Storage of construction materials, debris, or excavated material.
  2. Parking vehicles or equipment.
  3. Foot traffic.
  4. Erection of sheds or structures.
  5. Impoundment of water.
  6. Excavation or other digging unless otherwise indicated.
  7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- B. Do not direct vehicle or equipment exhaust toward protection zones.
- C. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones and organic mulch.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Planting Soil: Refer to Section 329300 "Plants"
- B. Organic Mulch: Free from deleterious materials and suitable as a top dressing for trees and shrubs, consisting of one of the following:
1. Type: Shredded hardwood
  2. Size Range: 3 inches maximum, 1/2 inch minimum.
  3. Color: Natural (non-dyed)
- C. Plant Protection-Zone Fencing: Fencing fixed in position and meeting the following requirements.
1. Protection-Zone Fencing:



- a. Polymer-coated steel U-Shaped or C-Shaped pickets, 5-foot lengths, color shall be black. Post spacing 4 feet.
  - b. Wire Mesh 2" x 2" openings, minimum 14 gauge thickness.
- D. Pneumatic Excavator: Air-Spade® CGP System, as manufactured by Concept Engineering Group, Inc. Verona, PA, or approved equal.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Erosion and Sedimentation Control: Examine the site to verify that temporary erosion- and sedimentation-control measures are in place. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- B. For the record, prepare written report, endorsed by arborist, listing conditions detrimental to tree and plant protection.

#### 3.2 PREPARATION

- A. Locate and clearly identify trees, shrubs, and other vegetation to remain or to be removed. Tie a 1-inch blue-vinyl tape around plants to remain and a 1-inch red-vinyl tape around plants to be removed or transplanted..
- B. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Protect root systems from ponding, eroding, or excessive wetting caused by dewatering operations.
- C. Tree-Protection Zones: Mulch areas inside tree-protection zones if recommended by the arborist.
  1. Apply 4-inch average thickness of organic mulch. Do not place mulch within 6 inches of tree trunks.

#### 3.3 PLANT-PROTECTION ZONES

- A. Protection-Zone Fencing: Install protection-zone fencing along edges of protection zones before materials or equipment are brought on the site and construction operations begin in a manner that will prevent people and animals from easily entering protected area except by entrance gates. Construct fencing so as not to obstruct safe passage or visibility where fencing is located adjacent to pedestrian walkways or in close proximity to street intersections, drives, or other vehicular circulation.
  1. Posts: Set or drive posts into ground one-third the total height of the fence without concrete footings. Where a post is located on existing paving or concrete to remain, provide appropriate means of post support acceptable to Commissioner.

- B. Maintain protection zones free of weeds and trash.
- C. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Commissioner.
- D. Maintain protection-zone fencing in good condition as acceptable to Commissioner and remove when construction operations are complete and equipment has been removed from the site.
  - 1. Do not remove protection-zone fencing, even temporarily, to allow deliveries or equipment access through the protection zone.
  - 2. Temporary access is permitted subject to preapproval in writing by arborist if a root buffer effective against soil compaction is constructed as directed by arborist. Maintain root buffer so long as access is permitted.

### 3.4 SITE PROTECTION

- A. Prior to any excavation, by either pneumatic excavation or hand excavation, all surrounding areas, plant material and site features shall be protected to prevent damage or contamination. All traprock areas and planting beds shall be covered to prevent the intrusion of excavated soils. All plants and tree trunks shall be protected. All other site features shall be protected in a manner acceptable to the City of New York.

### 3.5 EXCAVATION

- A. Trenching near Plants: Where utility trenches are required the edge of the trench shall be excavated using a pneumatic excavator to expose the roots. Do not cut main lateral tree roots or taproots; cut only smaller roots that interfere with installation of utilities. Cut roots as required for root pruning.
- B. Redirect roots in backfill areas where possible. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and redirect them without breaking. If encountered immediately adjacent to location of new construction and redirection is not practical, cut roots approximately 3 inches back from new construction and as required for root pruning.
- C. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.

### 3.6 ROOT PRUNING

- A. Prune roots that are affected by temporary and permanent construction. Prune roots as directed by the Arborist and as shown on Drawings and as follows:
  - 1. Clearly identify areas where trenches must be excavated and mark with non-permanent landscape paint.
  - 2. By means of a pneumatic excavator slowly remove soil to expose the root system.

3. Cut roots manually by cutting exposed roots with sharp pruning instruments; do not break, tear, chop, or slant the cuts. Do not use a backhoe or other equipment that rips, tears, or pulls roots.
4. Cut Ends: Do not coat cut root ends unless recommended by the Arborist. If recommended by the Arborist coat the root ends in a manner that is acceptable to arborist.
5. Temporarily support and protect roots from damage until they are permanently redirected and covered with soil.
6. Cover exposed roots with burlap and water regularly.
7. Backfill as soon as possible according to requirements in Section 312000 "Earth Moving."

### 3.7 CROWN PRUNING

- A. Prune branches that are affected by temporary and permanent construction. Prune branches as recommended by the arborist and as follows:
  1. Prune trees to remain to compensate for root loss caused by damaging or cutting root system. Provide subsequent maintenance during Contract period as recommended by arborist.
  2. Pruning Standards: Prune trees according to ANSI A300 (Part 1) and the following:
    - a. Type of Pruning: Cleaning, Thinning, Raising and Reduction.
    - b. Specialty Pruning: Restoration and Vista.
  3. Cut branches with sharp pruning instruments; do not break or chop.
  4. Do not apply pruning paint to wounds.
- B. Chip removed branches and dispose of off-site.

### 3.8 SOIL DECOMPACTION

- A. If recommended by the arborist the soils the soils surrounding trees shall be decompacted after major construction activities are completed.
- B. Soil Decompaction shall be performed utilizing one of the following methods as recommended by the Arborist:
  1. Air-Tilling of the Critical Root Zone Method: Using a pneumatic device, The area within a 3 to 5 foot radius of the tree stem, and specified on the Tree Protection Plan, is to be tilled to a depth of 6 to 8-inches using a compressed air gun. Compost backfill shall be applied to the area at a depth of 1-inch and tilled into the soil using a compressed air gun. The area shall be top dressed with four-inches (4") of shredded bark mulch and thoroughly watered.
  2. Radial Trenching Method: Using a pneumatic device, narrow trenches, 18 to 24-inches wide, shall be cut in a radial pattern throughout the root zone. These trenches appear similar to the spokes of a wagon wheel. The trenches shall begin two (2') feet from the trunk of the tree and between buttress roots to avoid cutting any major support roots. The trenches should extend at least as far as the dripline of the tree. The trenches shall be 8-12 inches in depth. Compost backfill shall be used to fill the

trenches. Where required, fertilizer may be mixed with the compost and applied. The area shall be thoroughly watered after completion.

3. **Vertical Mulching Method:** Three inch (3") diameter holes shall be excavated 12" deep, spaced 30" on center in a grid pattern throughout the root zone of the tree. Compost backfill shall be used to fill the holes and the area shall be thoroughly watered after completion.

Tree DBH	Number of 3" Dia. Holes
0-6"	40
6-12"	60
12-18"	80
18-24"	100
24-30"	120
30-36"	160
36-42"	180
42-48"	200
over 48"	220

### 3.9 REGRADING

- A. **Lowering Grade:** Where new finish grade is indicated below existing grade around trees, slope grade beyond the protection zone. Maintain existing grades within the protection zone.
- B. **Lowering Grade within Protection Zone:** Where new finish grade is indicated below existing grade around trees, slope grade away from trees as recommended by arborist unless otherwise indicated.
1. **Root Pruning:** Prune tree roots exposed by lowering the grade. Do not cut main lateral roots or taproots; cut only smaller roots. Cut roots as required for root pruning.
- C. **Raising Grade:** Where new finish grade is indicated above existing grade around trees, slope grade beyond the protection zone. Maintain existing grades within the protection zone.
- D. **Minor Fill within Protection Zone:** Where existing grade is 2 inches or less below elevation of finish grade, fill with topsoil. Place topsoil in a single uncompacted layer and hand grade to required finish elevations.

### 3.10 FIELD QUALITY CONTROL

- A. **Inspections:** Engage a qualified arborist to direct plant-protection measures in the vicinity of trees, shrubs, and other vegetation indicated to remain and to prepare inspection reports.

### 3.11 REPAIR AND REPLACEMENT

- A. **General:** Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Commissioner.

July 19, 2012

1. Submit details of proposed root cutting and tree and shrub repairs.
2. Have arborist perform the root cutting, branch pruning, and damage repair of trees and shrubs.
3. Treat damaged trunks, limbs, and roots according to arborist's written instructions.
4. Perform repairs within 24 hours.
5. Replace vegetation that cannot be repaired and restored to full-growth status, as determined by Commissioner.

B. Trees: Remove and replace trees indicated to remain that are more than 25 percent dead or in an unhealthy condition before the end of the corrections period or are damaged during construction operations that Commissioner determines are incapable of restoring to normal growth pattern.

a. Provide new trees of same size and species as those being replaced for each tree.

2. Plant and maintain new trees as specified in Section 329300 "Plants."

C. Soil Aeration: Where directed by the Arborist, aerate surface soil compacted during construction. Aerate 10 feet beyond drip line and no closer than 36 inches to tree trunk. Drill 2-inch diameter holes a minimum of 12 inches deep at 24 inches o.c. Backfill holes with an equal mix of augered soil and sand.

### 3.12 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Disposal: Remove excess excavated material, displaced trees, trash and debris, and legally dispose of them off City of New York's property.

END OF SECTION 015639

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## SECTION 015700 - TEMPORARY SCULPTURE PROTECTION AND REMOVALS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

##### A. Section includes:

1. Services of a licensed Art Rigger experienced in art handling, protection and relocation and storage
2. Off-site construction of protective crates for use on site
3. Protecting and crating sculptures identified to remain on site during construction
4. Protection, rigging, removal and storage of sculptures required to be taken off site during construction.
5. Coordination with General Contractor to survey, protect or reconstruct existing footings or bases for eventual reinstallation.
6. Identification and provision of an industry-established off-site storage facility providing a clean, dry and secure (alarmed and guarded) art storage warehouse for temporary relocation.
7. Associated protection of adjacent areas.
8. After the completion of construction, return, relocation and re-attachment of all pieces temporarily removed.
9. Removal of protection and packing materials from sculpture stored on and off-site at the completion the project.
10. Labor, equipment and tools to perform all work described above.

##### B. Related Sections:

1. Section 015000 "Temporary Facilities and Controls."
2. Section 017300 "Execution"
3. Section 024119 "Selective Demolition"
4. Museum's inventory of sculptures to remain or be moved, Appendix to this Section.

1.3 DEFINITIONS – Not Used

1.4 ACTION SUBMITTALS

A. Informational Data:

1. For off-site storage facility proposed indicating documenting experience with valuable artwork and associated controlled and secure environment.
2. Material data sheets and samples of all packing materials to be used at the interior of the crates.
3. Evidence of insurance of Rigger

B. Shop Drawings:

1. Drawings that describe the assembly, materials and details of each crate and the way in which it interfaces with the sculpture.

C. Samples for Verification: For typical crate:

1. Typical crate(s) for work to be taken off-site and protected in place.

D. Crating and Moving Schedule (During Construction): After discussion with the Commissioner and the Museum, provide a written schedule detailing scope and extent of protection, rigging and removals required. Report will include but not be limited to:

1. Identification of each piece in question and proposed method of handling.
2. Methods and materials used for protection including strength of exterior enclosure to damage from impact.
3. Full description of methods and equipment for maneuvering within the Garden.
4. Location on site plan. Include unique identifier for each.
5. Identification of protection around the sculpture and associated Garden.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For qualified licensed rigger and art storage facility.

B. Certification: From rigger, certifying that sculptures indicated to remain have been protected during construction according to recognized standards and that sculptures designated for off-site storage are to be handled according to the highest industry and professional standards.

C. Maintenance Recommendations: Written report and drawing documenting recommendations from rigger, for care and protection of sculpture affected by construction during and after completing the Work.

D. Existing Conditions: Documentation of existing sculpture and precise measurement, particular materials and fragile surfaces of all sculptures and respective footings to establish preconstruction conditions that might be misconstrued as damage caused by construction activities.

1. Use sufficiently detailed photographs or videotape.



2. Measured drawings indicating size, approximate weight and detailed characteristics.
3. Include detailed notations to indicate specific conditions of each piece.

## 1.6 QUALITY ASSURANCE

- A. Art Rigger Qualifications: Rigger must have previous experience similar to the specific project site and be familiar with all existing sculptures. Rigger must have an experienced team comprised of as many experienced and certified riggers necessary to complete the scope and character of the work at the highest level of professional competence.
- B. Art Rigger and Storage Facility Qualifications: An experienced Art Rigger firm that has successfully completed artwork protection, moving and off-site storage handling of work similar to that required for this Project and that will assign an experienced, qualified Master Rigger (foreman) to Project site during execution of the Work.
- C. Preinstallation Conference: Conduct conference at Project site.
  1. Review methods and procedures related to temporary sculpture protection including, but not limited to, the following:
    - a. Construction schedule. Verify availability of materials, personnel, and equipment needed to make progress and avoid delays.
    - b. Identification of sculptures to remain and be protected and those to be stored off-site.
    - c. Rigger's responsibilities.
    - d. Review of conditions and coordination of visit for Commissioner to visit off-site art storage facility.
    - e. Field quality control.

## 1.7 PROJECT CONDITIONS

- A. The following practices are prohibited within protection zones:
  1. Storage of construction materials, debris, or excavated material.
  2. Parking vehicles or equipment.
  3. Foot traffic.
  4. Excavation or other digging unless otherwise indicated.
  5. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- B. Do not direct vehicle or equipment exhaust toward protection zones.
- C. Prohibit heat sources, flames, ignition sources and smoking within or near Garden.

## PART 2 - PRODUCTS

### 2.1 CONTRACTORS

- A. Specialists in Art Crating, Moving and Storage
1. DunRite Specialized Riggers & Carriers
  2. Griffen Art Services, a subsidiary of Artex Fine Arts
  3. Marshall Fine Arts Rigging & Art Storage
  4. Or approved equal

### 2.2 MATERIALS

- A. Finish Carpentry: For crates made off-site and used on site, lumber should be paint-grade for and built in a clean and orderly way that will be acceptable to public view.
1. The crates are to be painted and/or labeled as directed by the Commissioner.
- B. Crate Exterior
1. Enclosure: to be built of 3/8" MDO water resistant plywood exterior with 2" x 4" skids at base of crate for forklift access. Crates over 6'-0" in width must be fitted with skids to provide end-access.
  2. Lids: must have a flat surface, reinforced to protect against impact from above. Secured with bolts and plates unless the Museum indicates otherwise. Rubber, thicker than bolt plates, must wrap around top rim.
  3. Access: Top or side access will be dictated by the Museum depending up on the nature of the artwork.
    - a. Top access cannot exceed 34" in depth.
    - b. All stone sculpture must be crated for side access, confirmed by the Museum.
- C. Crate Interior
1. Interior construction will be one of three types listed below, as designated and approved by the Museum and the Commissioner.
  2. Interior walls of all crates should be lined with Tyvek or other waterproof paper.
  3. All "cavity" and "slot" crates must be lined with 2" of polyurethane foam.
  4. Cavity Packed
    - a. Cavity must be a minimum of 4" on all sides between the innermost surface of the crate and the artwork to be crated.
    - b. Cavity to be made from anti-static esterfoam and lined with white felt, *Nomex* or *Gortex* or approved equal. Foam is to be cut to fit the contour of the object securely to prevent movement during transit.
    - c. The same cavity material is to be fitted at the top of the object as an interior covering.
  5. Brace Packed
    - a. Foam liner is comparable to the Cavity Packed but requires foam to the bottom of the interior to protect against impact.
    - b. All braces are to be constructed of Ethafoam from Dow or equivalent from Dupont or Corning; or wood. Braces are to be covered with white felt, *Nomex* or *Gortex* or approved equal depending on the character of the artwork.

- c. All braces should slide into place and fit the contour of the object precisely.
  - d. Heavy stone works should rest of Masonite for easy removal. Braces for heavy stones can slide or be affixed with exterior screws.
6. Slot Crates
- a. "Slot" crate construction assumes the construction of an inner crate
  - b. Inner crate to be constructed of ¾" pine or archival corrugated board lined with pine boards for rigidity, provided from an approved source for museum quality archival materials.
  - c. Interior of "Slot" crates will be brace-packed or cavity-packed, as described above.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine the site to verify that the sculptures and their condition are properly documented.
- B. For the record, prepare written report, endorsed by Art Rigger, listing conditions detrimental to sculpture relocation or protection.

#### 3.2 PREPARATION

- A. Protect areas around where work will take place to protect or prepare for relocation.
- B. Coordinate with Contractor, the Commissioner and the arborist before commencing work to make sure that all precautions have been properly anticipated.

#### 3.3 CRATING, RIGGING and STORAGE

- A. Equipment
  - 1. The range of equipment used, in coordination with the approved plan, may include Air Bearings, Blocks, Dollies, Gentries (Jib cranes), Cumalongs, Jacks (pallet and otherwise), Synthetic round and Synthetic Flat Slings, Pry Bars, Forklift (high/low).
  - 2. A lift gate with a capacity to hold five thousand 5,000lbs minimum and a strap/tie down system inside the truck.
- B. Off Site Storage Facility
  - 1. Storage of the crated artworks must be in a Alarmed, Clean & Private locked warehouse space.
  - 2. The crated works must NOT be stacked.
  - 3. He crated works must be made accessible for inspection by Noguchi Museum employees.

3.4 FIELD QUALITY CONTROL

- A. Inspections: Engage a qualified Art Rigger to remain and to prepare inspection reports during the course of construction.

3.5 REPAIR AND REPLACEMENT

- A. General: Repair or replace protection that is damaged by construction operations, in a manner approved by Commissioner.

1. Perform repairs within 24 hours.

3.6 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Disposal: Remove excess excavated material, displaced trees, trash and debris, and legally dispose of them off City of New York's property.



18.

**Isamu Noguchi**

*Spin-Off #1 the from Chase Manhattan Garden,  
1961 - 1964*

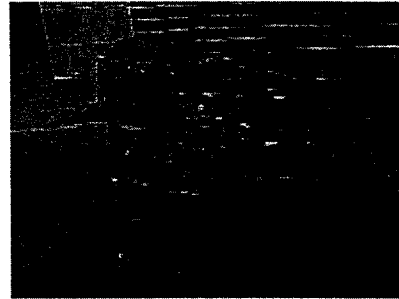
Basalt

29 1/4 x 38 1/2 x 38 5/8 in. (74.3 x 97.8 x 98.1 cm)

The Isamu Noguchi Foundation and Garden

Museum, New York

CR# 514A-1/5



16.

**Isamu Noguchi**

*Spin-off from the Chase Manhattan Garden, 1961 -  
1964*

Granite

10 x 52 x 22 in. (25.4 x 132.1 x 55.9 cm)

The Isamu Noguchi Foundation and Garden

Museum, New York

CR# 514B



11.

**Isamu Noguchi**

*Bench, c. 1962*

Granite

Element (A): 18 1/4 x 90 x 16 in., 998.7 lb. (46.4 x  
228.6 x 40.6 cm, 453 kg)

Element (B): 19 x 48 1/2 x 16 1/4 in., 699.1 lb. (48.3  
x 123.2 x 41.3 cm, 317.1 kg)

18 x 105 3/4 x 47 in. (45.7 x 268.6 x 119.4 cm)

The Isamu Noguchi Foundation and Garden

Museum, New York

CR# 535



15.

**Isamu Noguchi**

*Indian Dancer, 1965 - 1966*

Granite

60 1/4 x 34 5/8 x 17 3/8 in. (153 x 87.9 x 44.1 cm)

Base: 14 x 22 x 15 in. (35.6 x 55.9 x 38.1 cm)

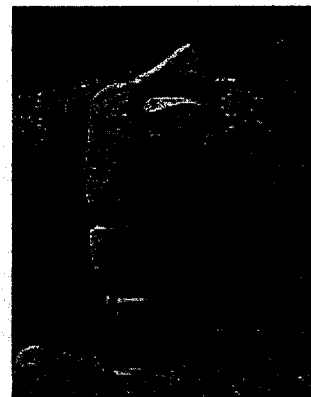
Weight: 1627.9 lb. (738.4 kg)

Weight (base): 424.4 lb. (192.5 kg)

The Isamu Noguchi Foundation and Garden

Museum, New York

CR# 580



8.

**Isamu Noguchi**

*Miharu, c. 1968*

Miharu granite

47 1/2 x 44 1/4 x 16 1/2 in. (120.7 x 112.4 x 41.9 cm)

Base: 26 1/2 x 30 1/2 x 13 3/8 in. (67.3 x 77.5 x 34 cm)

The Isamu Noguchi Foundation and Garden Museum, New York

CR# 640



6.

**Isamu Noguchi**

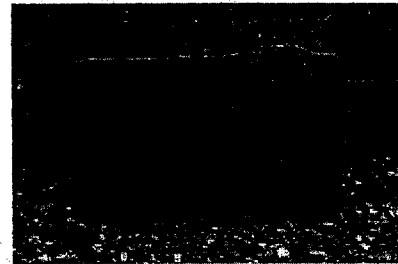
*Squares, 1969*

Granite

36 1/4 x 53 1/8 x 7 7/8 in. (92.1 x 134.9 x 20 cm)

The Isamu Noguchi Foundation and Garden Museum, New York

CR# 671



21.

**Isamu Noguchi**

*Illusion of the Fifth Stone, 1970*

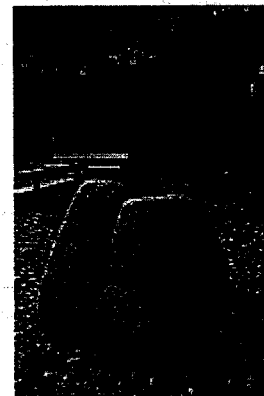
Aji granite

47 5/8 x 66 1/2 x 57 in. (121 x 168.9 x 144.8 cm)

Weight: 7989.5 lb. (3624 kg)

The Isamu Noguchi Foundation and Garden Museum, New York

CR# 681



23.

**Isamu Noguchi**

*Unmei, 1970*

Basalt

33 3/4 x 134 1/2 x 43 1/2 in. (85.7 x 341.6 x 110.5 cm)

Base: 16 x 11 x 60 in. (40.6 x 27.9 x 152.4 cm)

Base: 15 3/4 x 11 x 61 in. (40 x 27.9 x 154.9 cm)

Weight: 9986.8 lb. (4530 kg)

The Isamu Noguchi Foundation and Garden Museum, New York

CR# 702



1.

**Isamu Noguchi**

*Uruguayan, 1973*

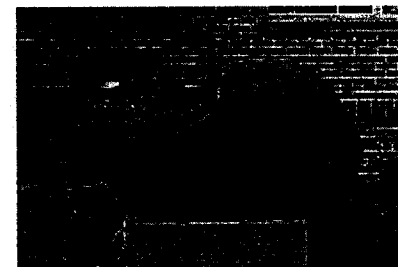
Granite

26 3/8 x 49 3/4 x 21 1/8 in. (67 x 126.4 x 53.7 cm)

Base: 18 x 29 1/2 x 15 3/4 in. (45.7 x 74.9 x 40 cm)

The Isamu Noguchi Foundation and Garden Museum, New York

CR# 733.01



20.

**Isamu Noguchi**  
*End Pieces, 1974*

Swedish granite

59 1/8 x 38 7/8 x 31 5/8 in. (150.2 x 98.7 x 80.3 cm)

Base: 9 3/4 x 5 3/8 x 13 3/8 in. (24.8 x 13.7 x 34 cm)

Base: 9 3/4 x 5 3/8 x 13 1/8 in. (24.8 x 13.7 x 33.3 cm)

Base: 9 3/4 x 5 3/8 x 12 3/4 in. (24.8 x 13.7 x 32.4 cm)

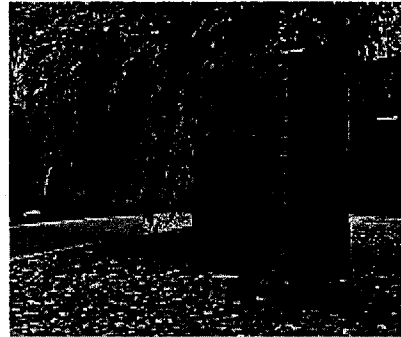
Base: 9 3/4 x 5 3/8 x 13 1/8 in. (24.8 x 13.7 x 33.3 cm)

Weight: 2996.1 lb. (1359 kg)

The Isamu Noguchi Foundation and Garden

Museum, New York

CR# 737



10.

**Isamu Noguchi**  
*Seeking, 1974*

Miharu granite

28 7/8 x 26 3/8 x 21 1/2 in. (73.3 x 67 x 54.6 cm)

Base: 32 x 31 7/8 x 16 in. (81.3 x 81 x 40.6 cm)

Base (Element A): 13 x 31 3/4 x 15 7/8 in., 500 lb. (33 x 80.6 x 40.3 cm, 226.8 kg)

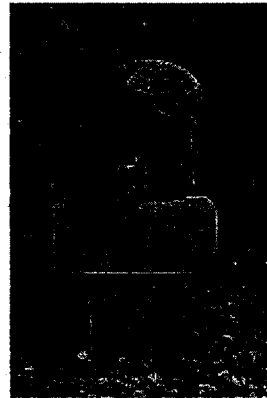
Base (Element B): 18 3/8 x 20 1/4 x 14 1/2 in., 500 lb. (46.7 x 51.4 x 36.8 cm, 226.8 kg)

Weight: 549.3 lb. (249.2 kg)

The Isamu Noguchi Foundation and Garden

Museum, New York

CR# 743



7.

**Isamu Noguchi**

*Behind Inner Seeking Shiva Dancing, 1976 - 1982*

Basalt

100 5/8 x 47 7/8 x 27 in. (255.6 x 121.6 x 68.6 cm)

Base: 3 5/8 x 39 7/8 x 39 7/8 in. (9.2 x 101.3 x 101.3 cm)

Weight: 8488.8 lb. (3850.5 kg)

The Isamu Noguchi Foundation and Garden

Museum, New York

CR# 751.01



22.

**Isamu Noguchi**

*The Big Bang, 1978*

Granite

17 1/2 x 75 x 56 in. (44.5 x 190.5 x 142.2 cm)

Weight: 3495.4 lb. (1585.5 kg)

The Isamu Noguchi Foundation and Garden

Museum, New York

CR# 796



12.

Isamu Noguchi  
*Core, 1978*

Basalt

74 x 34 7/8 x 27 1/2 in. (188 x 88.6 x 69.9 cm)  
Base: 5 x 45 1/4 x 38 1/2 in. (12.7 x 114.9 x 97.8 cm)  
Weight: 5892.2 lb. (2672.7 kg)

The Isamu Noguchi Foundation and Garden  
Museum, New York  
CR# 798



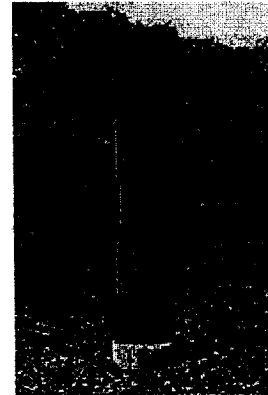
9.

Isamu Noguchi  
*To Tallness, 1981*

Manazuru stone

118 1/4 x 24 x 17 5/8 in. (300.4 x 61 x 44.8 cm)  
Base: 10 1/2 x 27 x 27 in. (26.7 x 68.6 x 68.6 cm)  
Weight: 3195.8 lb. (1449.6 kg)  
Weight (base): 550 lb. (249.5 kg)

The Isamu Noguchi Foundation and Garden  
Museum, New York  
CR# 947



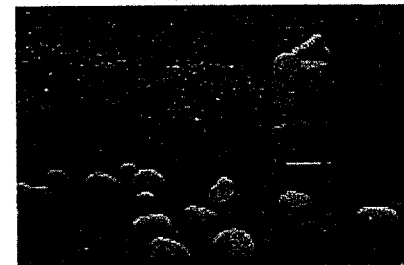
14.

Isamu Noguchi  
*Practice Rocks in Placement, 1982 - 1983*

Aji granite

699.1 lb. (317.1 kg)

The Isamu Noguchi Foundation and Garden  
Museum, New York  
CR# 994



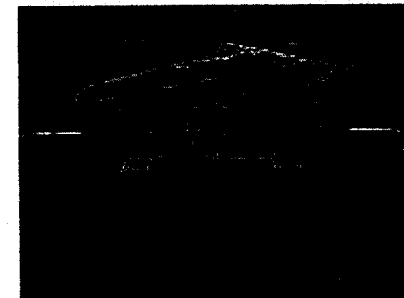
17.

Isamu Noguchi  
*Thebes, 1982*

Basalt

22 3/8 x 64 x 21 1/2 in. (56.8 x 162.6 x 54.6 cm)  
Base: 12 x 5 1/2 x 24 in. (30.5 x 14 x 61 cm)  
Base: 12 x 5 3/4 x 24 in. (30.5 x 14.6 x 61 cm)  
Weight: 1997.4 lb. (906 kg)

The Isamu Noguchi Foundation and Garden  
Museum, New York  
CR# 1000





July 19, 2012

19.

Isamu Noguchi

*Garden Table, 1983*

Granite

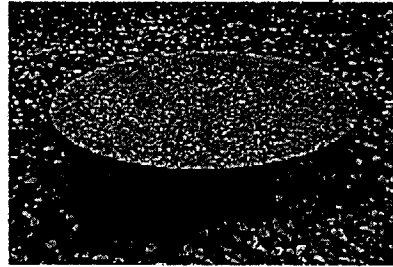
4 x 62 7/8 x 62 7/8 in. (10.2 x 159.7 x 159.7 cm)

Base: 15 7/8 x 35 5/8 x 35 5/8 in. (40.3 x 90.5 x 90.5 cm)

Weight: 1298.3 lb. (588.9 kg)

The Isamu Noguchi Foundation and Garden  
Museum, New York

CR# 1060



24.

Isamu Noguchi

*Basin and Range, 1984*

Mihara granite

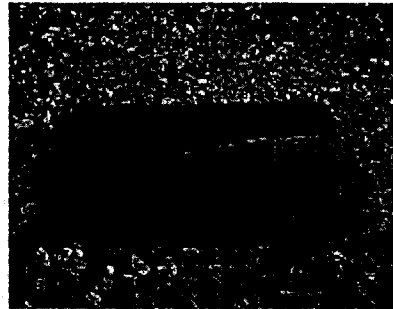
7 7/8 x 45 3/4 x 31 1/4 in. (20 x 116.2 x 79.4 cm)

Base (left support): 5 3/4 x 10 1/2 x 10 5/8 in. (14.6 x 26.7 x 27 cm)

Base (right support): 5 3/4 x 10 3/4 x 10 3/4 in. (14.6 x 27.3 x 27.3 cm)

The Isamu Noguchi Foundation and Garden  
Museum, New York

CR# 1070



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## SECTION 017300 - EXECUTION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
  - 1. Construction layout.
  - 2. Field engineering and surveying.
  - 3. Installation of the Work.
  - 4. Cutting and patching.
  - 5. Coordination of The City of New York-installed products.
  - 6. Progress cleaning.
  - 7. Starting and adjusting.
  - 8. Protection of installed construction.
  - 9. Correction of the Work.
- B. Related Requirements:
  - 1. Division 01 Section "Temporary Facilities and Controls"
  - 2. Division 01 Section "Temporary Tree and Plant Protection"
  - 3. Division 01 Section "Temporary Sculpture Protection and Removals"
  - 4. Division 01 Section "Submittal Procedures" for submitting surveys.
  - 5. Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of The City of New York-accepted deviations from indicated lines and levels, and final cleaning.
  - 6. Division 02 Section "Selective Demolition" for demolition and removal of selected portions of the building.

### 1.3 DEFINITIONS

- A. **Cutting:** Removal of in-place construction necessary to permit installation or performance of other work.
- B. **Patching:** Fitting and repair work required to restore construction to original conditions after installation of other work.

### 1.4 INFORMATIONAL SUBMITTALS

- A. **Qualification Data:** For land surveyor and professional engineer.
- B. **Certificates:** Submit certificate signed by land surveyor and professional engineer certifying that location and elevation of improvements comply with requirements.
- C. **Cutting and Patching Plan:** Submit plan describing procedures at least 10 days prior to the time cutting and patching will be performed. Include the following information:
  - 1. **Extent:** Describe reason for and extent of each occurrence of cutting and patching.
  - 2. **Changes to In-Place Construction:** Describe anticipated results. Include changes to structural elements and operating components as well as changes in building appearance and other significant visual elements.
  - 3. **Products:** List products to be used for patching and firms or entities that will perform patching work.
  - 4. **Dates:** Indicate when cutting and patching will be performed.
  - 5. **Utilities and Mechanical and Electrical Systems:** List services and systems that cutting and patching procedures will disturb or affect. List services and systems that will be relocated and those that will be temporarily out of service. Indicate length of time permanent services and systems will be disrupted.
    - a. Include description of provisions for temporary services and systems during interruption of permanent services and systems.
- D. **Landfill Receipts:** Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.
- E. **Certified Surveys:** Submit two copies signed by land surveyor.
- F. **Final Property Survey:** Submit 10 copies showing the Work performed and record survey data.

### 1.5 QUALITY ASSURANCE

- A. **Land Surveyor Qualifications:** A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.
- B. **Cutting and Patching:** Comply with requirements for and limitations on cutting and patching of construction elements.

1. **Structural Elements:** When cutting and patching structural elements, notify The Commissioner of locations and details of cutting and await directions from The Commissioner before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection
  2. **Operational Elements:** Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. These include but are not limited to:
    - a. Primary operational systems and equipment.
    - b. Fire separation assemblies.
    - c. Air or smoke barriers.
    - d. Fire-suppression systems.
    - e. Mechanical systems piping and ducts.
    - f. Control systems.
    - g. Communication systems.
    - h. Fire-detection and -alarm systems.
    - i. Conveying systems.
    - j. Electrical wiring systems.
    - k. Operating systems of special construction.
  3. **Other Construction Elements:** Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety. These include but are not limited to:
    - a. Water, moisture, or vapor barriers.
    - b. Membranes and flashings.
    - c. Exterior curtain-wall construction.
    - d. Sprayed fire-resistive material.
    - e. Equipment supports.
    - f. Piping, ductwork, vessels, and equipment.
    - g. Noise- and vibration-control elements and systems.
  4. **Visual Elements:** Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in The Commissioner's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- C. **Cutting and Patching Conference:** Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
- D. **Manufacturer's Installation Instructions:** Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
1. For projects requiring compliance with sustainable design and construction practices and procedures, use products for patching that comply with requirements in Division 01 sustainable design requirements Section.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to The Commissioner for the visual and functional performance of in-place materials.
  2. No cutting or drilling of existing materials will be permitted where integrity of surface or figure will be disfigured including but not limited to sidewalk flags.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, mechanical and electrical systems, and other construction affecting the Work.
1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services, and other utilities.
  2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
  2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
  3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.

- C. **Written Report:** Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
1. Description of the Work.
  2. List of detrimental conditions, including substrates.
  3. List of unacceptable installation tolerances.
  4. Recommended corrections.
- D. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

### 3.2 PREPARATION

- A. **Existing Utility Information:** Furnish information to The City of New York that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. **Field Measurements:** Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. **Space Requirements:** Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. **Review of Contract Documents and Field Conditions:** Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to The Commissioner according to requirements in Division 01 Section "Project Management and Coordination."

### 3.3 CONSTRUCTION LAYOUT

- A. **Verification:** Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify The Commissioner promptly.
- B. **General:** Engage a land surveyor to lay out the Work using accepted surveying practices.
1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
  2. Establish limits on use of Project site.
  3. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
  4. Inform installers of lines and levels to which they must comply.
  5. Check the location, level and plumb, of every major element as the Work progresses.

6. Notify The Commissioner when deviations from required lines and levels exceed allowable tolerances.
  7. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- C. **Site Improvements:** Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.
- D. **Building Lines and Levels:** Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.
- E. **Record Log:** Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by The Commissioner.

### 3.4 FIELD ENGINEERING

- A. **Identification:** The City of New York will identify existing benchmarks, control points, and property corners.
- B. **Reference Points:** Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
1. Do not change or relocate existing benchmarks or control points without prior written approval of The Commissioner. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to The Commissioner before proceeding.
  2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.
- C. **Benchmarks:** Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
  2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
  3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.
- D. **Certified Survey:** On completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework.



- E. **Final Property Survey:** Engage a land surveyor to prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by land surveyor, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey.
1. Show boundary lines, monuments, streets, site improvements and utilities, existing improvements and significant vegetation, adjoining properties, acreage, grade contours, and the distance and bearing from a site corner to a legal point.
  2. **Recording:** At Substantial Completion, have the final property survey recorded by or with authorities having jurisdiction as the official "property survey."

### 3.5 INSTALLATION

- A. **General:** Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
1. Make vertical work plumb and make horizontal work level.
  2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
  3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
  4. Maintain minimum headroom clearance of 96 inches in occupied spaces and 90 inches in unoccupied spaces.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- F. **Tools and Equipment:** Do not use tools or equipment that produce harmful noise levels.
- G. **Templates:** Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- H. **Attachment:** Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
1. **Mounting Heights:** Where mounting heights are not indicated, mount components at heights directed by The Commissioner.

2. Allow for building movement, including thermal expansion and contraction.
  3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

### 3.6 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Section "Summary."
- F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.
- G. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.

3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
4. Excavating and Backfilling: Comply with requirements in applicable Division 31 Sections where required by cutting and patching operations.
5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
6. Proceed with patching after construction operations requiring cutting are complete.

H. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.

1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
  - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
  - b. Restore damaged pipe covering to its original condition.
3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
  - a. Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.

I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

### 3.7 THE CITY OF NEW YORK-INSTALLED PRODUCTS

- A. Site Access: Provide access to Project site for The City of New York's construction personnel.
- B. Coordination: Coordinate construction and operations of the Work with work performed by The City of New York's construction personnel.

1. **Construction Schedule:** Inform The City of New York of Contractor's preferred construction schedule for The City of New York's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify The City of New York if changes to schedule are required due to differences in actual construction progress.
2. **Preinstallation Conferences:** Include The City of New York's construction personnel at preinstallation conferences covering portions of the Work that are to receive The City of New York's work. Attend preinstallation conferences conducted by The City of New York's construction personnel if portions of the Work depend on The City of New York's construction.

### 3.8 PROGRESS CLEANING

- A. **General:** Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
  1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
  3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
    - a. Use containers intended for holding waste materials of type to be stored.
  4. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.
- B. **Site:** Maintain Project site free of waste materials and debris.
- C. **Work Areas:** Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
  1. Remove liquid spills promptly.
  2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. **Installed Work:** Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. **Concealed Spaces:** Remove debris from concealed spaces before enclosing the space.
- F. **Exposed Surfaces in Finished Areas:** Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

- G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Division 01 Section "Temporary Facilities and Controls."
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

### 3.9 STARTING AND ADJUSTING

- A. Coordinate startup and adjusting of equipment and operating components with requirements in Division 01 Section "General Commissioning Requirements."
- B. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- C. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
- D. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

### 3.10 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 017300

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## SECTION 024119 - SELECTIVE DEMOLITION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

##### A. Section Includes:

1. Demolition and removal of selected portions of building and structure.
2. Demolition and removal of selected site elements.
3. Salvage of existing items to be reused or recycled.
4. Temporary protection and removal of sculpture by a qualified sub-contractor.

##### B. Related Requirements:

1. Division 01 Section "Temporary Tree and Plant Protection" for temporary protection of existing trees and plants that are affected by selective demolition.
2. Division 01 Section "Temporary Sculpture Protection and Removals"
3. Division 01 Section "Execution" for cutting and patching procedures.
4. Division 04 Section "Maintenance of Unit Masonry"
5. Division 31 Section "Site Clearing" for site clearing and removal of above- and below-grade improvements.
6. Division 31 Section "Earth Moving" for excavation
7. Division 31 Section "Excavation Support and Protection"

#### 1.3 DEFINITIONS

- A. **Remove:** Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.

- B. **Remove and Salvage:** Carefully detach from existing construction, in a manner to prevent damage, and deliver to The City of New York ready for reuse.

- C. Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

#### 1.4 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to The City of New York that may be uncovered during demolition remain the property of The City of New York.
  - 1. Carefully salvage in a manner to prevent damage and promptly return to The City of New York.

#### 1.5 PREINSTALLATION MEETINGS

- A. Predemolition Conference: Conduct conference at Project site.
  - 1. Inspect and discuss condition of construction to be selectively demolished.
  - 2. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
  - 3. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
  - 4. Review areas where existing construction is to remain and requires protection.
  - 5. Review and discuss the coordination and timing of the protection and removal of sculpture and landscape elements.

#### 1.6 INFORMATIONAL SUBMITTALS

- A. Proposed Protection Measures: Submit report, including drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control and , for noise control. Indicate proposed locations and construction of barriers.
- B. Schedule of Selective Demolition Activities: Indicate the following:
  - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure the Museum's on-site operations are uninterrupted.
  - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
  - 3. Coordination for shutoff, capping, and continuation of utility services.
  - 4. Use of elevator and stairs.



5. Coordination of the Museum's continuing occupancy of portions of existing building and of the Museum's partial occupancy of completed Work.
- C. Inventory: Submit a list of items to be removed and salvaged and deliver to The City of New York prior to start of demolition.
- D. Pre-demolition Photographs or Video: Submit before Work begins.
- E. Warranties: Documentation indicated that existing warranties are still in effect after completion of selective demolition.

1.7 CLOSEOUT SUBMITTALS

- A. Inventory: Submit a list of items that have been removed and salvaged.
- B. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.

1.8 FIELD CONDITIONS

- A. The Museum will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so the Museum's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by The City of New York as far as practical.
  1. Before selective demolition, the Museum will remove the following items:
    - a. Items not otherwise identified for protection or removal.
- C. Notify The Commissioner of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Historic Areas: Demolition and hauling equipment and other materials shall be of sizes that clear surfaces within historic spaces, including temporary protection, by 12 inches or more.
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
  1. Maintain fire-protection facilities in service during selective demolition operations.

## 1.9 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties. Notify warrantor before proceeding.
- B. Notify warrantor on completion of selective demolition, and obtain documentation verifying that existing system has been inspected and warranty remains in effect. Submit documentation at Project closeout.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review record documents of existing construction provided by The City of New York. The City of New York does not guarantee that existing conditions are same as those indicated in record documents.
- C. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to The Commissioner.
- E. Engage a licensed professional engineer to perform an engineering survey of condition of the affected areas to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective building demolition operations.

- 1. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

- F. Survey of Existing Conditions: Record existing conditions by use of measured drawings, preconstruction photographs, preconstruction videotapes, and templates.
1. Inventory and record the condition of items to be removed and salvaged. Provide photographs or video of conditions that might be misconstrued as damage caused by salvage operations.
  2. Before selective demolition or removal of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.

### 3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
1. Comply with requirements for existing services/systems interruptions specified in the General Conditions.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
1. The City of New York will arrange to shut off indicated services/systems when requested by Contractor.
  2. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
  3. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated to be removed.
    - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
    - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material.
    - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
    - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
    - e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to The City of New York.

### 3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with Museum property, roads, streets, walks, walkways, and other adjacent occupied and used facilities.

1. Comply with requirements for access and protection specified in the General Conditions and "Temporary Facilities and Controls."

B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.

1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
4. Cover and protect furniture, furnishings, and equipment that have not been removed.
5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Division 01 Section "Temporary Facilities and Controls."

C. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.

1. Strengthen or add new supports when required during progress of selective demolition.

### 3.4 SELECTIVE DEMOLITION, GENERAL

A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above tier before disturbing supporting members on the next lower level.
2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
5. Maintain adequate ventilation when using cutting torches.
6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.

7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
9. Dispose of demolished items and materials promptly. Comply with requirements in the General Conditions for Construction Waste Management and Disposal.

B. Removed and Salvaged Items:

1. Clean salvaged items.
2. Pack or crate items after cleaning. Identify contents of containers.
3. Store items in a secure area until delivery to The City of New York.
4. Transport items to Museum's storage area designated by Museum.
5. Protect items from damage during transport and storage.

C. Removed and Reinstalled Items:

1. Clean and repair items to functional condition adequate for intended reuse.
2. Pack or crate items after cleaning and repairing. Identify contents of containers.
3. Protect items from damage during transport and storage.
4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

- D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by The Commissioner, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Concrete: Demolish in small sections. Using power-driven saw, cut concrete as indicated on the drawings and relative to junctures with construction to remain. Dislodge concrete from reinforcement at perimeter of areas being demolished, cut reinforcement, and then remove remainder of concrete. Neatly trim openings to dimensions indicated.
- B. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, then remove masonry between saw cuts.
- C. Concrete Slabs-on-Grade if appropriate: Saw-cut perimeter of area to be demolished, then break up and remove.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be recycled, reused, salvaged, reinstalled, or otherwise indicated to remain Museum's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.

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1. Do not allow demolished materials to accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
3. Remove debris from elevated portions of building by an agreed-upon method that will convey debris to grade level in a controlled descent.
4. Comply with requirements specified in the General Conditions for Construction Waste Management and Disposal.

B. Burning: Do not burn demolished materials.

C. Disposal: Transport demolished materials off the Museum's property and legally dispose of them.

### 3.7 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

**SECTION 028013 - GENERAL CONTRACTOR WORK**  
**ALLOWANCE FOR INCIDENTAL ASBESTOS ABATEMENT**

**1.01 SCOPE**

- A. The "General Conditions" apply to the work of this Section.
- B. The Contractor shall remove asbestos containing materials as needed to perform the other work of this Contract when discovered during the course of work. When required, the Contractor shall replace the ACM with non-asbestos containing materials. An allowance **\$15,000.00** for the General Contractor is herein established for this incidental work when so ordered and authorized by the Commissioner through a written Work Order Letter.
- C. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE RULES AND REGULATIONS OF THE ASBESTOS CONTROL PROGRAM AS PROMULGATED BY TITLE 15 CHAPTER I OF RCNY AND NEW YORK STATE DEPARTMENT OF LABOR INDUSTRIAL CODE RULE 56 CITED AS 12 NYCRR, PART 56 WHICHEVER IS MORE STRINGENT AS PER LATEST AMENDMENTS TO THESE LAWS AND AS MODIFIED HEREIN BY THESE SPECIFICATIONS.
- D. ALL DISPOSAL OF ASBESTOS CONTAMINATED MATERIAL SHALL BE PER LOCAL LAW 70/85.
- E. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT CERTAIN METHODS OF ASBESTOS ABATEMENT ARE PROTECTED BY PATENTS. TO DATE, PATENTS HAVE BEEN ISSUED WITH RESPECT TO "NEGATIVE PRESSURE ENCLOSURE" OR "NEGATIVE-AIR" OR "REDUCED PRESSURE" AND "GLOVE BAG".
- F. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND SHALL HOLD THE DEPARTMENT OF DESIGN AND CONSTRUCTION AND THE CITY HARMLESS FROM ANY AND ALL DAMAGES, LOSSES AND EXPENSES RESULTING FROM ANY INFRINGEMENT BY THE CONTRACTOR OF ANY PATENT, INCLUDING BUT NOT LIMITED TO THE PATENTS DESCRIBED ABOVE, USED BY THE CONTRACTOR DURING PERFORMANCE OF THIS AGREEMENT.
- G. "Asbestos" shall mean any hydrated mineral silicate separable into commercially usable fibers, including but not limited to chrysotile (serpentine), amosite (cumingtonite-grunerite), crocidolite (riebeckite), tremolite, anthrophyllite and actinolite.
- H. Prior to starting, the Contractor must notify the Commissioner of the Department of Design and Construction if he/she anticipates any difficulty in performing the

**GENERAL CONTRACTOR WORK ALLOWANCE FOR INCIDENTAL ASBESTOS ABATEMENT**

Work as directed in the Work Order Letter and as required by these Specifications. The Contractor is responsible to prepare and submit all filings, notifications, etc. required by all City, State and Federal regulatory agencies having jurisdiction.

The Contractor is responsible for submitting the Asbestos Project Notification Form (ACP-7 Form) to the Department of Environmental Protection, Asbestos Control Program 7 days prior to abatement work as per Title 15, Chapter I of RCNY.

The Contractor is responsible for preparing, and submitting Asbestos Variance Application (ACP-9). If a Variance is required, the Contractor is responsible to retain a NYSDOL Asbestos Project Designer, as defined in Title 15, Chapter 1 of the RCNY to prepare and submit the required variance.

The Contractor is responsible for preparing and submitting an Asbestos Abatement Permit and/or Work Place Safety Plans (WPSP) that may be required for the completion of the Contract or incidental work. If such plans are required, the Contractor is responsible to retain a NYS Licensed Design Professional as defined in Title 15, Chapter 1 of the RCNY to prepare and submit the required plans.

The Contractor is responsible for the submission of all required documents to the NYCDEP to acquire the appropriate Asbestos Project Conditional Closeout (ACP-20) and/or Asbestos Project Completion Forms (ACP-21) on a timely basis for the completion of the incidental work encountered under this contract.

The Contractor will be required to attend an on-site job meeting with the Construction Project Manager prior to the start of work to examine conditions and plan the sequence of operations, etc.

The Contractor shall have a NYSDOL/NYCDEP Asbestos Supervisor onsite to oversee the work and conduct a final visual inspection as required by both Title 15, Chapter 1 of the RCNY and NYSDOL Industrial Code Rule 56.

- I. All work shall be done during regular working hours unless the Contractor requests authorization to work in other than regular working hours and such authorization is granted by the Commissioner. (Regular work hours are those hours during which any given facility, in which work is to be done, is customarily open and functioning, normally between the hours of 8:00 A.M. and 4:00 P.M. Monday - Friday.) If such work schedule is authorized by the Commissioner, the work shall be done at no additional cost to the City.
- J. The Commissioner may order that work be done in other than regular working hours as herein by defined and this order may require the Contractor to pay premium or overtime wages to complete the work. If the Commissioner orders work in other than regular working hours, the Contractor shall multiply the unit



price for that portion of the work requiring premium wages by 1.50 when computing payment in accordance with Paragraph 1.10. All requests for premium payment must be supported by certified payroll sheets and field sheets approved by the Construction Project Manager.

**1.02 QUALIFICATIONS OF CONTRACTOR**

A. **General:** The special experience requirements set forth in Section B below apply to the bidder for this contract.

1. **Evaluation:** Compliance with the special experience requirements will be evaluated at the time of the bid. The bidder is advised that failure to meet such special experience requirements will result in the rejection of the bid as non-responsive. Compliance with the experience requirements set forth herein will be determined solely by the City.

2. **Compliance by the Bidder as an Entity:** Compliance with the special experience requirements must be demonstrated by the BIDDER ITSELF, i.e., the actual entity submitting the bid. The bidder itself must have been in existence as the same entity for the three year period prior to the bid opening. During such period, the bidding entity itself must have achieved compliance with the special experience requirements. The bidding entity may not use or rely on the experience or credentials of any other entity, regardless of any relationship such other entity may have to the bidder.

B. **Requirements:** The bidder must demonstrate compliance with the special experience requirements set forth in subparagraphs (1) through (5) below. The bidder must, as part of its bid, submit documentation demonstrating compliance with all listed requirements. Such documentation shall include without limitation, all required licenses, certificates, and documentation.

1. The bidder must, whether an individual, corporation, partnership, joint venture or other legal entity, must demonstrate for the three year period prior to the bid opening, that it has been licensed by the New York State Department of Labor, as an "Asbestos Contractor".

2. The bidder must, for the three year period prior to the bid opening, have been in the business of providing asbestos abatement services as a routine part of its daily operations.

3. The bidder proposing to do asbestos abatement work must be thoroughly experienced in such work and must provide evidence of having successfully performed and completed in a timely fashion at least five (5) asbestos abatement projects of similar size and complexity. The aggregate cost of these projects must be at least \$500,000.00 in each of the three years.

4. For each project submitted to meet the experience requirements set forth above, the bidder must submit the following information for the project; name and location of the project; name title and telephone number of the owner or the owner's representative who is familiar with the bidder's work, brief description of the work completed as a prime or sub-contractor; amount of contract or subcontract and the date of completion.
  5. The bidder must demonstrate that it has the financial resources, supervisory personnel and equipment necessary to carry out the work and to comply with the required performance schedule, taking into consideration other business commitments. The bidder must submit such documentation as may be required by the Department of Design and Construction to demonstrate that it has the requisite capacity to perform the required services of this contract.
- C. Insurance Requirements: The asbestos contractor must provide asbestos liability insurance in the following amount: 1 million dollars per occurrence, 2 million dollars aggregate (combined single limit). The City of New York shall be named as an additional insured on such insurance policy.
- D. Throughout the specifications, reference is made to codes and standards which establish qualities and types of workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics thereof.

### **1.03 WORK ORDER LETTERS**

Work Order Letters will be issued throughout the Contract period, and as required to cover the services requested.

### **1.04 ESTIMATED QUANTITY**

The Department of Design and Construction reserves the right during the term of this Contract to determine the number of Work Order Letters and the Scope of Work to be included therein, and shall not be deemed to be limited by the estimate amount of the allowance nor does this Contract guarantee or obligate the Department of Design and Construction to issue a required number of Work Order Letters. The Contractor is cautioned that payment will not be made for any work that is not authorized by the Department of Design and Construction.

When work is ordered, the Contractor will visit the subject location within one (1) working day of notification to ascertain actual work required. If the project is identified as being "urgent", then work shall commence no later than 48 hours from the time of notification. In this event, the contractor shall immediately notify when applicable EPA NESHAPS Coordinator, NYSDOL Asbestos Control Bureau and NYCDEP Asbestos Control Program of start of the work and file the necessary Asbestos Notifications and Variance Applications with the NYCDEP, NYSDOL and USEPA.

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In the event that the project is not classified as "urgent" the Contractor shall notify the EPA NESHAPS Coordinator, NYSDOL and NYCDEP by submitting the requisite asbestos project notification forms, postmarked 10 days before activity begins if 260 linear feet or more and/or 160 square feet or more of asbestos containing material will be disturbed.

The following information must be included in the notification:

- A. Name and address of building City or operator;
- B. Project description:
  - 1. Size - square feet, number of linear feet, etc;
  - 2. Age - date of construction and renovations (if known);
  - 3. Use - i.e., office, school, industrial, etc.
  - 4. Scope - repair, demolition, cleaning, etc.
- C. Amount of asbestos involved in work and an explanation of techniques used to determine the amount;
- D. Building location/address, including Block and Lot numbers;
- E. Work schedule including the starting and completion dates;
- F. Abatement methods to be employed;
- G. Procedures for removal of asbestos-containing material;
- H. Name, title and authority of governmental representative sponsoring project.

**1.05 WORK INCLUDED IN UNIT PRICE**

An allowance as identified in the Bid booklet has been established for any additional work in areas that contain asbestos that is exposed during construction. From this allowance, the Contractor will be paid a basic unit price of **\$20.00** per square feet for the removal and disposal of asbestos containing material and replacement of the same with non-asbestos containing materials.

Unit price shall include all costs necessary to do the work of this Contract, including but not limited to: labor, materials, equipment, utilities, disposal, insurance, overhead and profit.

**1.06 AIR MONITORING - CONTRACTOR**

- A. "Air Sampling" shall mean the process of measuring the fiber content of a known volume of air collected during a specific period of time. The procedure utilized for asbestos follows the NIOSH Standard Analytical Method 7400 or the provisional transmission electron microscopy methods developed by the USEPA and/or National Institute of Standard and Technology which are utilized for lower detectability and specific fiber identification.
- B. Air monitoring of Contractor's personnel will be performed in conformance with OSHA requirements, (All costs associated with this work are deemed included in the unit price.).
- C. Qualifications of Testing Laboratory:

The industrial hygiene laboratory shall be a current proficient participant in the American Industrial Hygiene Association (AIHA) PAT Program. The laboratory identification number shall be submitted and approved by the City. The laboratory shall be accredited by the AIHA and New York State Department of Health Environmental Laboratory Approval Program (ELAP).

Note: Work area air testing and analysis before, during and upon completion of work (clearance testing) will be performed by a Third Party Air Monitor under separate Contract with the City.

**1.07 THIRD PARTY MONITORING AND LABORATORY**

- A. The NYCDDC, at its own expense, will employ the services of an independent Third Party Air Monitoring Firm and Laboratory. The Third Party Air Monitor will perform air sampling activities and project monitoring at the Work Site.
- B. The Laboratory will perform analysis of air samples utilizing Phase Contrast Microscopy (PCM) and/or Transmission Electron Microscopy (TEM).
- C. The Third Party Air Monitoring Firm and the designated Project Monitor shall have access to all areas of the asbestos removal project at all times and shall continuously inspect and monitor the performance of the Contractor to verify that said performance complies with this Specification. The Third-Party Air Monitor shall be on site throughout the entire abatement operation.
- D. The NYCDDC will be responsible for costs incurred with the Third Party Air Monitoring Firm and laboratory work. Any subsequent additional testing required due to limits exceeded during initial testing shall be paid for by the Contractor.

**1.08 PAYMENT REQUEST**

- A. Request for payment shall be submitted to the Commissioner, Department of Design and Construction not more often than every 30 days that this Contract is in force.
- B. Each payment request shall include copies of all Work Order Letters completed in that month. Each Work Order Letter shall be listed separately.
- C. The following information shall be included for each Work Order Letter:
  - 1. Description of work performed.
  - 2. Linear footage and pipe sizes involved.
  - 3. Square footage for boiler & breaching insulation removed.
  - 4. Square footage of non pipe and boiler areas removed, patched, enclosed, sealed, or painted.
  - 5. Square footage of encapsulation, sealing, patching, painting involved.
  - 6. Total cost associated with compliance with Work Order Letter.
  - 7. Architectural, Electrical, HVAC, Plumbing, etc. work incidental to the Asbestos Abatement Work.
  - 8. A certified copy (in form 4312-39) to the Comptroller or Financial Officer of the New York City to the effect that the financial statement is true.
  - 9. A signed copy (in form 6506q-6) of certificate of compliance with non-discriminatory provisions of the Contract.
  - 10. Attach a copy of valid workmen compensation insurance.
  - 11. Valid asbestos insurance per occurrence.
  - 12. General liability insurance when required.
- D. Each payment request shall include a grand total for all work completed that billing period, the landfill waste manifests and a copy of waste transporter permit. The Department of Design and Construction will inspect the work performed, review the cost and approve or disapprove requests for payment.
- E. **EXPOSURE LOG:** With this final payment, the Contractor shall submit a listing of the names and social security numbers of all employees actively engaged in the abatement work of this Contract. This list shall include a summary showing each

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part of the abatement work in which the employee was engaged and the dates thereof.

**1.09 QUANTITY CALCULATIONS**

In order to determine the square footage involved for the various pipe sizes of pipe insulation that might be encountered, the following table is to be used.

<u>PIPE INSULATION SIZE O.D.</u>	<u>PIPE SIZE O.D.</u>	<u>SQUARE FOOTAGE PER LINEAR FOOT</u>
2-1/2"	1/2"	0.65
2-3/4"	3/4"	0.72
3"	1"	0.79
3-1/4"	1-1/4"	0.85
3-1/2"	1-1/2"	0.92
4"	2"	1.05
4-1/2"	2-1/2"	1.18
5"	3"	1.31
6"	3-1/4"	1.57
7"	3-1/2"	1.83
8"	4"	2.09
9"	5"	2.36
10"	6"	2.62
12"	8"	3.14
14"	10"	3.67
16"	12"	4.19
18"	14"	4.71

**1.10 METHOD OF PAYMENT**

Payment shall be made in accordance with Items A through R below. Payment shall be calculated based on the actual quantity of the item performed by the contractor, times the unit price specified below. Credits may apply to certain times, as specified below.

**A. REMOVAL, DISPOSAL AND REPLACEMENT OF ASBESTOS CONTAINING PIPE INSULATION:** Actual linear footage, multiplied by the square footage factor listed for the respective pipe size in Section 1.09, multiplied by the unit price in Section 1.05.

EXAMPLE: 100 lin.ft. of 1/2" pipe and 100 lin.ft. of 6" pipe, including elbows, tees. Flanges, etc.

100 X 0.65 = 65 sq.ft.      65 x unit price = Payment

100 X 2.62 = 262 sq.ft.      262 x unit price = Payment

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- B. REMOVAL, DISPOSAL AND REPLACEMENT OF BOILER INSULATION:** (all types including Silicate Block and including the removal/replacement of metal jacketing) Payment shall be made at 1.5 times the unit price per square foot.
- EXAMPLE: Item B. removal and replacement of 1000 S.F. of boiler insulation (incl. Silicate block)
- 1000 S.F. X (1.5) X the Unit Price = Payment
- C. REMOVAL, DISPOSAL AND REPLACEMENT OF TANK INSULATION:** (all types including removal/replacement of metal jacketing) Payment shall be made at 1.5 times the unit price per square foot.
- D. REMOVAL, DISPOSAL AND REPLACEMENT OF BOILER UPTAKE, & BREACHING INSULATION:** (all types including stiffening angles and wire lath) Payment shall be made at 2.0 times the unit price per square foot.
- E. REMOVAL, DISPOSAL AND REPLACEMENT OF DUCT INSULATION:** Payment shall be made at 1.0 times the unit price per square foot.
- F. REMOVAL, DISPOSAL AND REPLACEMENT OF SOFT ASBESTOS CONTAINING MATERIAL:** (Including sprayed-on fire proofing and sound proofing) Payment shall be made at 1.0 times the unit price per square foot of surface area. Area of irregular surfaces must be calculated and confirmed with DDC representative.
- G. ACOUSTIC PLASTER REPAIR AND/OR ENCAPSULATION:** Payment shall be made at 0.5 times the unit price per square foot.
- H. PATCHING OR REPAIR** of items listed in A through F will be paid at 0.33 times the unit price per square foot.
- I. REMOVAL, DISPOSAL AND REPLACEMENT OF WATERPROOFING ASBESTOS CONTAINING MATERIAL:** (including friable and non-friable waterproofing material from interior and exterior walls, floors, foundations, penetrations, louvers, vents and openings other than windows, doors and skylights) Payment shall be made at 0.5 times the unit price per square foot.
- J. REMOVAL, DISPOSAL AND REPLACEMENT OF ASBESTOS CONTAINING ELECTRICAL WIRING INSULATION:** (including friable and non-friable wiring insulation) Payment shall be made at 0.33 times the unit price per square foot.
- K. PAINTING:** Payment shall be made at 0.05 times the unit price per square foot.

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- L. **REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING PLASTER:** from ceilings and walls, including any wire lath and disposal as asbestos containing waste. Payment shall be made at 0.80 times the unit price per square foot.
- M. **REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING FLOOR TILES, CEILING TILES, TRANSITE PANELS:** (including any adhesive, glue, mastic and/or underlayment) and disposal as asbestos containing waste. Payment shall be made at 0.40 times the unit price per square foot. If multiple layers are discovered, each additional layer shall be paid at 0.20 times the unit price per square foot.
- N. **ADDITIONAL CLEAN UP/HOUSEKEEPING OF WORK AREA:** (excluding pre-cleaning of work area required by regulations) HEPA vacuuming and wet cleaning of asbestos contaminated surface. Payment shall be made at 0.20 times the unit price per square foot. When GLOVE BAG is employed to remove ACM, cost of HEPA vacuuming and wet cleaning of floor area up to 3 feet on each side of glove-bag shall be included in unit price and no extra payment will be made.
- O. **REMOVAL, DISPOSAL OF ASBESTOS-CONTAINING ROOFING MATERIAL:** including mastic, flashing and sealant compound and provide temporary asbestos-free roof covering consisting of one layer of rolled roofing paper sealed with asphaltic roofing compound. Payment shall be made at 0.8 times the unit price per square foot. Credit at a rate of 0.33 times the unit price will be taken for each square foot of temporary roof covering which the Contractor is directed not to install.
- P. **PICK-UP AND DISPOSAL OF GROSS DEBRIS:** (excluding any waste generated from abatement under Item A-R) at a rate of \$150 per cubic yard for asbestos contaminated waste and \$75 per cubic yard for non-asbestos contaminated waste. This cost includes all labor and material cost associated with work.
- Q. **REMOVAL OF ASBESTOS-CONTAINING BRICK, BLOCK, MORTAR, CEMENT OR CONCRETE:** along with all surfacing materials including wire lath and/or other supporting structures and disposal as ACM waste. Payment shall be made at a rate of \$25.00 per cubic foot of material removed.
- R. **REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING WINDOW/DOOR CAULKING:** including friable and non-friable caulking, weather-stripping, glazing, sealants or other waterproofing materials applied to windows, doors, skylights, etc. Payment shall be made at the rate of \$400.00 per opening regardless of size or configuration. This cost includes labor, consumable materials, set-up/breakdown, removal and disposal, as required.



**Note 1: CREDIT:** For items listed in A through F, a credit at a rate of 0.33 times the unit price, times the respective multiplier (for each item) will be taken for each square foot of insulation which the contractor is not directed to reapply.

**Note 2: MINIMUM PAYMENT:** The minimum payment per call at any individual job sites or various job sites during the same day will be eight hundred dollars (\$800.00).

**Note 3:** All payments shall be made as described in paragraph 1.10 herein.

**Note 4: WORKING HIGHER THAN 12 FEET ABOVE FLOOR LEVEL OR WORK REQUIRING COMPLEX SCAFFOLDING OR CONSTRUCTION WORK PLATFORMS:** Provisions are made in this Contract to compensate the Contractor for work performed in locations that are difficult to access due to work at elevations that are significantly higher than the normal work level. The unit price for these items will be paid at 1.20 times the unit price described in Paragraphs 1.10, A through R for those portions of the work that are more than twelve (12) feet above the grade for that would be judged as the normal working level.

#### **1.11 GUARANTEE**

- A. Work performed in compliance with each Work Order Letter shall be guaranteed for a period of one year from the date the completed work is accepted by the Department of Design and Construction.
- B. The Contractor shall not be held liable for the guarantee where the repair required under the guarantee is a result of obvious abuse or vandalism as determined by the Commissioner.
- C. The Commissioner of The Department of Design and Construction will notify the Contractor in writing regarding defects in work under the guarantee.

#### **1.12 WORK BY OTHERS**

The Department of Design and Construction reserves the right during the term of this Contract to have work performed on asbestos abatement projects by other Contractors and/or their own shop mechanics as warranted by field or project conditions.

#### **1.13 OCCUPANCY OF SITE NOT EXCLUSIVE**

Attention is specifically drawn to the fact that Contractors, performing the work of other Contracts, may be brought upon any of the work sites of this Contract. Therefore, the Contractor shall not have exclusive rights to any site of his work and shall fully cooperate and coordinate his work with the work of other Contractors who may be brought upon any site of the work of this Contract. This paragraph applies to those areas outside the regulated Work Area as defined by Title 15, Chapter I of RCNY.

**1.14 SUBMITTALS**

**A. Pre-Construction Submittals:**

1. Attend a pre-construction meeting scheduled by the City of New York Department of Design and Construction. This meeting shall also be attended by a designated representative of the City of New York third party air monitoring firm, facility manager and the Construction Project Manager. At this meeting, the Contractor shall present three copies of the following items:
  - a. Contractor's scope of work, work plan and schedule.
  - b. Asbestos project notifications, approved variances and plans to Government Agencies.
  - c. Copies of Permits, clearance and licenses if required.
  - d. Schedules: the Contractor shall provide to the Construction Project Manager a copy of the following schedules for approval. Once approved, schedules shall be maintained and updated as received. Contractor shall post a copy of all schedules at the site:
    - (1) A construction schedule stating critical dates of the project including, but not limited to, mobilization, Work Area preparation, demolition, gross removal, fine cleaning, encapsulation, inspections, clearance monitoring, and phase of refinishing and final inspections. The schedule shall be updated biweekly, at a minimum.
    - (2) A schedule of staffing stating number of workers per shift per activity, name and number of supervisor(s) per shift, shifts per day, and total days to be worked.
    - (3) Submit all changes in schedule or staffing to the Construction Project Manager prior to implementation.
  - e. Written description of emergency procedures to be followed in case of injury or fire. This section must include evacuation procedures, source of medical assistance (name and telephone number to nearest hospital) and procedures to be used for access by medical personnel (examples: first aid squad and physician). NOTE: Necessary Emergency Procedures Shall Take Priority Over All Other Requirements of These Specifications.

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- f. **Material Safety Data Sheets (MSDS)** for encapsulants, sealants, firestopping foam, cleaners/disinfectants, spray adhesive and any and all potentially hazardous materials that may be employed on the project. No work involving the aforementioned will be allowed to proceed until MSDS are reviewed.
- g. **Worker Training and Medical Surveillance:** Contractor shall submit a list of the persons who will be employed by him and his Subcontractors in the removal work. Present evidence that workers have received proper training required by the regulations and the medical examinations required by OSHA 29 CFR 1926.1101.
- h. **Logs:** Specimen copies of daily progress log, visitor's log, and disposal log.
  - (1) The Contractor shall provide a permanently bound log book of minimum 8-1/2" x 11" size at the entrance to the Worker and Waste Decontamination enclosure system as hereinafter specified. Log book shall contain on title page the project name, name, address and phone number of the Abatement Contractor; name, address and phone number of Contractor and City's third party air monitoring firm; emergency numbers including, but not limited to local Fire/Rescue Department. Log book shall contain a list of personnel approved for entry into the Work Area.
  - (2) All entries into the log shall be made in non-washable, permanent ink and such pen shall be strung to or otherwise attached to the log to prevent removal from the log-in area. Under no circumstances shall pencil entries be permitted. Any significant events occurring during the abatement project shall be entered into the log. Upon completion of the job, the Contractor shall submit the logbook containing a day-to-day record of personnel log entries countersigned by the Construction Project Manager every day.
- i. **Worker's Acknowledgments:** Submit statements signed by each employee that the employee has received training in the proper handling of ACM, understands the health implications and risks involved; and understands the use and limitations of the respiratory equipment to be used.

**B. During Construction Submittals:**

- 1. Security and safety logs showing names of person entering workspace, date and time of entry and exit, record of any accident, emergency evacuation, and any other safety and/or health incident.

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2. Progress logs showing the number of workers, supervisors, hours of work and tasks completed shall be submitted daily to the Construction Project Manager.
3. Floor plans indicating Contractor's current work progress shall be submitted for review by the Construction Project Manager.
4. All Contractors' air monitoring and inspection results.

**C. Project Closeout Submittals:**

Upon completion of the project and as a condition of acceptance, the Contractor shall present two copies of the following items, bound and indexed:

1. Lien Waivers from Contractor, Sub-Contractors and Suppliers,
2. Daily OSHA air monitoring results,
3. All Waste Manifests (Asbestos and Construction Debris), seals and disposal logs,
4. Field Sign-In/Sign-Out Logs for every shift,
5. Copies of all Building Department Forms and Permits,
6. A Letter of Compliance stating that all the work on this project was performed in accordance with the Specifications and all applicable Federal, State and Local regulations,
7. All Warranties as stated in the Specifications,
  - a. Fully executed disposal certificates and transportation manifest.
8. Project Record: The contractor shall maintain a project record for all small and large asbestos projects. During the project, the project record shall be kept on site at all times. Upon completion of the project, the project record shall be maintained by the building owner. The project record shall be submitted to DDC as part of the close out documents. The project record shall consist of:
  - a. Copies of licenses of all contractors involved in the project;
  - b. Copies of NYCDEP and NYSDOL supervisor and handler certificates for all workers engaged in the project;

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- c. Copies of all project notifications and reports filed with NYCDEP, NYSDOL and USEPA for the project, with any amendments or variances;
- d. Copies of all asbestos abatement permits, including associated approved plans and work place safety plan;
- e. A copy of the air sampling log and all air sampling results;
- f. A copy of the abatement contractor's daily log book;
- g. Copies of all asbestos waste manifests;
- h. A copy of all Project Monitor's Reports (ACP-15).
- i. A copy of each ATR-1 Form completed for the asbestos project (if required).
- j. A copy of each Asbestos Project Conditional Closeout Report (ACP-20) if required.
- k. A copy of the Asbestos Project Completion Form (ACP-21).

**1.15 PROTECTION OF FURNITURE AND EQUIPMENT**

Cover all furniture and equipment that cannot be removed from Work Areas. Movable furniture and equipment will be removed from Work Areas by the Contractor prior to start of work. At the conclusion of the work (after final air testing), the Contractor will remove all plastic covering on walls, floors, furniture, equipment and reinstall furniture and equipment. He shall remove and store all sheaths, curtains and drapes, and reinstall same following final clean up.

**1.16 UTILITIES**

**A. General:**

All temporary facilities shall be subject to the approval of the Commissioner. Prior to starting work at any site, locations and/or sketches (if required) of temporary facilities must be submitted to the Construction Project Manager for the required approval.

**B. Water:**

The Department of Design and Construction will furnish all water needed for construction, at no cost to the Contractor in buildings under their jurisdiction. However, it is the responsibility of the Contractor to ensure that hot water is provided for showering in the decontamination unit. The Contractor shall furnish,

**GENERAL CONTRACTOR WORK ALLOWANCE FOR INCIDENTAL ASBESTOS ABATEMENT**

install and maintain any needed equipment to meet these requirements at his own expense.

**C. Electricity:**

The Department of Design and Construction will furnish all electricity needed for construction, at no cost to the Contractor in a building, under their jurisdiction. The Contractor is responsible for routing the electric power to the abatement Work Area.

All temporary lighting and temporary electrical service for Work Area shall be in weatherproof enclosures and be ground fault protected.

- D.** In leased spaces, arrangements for water supplies and electricity must be made with the landlord. However, all such arrangements must be made through and are subject to approval of the Department of Design and Construction. Utilities will be provided at no cost to the Contractor. However, it is the Contractor's (or the General Contractor's) responsibility to furnish and install a suitable distribution system to the Work Area. This system will be provided at no cost to the City.

**1.17 FEES**

The Contractor shall be responsible for any and all fees or charges imposed by Local, State or Federal Law, Rule and Regulation applicable to the work specified herein, including fees or charges which may be imposed subsequent to the date of the Bid opening.

**PART 2 – PRODUCTS**

Not used.

**PART 3 – EXECUTION**

Not used.

**END OF SECTION**

SECTION 033000

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Design Mixtures: For each concrete mixture, signed and sealed by a qualified professional engineer registered in the State of the Project, responsible for their preparation.
- C. Steel Reinforcement Shop Drawings.
- D. Formwork Shop Drawings: Signed and sealed by a qualified professional engineer registered in the State of the Project, responsible for their preparation.
- E. Material certificates.

1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94 requirements for production facilities and equipment.
  - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."

- B. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
  - 1. ACI 301, "Specification for Structural Concrete," Sections 1 through 5. Sections 1 through 5 and Section 7, "Lightweight Concrete."
  - 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
- C. Preinstallation Conference: Conduct conference at Project site.

## PART 2 - PRODUCTS

### 2.1 FORM-FACING MATERIALS

- A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.

### 2.2 STEEL REINFORCEMENT

- A. Recycled Content of Steel Products: Provide products with an average recycled content of steel products so postconsumer recycled content plus one-half of preconsumer recycled content is not less than 60 percent.
- B. Reinforcing Bars: ASTM A 615, Grade 60, deformed.
  - 1. Epoxy-Coated Reinforcing Bars: ASTM A 775, epoxy coated, with less than 2 percent damaged coating in each 12-inch bar length.
- C. Plain-Steel Welded Wire Reinforcement: ASTM A 185, plain, fabricated from as-drawn steel wire into flat sheets.
- D. Deformed-Steel Welded Wire Reinforcement: ASTM A 497, flat sheet.
- E. Galvanized-Steel Welded Wire Reinforcement: ASTM A 185, plain, fabricated from galvanized steel wire into flat sheets.
- F. Epoxy-Coated Welded Wire Reinforcement: ASTM A 884, Class A coated, Type 1, plain or deformed steel.



- G. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice."

## 2.3 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
1. Portland Cement: ASTM C 150, Type I. Supplement with the following:
    - a. Fly Ash: ASTM C 618, Class F.
    - b. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or 120.
- B. Normal-Weight Aggregates: ASTM C 33, graded, 3/4-inch nominal maximum coarse-aggregate size.
1. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Lightweight Aggregate: ASTM C 330, 3/4-inch nominal maximum aggregate size.
- D. Water: ASTM C 94 and potable.
- E. Air-Entraining Admixture: ASTM C 260.
- F. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
1. Water-Reducing Admixture: ASTM C 494, Type A.
  2. Retarding Admixture: ASTM C 494, Type B.
  3. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.
  4. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
  5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494, Type G.
  6. Plasticizing and Retarding Admixture: ASTM C 1017, Type II.
- G. Macro Synthetic Fiber: Complying with ASTM C 1399 & ASTM C 1609, GRACE STRUX 90/40 or approved equal.

## 2.4 VAPOR RETARDERS

- A. Plastic Vapor Retarder: ASTM E 1745, Class B. Include manufacturer's recommended adhesive or pressure-sensitive tape.

## 2.5 CURING MATERIALS

- A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
- B. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.
- C. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- D. Water: Potable.
- E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.
- F. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, nondissipating, certified by curing compound manufacturer to not interfere with bonding of floor covering.
- G. Clear, Solvent-Borne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.
- H. Clear, Waterborne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.

## 2.6 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber or ASTM D 1752, cork or self-expanding cork.

## 2.7 CONCRETE MIXTURES

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.
- B. Cementitious Materials: Use fly ash, pozzolan, ground granulated blast-furnace slag, and silica fume as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 40 percent.
- C. Proportion normal-weight concrete mixture as follows:
  - 1. Minimum Compressive Strength: 4000 psi at 28 days.
  - 2. Maximum Water-Cementitious Materials Ratio: 0.45.

3. Slump Limit: 4 inches, plus or minus 1 inch.
4. Air Content: 6 percent, plus or minus 1.5 percent at point of delivery for 3/4-inch nominal maximum aggregate size.
5. Synthetic Fiber: Uniformly disperse in concrete mixture at manufacturer's recommended rate, but not less than 4 lb/cu. yd.

D. Proportion structural lightweight concrete mixture as follows:

1. Minimum Compressive Strength: 4,000 psi at 28 days.
2. Calculated Equilibrium Unit Weight: 115 lb/cu. ft., plus or minus 3 lb/cu. ft. as determined by ASTM C 567.
3. Slump Limit: 4 inches, plus or minus 1 inch.
4. Air Content: 6 percent, plus or minus 2 percent at point of delivery for nominal maximum aggregate size greater than 3/8 inch.
5. Synthetic Macro Fiber: Uniformly disperse in concrete mixture at manufacturer's recommended rate, but not less than 4 lb/cu. yd.

E. Form TR3: Technical Report Concrete Design Mix:

1. The contractor shall be responsible for, and bear all costs associated with the filing and securing of approvals, if any, for Form TR3 - Technical Report Concrete Design Mix, including, but not limited to, engaging the services of a New York City licensed Concrete Testing Lab for the review and approval of concrete design mix, testing, signatures, and professional seals, etc. compliant with tNYC Department of Buildings requirements, for each concrete design mix.

2.8 FABRICATING REINFORCEMENT

- A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.9 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94 and ASTM C 1116, and furnish batch ticket information.

1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

## PART 3 - EXECUTION

### 3.1 FORMWORK

- A. Design, erect, shore, brace, and maintain formwork according to ACI 301 to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- C. Chamfer exterior corners and edges of permanently exposed concrete.

### 3.2 EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

### 3.3 VAPOR RETARDERS

- A. Plastic Vapor Retarders: Place, protect, and repair vapor retarders according to ASTM E 1643 and manufacturer's written instructions.
  - 1. Lap joints 6 inches and seal with manufacturer's recommended tape.

### 3.4 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.
  - 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.

### 3.5 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Commissioner.

- C. **Contraction Joints in Slabs-on-Grade:** Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth or 1 inch maximum of concrete thickness as follows:
1. **Grooved Joints:** Form contraction joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
  2. **Sawed Joints:** Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch-wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks.
- D. **Isolation Joints in Slabs-on-Grade:** After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.

### 3.6 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
1. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.
- C. **Cold-Weather Placement:** Comply with ACI 306.1.
- D. **Hot-Weather Placement:** Comply with ACI 301.

### 3.7 FINISHING FORMED SURFACES

- A. **Rough-Formed Finish:** As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
1. Apply to concrete surfaces not exposed to public view.
- B. **Smooth-Formed Finish:** As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.

1. Apply to concrete surfaces exposed to public view, to receive a rubbed finish.
- C. Rubbed Finish: Apply the following to smooth-formed finished as-cast concrete where indicated:
1. Smooth-Rubbed Finish: Not later than one day after form removal, moisten concrete surfaces and rub with carborundum brick or another abrasive until producing a uniform color and texture. Do not apply cement grout other than that created by the rubbing process.
  2. Grout-Cleaned Finish: Wet concrete surfaces and apply grout of a consistency of thick paint to coat surfaces and fill small holes. Mix one part portland cement to one and one-half parts fine sand with a 1:1 mixture of bonding admixture and water. Add white portland cement in amounts determined by trial patches so color of dry grout will match adjacent surfaces. Scrub grout into voids and remove excess grout. When grout whitens, rub surface with clean burlap and keep surface damp by fog spray for at least 36 hours.
  3. Cork-Floated Finish: Wet concrete surfaces and apply a stiff grout. Mix one part portland cement and one part fine sand with a 1:1 mixture of bonding agent and water. Add white portland cement in amounts determined by trial patches so color of dry grout will match adjacent surfaces. Compress grout into voids by grinding surface. In a swirling motion, finish surface with a cork float.
- D. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

### 3.8 FINISHING FLOORS AND SLABS

- A. General: Comply with ACI 302.1R recommendations for screeding, restraighening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Scratch Finish: While still plastic, texture concrete surface that has been screeded and bull-floated or darbied. Use stiff brushes, brooms, or rakes to produce a profile amplitude of 1/4 inch in 1 direction.
1. Apply scratch finish to surfaces to receive concrete floor toppings to receive mortar setting beds for bonded cementitious floor finishes.
- C. Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power driven floats. Restraighten, cut down high spots, and fill low spots. Repeat float passes and restraighening until surface is left with a uniform, smooth, granular texture.
1. Apply float finish to surfaces to receive trowel finish and to be covered with fluid-applied or sheet waterproofing, built-up or membrane roofing, or sand-bed terrazzo.

- D. **Trowel Finish:** After applying float finish, apply first troweling and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighen until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.
1. Apply a trowel finish to surfaces exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin-film-finish coating system.
  2. Finish and measure surface so gap at any point between concrete surface and an unveled, freestanding, 10-foot-long straightedge resting on 2 high spots and placed anywhere on the surface does not exceed 3/16 inch.
- E. **Trowel and Fine-Broom Finish:** Apply a first trowel finish to surfaces where ceramic or quarry tile is to be installed by either thickset or thin-set method. While concrete is still plastic, slightly scarify surface with a fine broom.
1. Comply with flatness and levelness tolerances for trowel finished floor surfaces.
- F. **Broom Finish:** Apply a broom finish to exterior concrete platforms, steps, and ramps, and elsewhere as indicated.

### 3.9 CONCRETE PROTECTING AND CURING

- A. **General:** Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.
- B. **Evaporation Retarder:** Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. **Cure concrete according to ACI 308.1, by one or a combination of the following methods:**
1. **Moisture Curing:** Keep surfaces continuously moist for not less than seven days.
  2. **Moisture-Retaining-Cover Curing:** Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
  3. **Curing Compound:** Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

- a. After curing period has elapsed, remove curing compound without damaging concrete surfaces by method recommended by curing compound manufacturer unless manufacturer certifies curing compound will not interfere with bonding of floor covering used on Project.
4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

### 3.10 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Commissioner. Remove and replace concrete that cannot be repaired and patched to Commissioner's approval.

### 3.11 FIELD QUALITY CONTROL

- A. Testing and Inspecting: City of New York will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.

1. Testing Services: Tests shall be performed according to ACI 301.

END OF SECTION 03300



**SECTION 040120 - MAINTENANCE OF UNIT MASONRY****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

**1.2 SUMMARY**

- A. Section includes maintenance of unit masonry consisting of brick and CMU masonry restoration and cleaning as follows:
  - 1. Unused anchor removal.
  - 2. Mock-ups for mortar matching
  - 3. Repairing unit masonry, including replacing units.
  - 4. Coordination and sleeving of piping
  - 5. Installation of access panels
  - 6. Painting steel uncovered during the work.
  - 7. Anchoring and re-installation of brick veneer.
  - 8. Repointing joints.
  - 9. Preliminary cleaning, including removing plant growth.
  - 10. Cleaning exposed unit masonry surfaces.
  - 11. Attic stock of brick masonry.
- B. Related Sections:
  - 1. Division 01 Section "Execution"
  - 2. Division 02 Section "Selective Demolition"
  - 3. Division 03 Section "Cast in Place Concrete"
  - 4. Division 04 Section "Concrete Unit Masonry" for new masonry construction.
- C. Removal and replacement of brick.
- D. Patching of masonry units.
- E. Clean new infill and adjacent existing brickwork, including preliminary and final cleaning, as part of masonry cleaning.

- F. Repoint masonry in areas affected.

### 1.3 DEFINITIONS

- A. Re-pointing: the process of removing (raking out) mortars and replacing it with new mortar.
- B. Pointing: the process of placing new mortar in existing joint spaces, which have previously been raked out. This term does not include the raking out process.
- C. Low-Pressure Spray: 100 to 400 psi; 4 to 6 gpm.
- D. Medium-Pressure Spray: 400 to 800 psi; 4 to 6 gpm.
- E. High-Pressure Spray: 800 to 1200 psi; 4 to 6 gpm.
- F. Saturation Coefficient: Ratio of the weight of water absorbed during immersion in cold water to weight absorbed during immersion in boiling water; used as an indication of resistance of masonry units to freezing and thawing.

### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include recommendations for application and use. Include test data substantiating that products comply with requirements.
- B. Shop Drawings: For the following:
  - 1. Full-size patterns with complete dimensions for new terra cotta units and their jointing, showing relation of existing to new units.
  - 2. Setting number of each new terra cotta unit and its location on the structure in annotated plans and elevations.
  - 3. Provisions for expansion joints or other sealant joints.
  - 4. Provisions for flashing, lighting fixtures, conduits, other components as required.
  - 5. Replacement and repair anchors. Include details of anchors within individual masonry units, with locations of anchors and dimensions of holes and recesses in units required for anchors.
- C. Samples for Initial Selection: For the following:
  - 1. Pointing Mortar: Submit sets of mortar for pointing in the form of sample mortar strips, 6 inches long by 1/2 inch wide, set in aluminum or plastic channels.
    - a. Have each set contain a close color range of at least three Samples of different mixes of colored sands and cements that produce a mortar matching the cleaned masonry when cured and dry.
    - b. Submit with precise measurements on ingredients, proportions, gradations, and sources of colored sands from which each Sample was made.

2. Patching Compound: Submit sets of patching compound Samples in the form of plugs (patches in drilled holes) in sample units of masonry representative of the range of masonry colors on the building.
  - a. Have each set contain a close color range of at least three Samples of different mixes of patching compound that matches the variations in existing masonry when cured and dry.
3. Sealant Materials: See Division 07 Section "Joint Sealants."
4. Include similar Samples of accessories involving color selection.

D. Samples for Verification, before executing Field Samples, of the following:

1. Each type of new exposed masonry unit to be used for replacing existing units. Include sets of Samples as necessary to show the full range of shape, color, and texture to be expected.
  - a. For each brick type, provide straps or panels containing at least six brick units. Include multiple straps for brick with a wide range.
2. Each type of sand used for pointing mortar; minimum 1 lb of each in plastic screw-top jars.
  - a. For blended sands, provide Samples of each component and blend.
  - b. Identify sources, both supplier and quarry, of each type of sand.
3. Each type, color, and texture of pointing mortar in the form of sample mortar strips, 6 inches long by 1/2 inch wide, set in aluminum or plastic channels.
  - a. Include with each Sample a list of ingredients with proportions of each. Identify sources, both supplier and quarry, of each type of sand and brand names of cementitious materials and pigments if any.
4. Sealant Materials: See Division 07 Section "Joint Sealants."
5. Accessories: Each type of anchor, accessory, and miscellaneous support.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For mason including field supervisors and masons terra cotta manufacturer and chemical-cleaner manufacturer.
- B. Preconstruction Test Reports: For replacement masonry units.
  1. Test replacement brick according to sampling and testing methods in ASTM C67 for compressive strength, 24 hour cold water absorption, 5-hour boil absorption saturation coefficient, and initial rate of absorption (suction).
- C. Quality-Control Program.
- D. Restoration Program.

- E. **Cleaning Program.**
- F. **Cold-Weather and Hot-Weather Procedures:** Detailed description of methods, materials, and equipment to be used to comply with requirements.

## 1.6 QUALITY ASSURANCE

- A. **Mason Qualifications:** Engage an experienced, masonry restoration and cleaning firm to perform work of this Section. Firm shall have completed work similar in material, design, and extent to that indicated for this Project with a record of successful in-service performance. Experience installing standard unit masonry is not sufficient experience for masonry restoration work.
  - 1. **Mason Qualifications:** Persons who are experienced and specialize in restoration work of types they will be performing. When masonry units are being patched, assign at least one worker among those performing patching work who is trained and certified by manufacturer of patching compound to apply its products.
- B. **Chemical-Cleaner Manufacturer Qualifications:** A firm regularly engaged in producing masonry cleaners that have been used for similar applications with successful results, and with factory-trained representatives who are available for consultation and Project-site inspection and assistance at no additional cost.
- C. **Source Limitations:** Obtain each type of material for masonry restoration (face brick, cement, sand, etc.) from one source with resources to provide materials of consistent quality in appearance and physical properties.
- D. **Quality-Control Program:** Prepare a written quality-control program for this Project to systematically demonstrate the ability of personnel to properly follow methods and use materials and tools without damaging masonry. Include provisions for supervising performance and preventing damage due to worker fatigue. Describe all means by which repointing and repair will be maintained within the specified requirements. Include maintenance of proper mortar mix design, batching sizes, ranking out procedures (if power tools are used, include precautions to prevent damage and worker fatigue), pointing procedures, cleaning procedures.
- E. **Reconstruction Program:** Prepare a written, detailed description of materials, methods, equipment, and sequence of operations to be used for each phase of restoration work including protection of surrounding materials and Project site.
  - 1. Include methods for keeping pointing mortar damp during curing period.
  - 2. If materials and methods other than those indicated are proposed for any phase of restoration work, add to the Quality-Control Program a written description of such materials and methods, including evidence of successful use on comparable projects, and demonstrations to show their effectiveness for this Project and worker's ability to use such materials and methods properly.

- F. **Cleaning Program:** Prepare a written cleaning program that describes cleaning process in detail, including materials, methods, and equipment to be used, protection of surrounding materials, and control of runoff during operations.
1. If materials and methods other than those indicated are proposed for any phase of restoration work, add to the Quality-Control Program a written description of such materials and methods, including evidence of successful use on comparable projects, and demonstrations to show their effectiveness for this Project and worker's ability to use such materials and methods properly.
- G. **Cleaning and Repair Appearance Standard:** Cleaned and repaired surfaces are to have a uniform appearance as viewed from 20 and at 50 feet away by The Commissioner. Perform additional paint and stain removal, general cleaning, and spot cleaning of small areas that are noticeably different, so that surface blends smoothly into surrounding areas.
- H. **Mockups:** Prepare mockups of restoration and cleaning to demonstrate aesthetic effects and set quality standards for materials and execution and for fabrication and installation.
1. **Masonry Repair:** Prepare sample areas for each type of masonry material indicated to have repair work performed. If not otherwise indicated, size each mockup not smaller than 2 adjacent whole units or approximately 48 inches in least dimension. Erect sample areas in existing walls unless otherwise indicated, to demonstrate quality of materials, workmanship, and blending with existing work. Include the following as a minimum:
    - a. **Replacement:**
      - 1) Six brick units replaced.
    - b. **Re-anchoring Veneers:** Install three masonry repair anchors in mockup wall assembly of each anchor type required.
  2. **Repointing:** Rake out joints in 2 separate areas, each approximately 36 inches high by 48 inches wide for each type of repointing required and repoint one of the areas.
  3. **Cleaning:** Clean an area approximately 25 sq. ft. for each type of masonry and surface condition.
    - a. Test cleaners and methods on samples of adjacent materials for possible adverse reactions. Do not use cleaners and methods known to have deleterious effect.
    - b. Notify the Commissioner 7 days in advance of the dates and times when each mock-up will be prepared.
    - c. Allow a waiting period of not less than seven days after completion of sample cleaning to permit a study of sample panels for negative reactions.
  4. Obtain Commissioner's approval of each mock-up before starting the remainder of the masonry restoration and cleaning.
  5. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless The Commissioner specifically approves such deviations in writing.

6. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

I. Source of materials: Obtain materials for masonry restoration from a single source for each type of material required (face brick, cement, sand, etc.) to ensure a match of quality, color, pattern and texture.

J. Pre-installation Conference: Conduct conference at Project site.

1. Review methods and procedures related to masonry restoration and cleaning including, but not limited to, the following:

- a. Construction schedule. Verify availability of materials, Restoration Specialist's personnel, equipment, and facilities needed to make progress and avoid delays.
- b. Materials, material application, sequencing, tolerances, and required clearances.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver masonry units to Project site strapped together in suitable packs or pallets or in heavy-duty cartons.

B. Deliver other materials to Project site in manufacturer's original and unopened containers, labeled with manufacturer's name and type of products.

C. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.

D. Store hydrated lime in manufacturer's original and unopened containers. Discard lime if containers have been damaged or have been opened for more than two days.

E. Store lime putty covered with water in sealed containers.

F. Store sand where grading and other required characteristics can be maintained and contamination avoided.

#### 1.8 PROJECT CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit masonry restoration and cleaning work to be performed according to manufacturers' written instructions and specified requirements.

B. Repair masonry units and repoint mortar joints only when air temperature is between 40 and 80 deg F and is predicted to remain so for at least 7 days after completion of the Work unless otherwise indicated.

- C. Cold-Weather Requirements: Comply with the following procedures for masonry repair and mortar-joint pointing unless otherwise indicated:
  - 1. When mean daily air temperature is below 40 deg F, provide enclosure and heat to maintain temperatures above 32 deg F within the enclosure for 7 days after repair and pointing.
- D. Hot-Weather Requirements: Protect masonry repair and mortar-joint pointing when temperature and humidity conditions produce excessive evaporation of water from mortar and repair materials. Provide artificial shade and wind breaks and use cooled materials as required to minimize evaporation. Do not apply mortar to substrates with temperatures of 90 deg F and above unless otherwise indicated.
- E. For manufactured repair materials, perform work within the environmental limits set by each manufacturer.
- F. Clean masonry surfaces only when air temperature is 40 deg F and above and is predicted to remain so for at least 7 days after completion of cleaning.
- G. Prevent grout or mortar used in repointing and repair work from staining face of surrounding masonry and other surfaces. Immediately remove grout and mortar in contact with exposed masonry and other surfaces.
- H. Use grinding and other power tools equipped with dust control devices, and take other steps to minimize the amount of dust generated during the repointing operations. Clean surfaces of cars exposed to mortar dust each day.
- I. Protect sills, ledges and projections from mortar droppings.

#### 1.9 COORDINATION

- A. Coordinate masonry restoration and cleaning with public circulation patterns at Project site. Some work is near public circulation patterns and public spaces of the Museum. Public circulation patterns cannot be closed off entirely, and in places can be only temporarily redirected around small areas of work. Plan and execute the Work accordingly.

#### 1.10 SEQUENCING AND SCHEDULING

- A. Order replacement materials at earliest possible date to avoid delaying completion of the Work.
- B. Order sand and cement for pointing mortar immediately after approval of mockups. Take delivery of and store at Project site a sufficient quantity to complete Project.
- C. Perform masonry restoration work in the following sequence:
  - 1. Remove plant growth as indicated in the documents.
  - 2. Inspect for open mortar joints and repair before cleaning to prevent the intrusion of water and other cleaning materials into the wall.

3. Remove paint.
4. Clean masonry surfaces.
5. Rake out mortar from joints surrounding masonry to be replaced and from joints adjacent to masonry repairs along joints.
6. Repair masonry, including replacing existing masonry with new masonry materials.
7. Rake out mortar from joints to be repointed.
8. Point mortar and sealant joints.
9. After repairs and repointing have been completed and cured, perform a final cleaning to remove residues from this work.
10. Inspect for open mortar joints and repair before cleaning to prevent the intrusion of water and other cleaning materials into the wall.
11. Remove paint.
12. Clean masonry surfaces.

- D. As scaffolding is removed, patch anchor holes used to attach scaffolding. Patch holes in masonry units to comply with "Masonry Unit Patching" Article. Patch holes in mortar joints to comply with "Repointing Masonry" Article.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide one of the following:
1. Brick: match colors, textures, profiles and patterns represented in the approved mock up located on the site.
    - a. Basis of Design: Match existing/adjacent condition originally provided by:
      - 1) Tri-State Brick and Building Materials, Inc.
      - 2) Brick No. 1: glen Geary 51DDX molded brick, full range or approved equal.

### 2.2 MASONRY MATERIALS

- A. Face Brick: Provide face brick, including specially molded, ground, cut, or sawed shapes where required to complete masonry restoration work.
1. Provide units with colors, color variation within units, surface texture, size, and shape to match existing brickwork and with physical properties within 10 percent of those determined from preconstruction testing of selected existing units.
    - a. Physical Properties per ASTM C 67:
      - 1) Grade SW, Type FBX
      - 2) Efflorescence: Provide brick that has been used according to the ASTM C67 and is rated "not effloresced".
      - 3) Initial Rate of Absorption: Less than 30g/30sq in per minutes when tested per ASTM C67.



- b. For existing brickwork that exhibits a range of colors or color variation within units, provide brick that proportionally matches that range and variation rather than brick that matches an individual color within that range.
2. Tolerances as Fabricated: Comply with tolerance requirements in ASTM C 216, Type FBX.
- B. Building Brick: Provide building brick complying with ASTM C 62, of same vertical dimension as face brick, for masonry work concealed from view.
  1. Grade SW where in contact with earth.
  2. Grade SW, MW, or NW for concealed backup.
- C. Salvaged Brick: Obtain salvaged brick if offered from Museum from location shown on Drawings. Clean off residual mortar.

### 2.3 MORTAR MATERIALS

- A. Mortar used for bedding and pointing shall be custom blended Portland cement-based mortar intended to match approved mortar included in the on-site sample.
- B. Use only Pre-blended Portland Cement-Lime-Sand-Pigmented Mix: Packaged blend of Portland cement complying with ASTM C150, Type I or Type III, hydrated lime complying with ASTM C207, Type S, and aggregate complying with ASTM C144. Provide mortar pigments made from natural and synthetic iron oxides and chromium oxides, compounded for use in mortar mixes. Use only pigments with a record of satisfactory performance in masonry mortar.
- C. Sources: all pre-blended packaged shall come from one of the following sources:
  1. Specmix
  2. Edison Coatings.
  3. Amerimix
  4. Or approved equal
- D. For pointing mortar, provide sand with rounded edges.
- E. Water: Potable.

### 2.4 MORTAR MIX DESIGN

- A. General: Do not use admixtures, including pigments, air entraining agents, accelerators, retarders, water repellent agents, antifreeze compounds or other admixtures, unless otherwise indicated.
- B. Do not use calcium chloride in mortar or grout.
- C. Limit cementitious materials in mortar to Portland cement and lime.

- D. Pigmented mortar: use colored cement product or select and proportion pigments with other ingredients to produce color required to match existing conditions. Do not add pigments to colored cement products.
1. If pigments containing carbon black are used, carbon black must be limited to 2 percent of Portland cement by weight.
  2. Pigments shall not exceed 10 percent of Portland cement by weight.
- E. Pre-blended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a pre-blended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.
- F. Mortar Design: Comply with ASTM C270 and IA Technical Notes 8A Property Specification. Provide the following types of mortar for applications stated unless another type is indicated.
1. For masonry below grade or in contact with earth, use Type S.
  2. For reinforced masonry, use Type N
  3. For mortar parge coats, use Type N
  4. For exterior, above grade, load bearing and non-load bearing walls and parapet walls; for interior load-bearing walls; for interior non-load-bearing partitions; and for other applications where another type is not indicated, use Type N.
  - 5.

## 2.5 CLEANING MATERIALS

- A. Water: Potable.
- B. Warm Water: Water heated to a temperature of 140 to 160 deg F.
- C. Job-Mixed Detergent Solution: Solution prepared by mixing 2 cups of tetrasodium polyphosphate, 1/2 cup of laundry detergent, and 20 quarts of hot water for every 5 gal. of solution required.
- D. Job-Mixed Mold, Mildew, and Algae Remover: Solution prepared by mixing 2 cups of tetrasodium polyphosphate, 5 quarts of 5 percent sodium hypochlorite (bleach), and 15 quarts of hot water for every 5 gal. of solution required.
- E. Mild Acidic Cleaner: Manufacturer's standard mildly acidic cleaner containing no muriatic (hydrochloric), hydrofluoric, or sulfuric acid; or ammonium bifluoride or chlorine bleaches.
1. Products: Subject to compliance with requirements, provide one of the following:
    - a. ABR Products, Inc.; X-190 Limestone & Concrete Cleaner.
    - b. Diedrich Technologies Inc.; Envirorestore 100.
    - c. Dominion Restoration Products, Inc.; DR-60 Stone and Masonry Cleaner.
    - d. PROSOCO; Enviro Klean BioWash.
    - e. Or approved equal

**2.6 ACCESSORY MATERIALS**

- A. Masonry Repair Anchors, Expansion Type:** Mechanical fasteners designed for masonry veneer stabilization consisting of 1/4-inch- diameter, Type 316 stainless-steel rod with brass expanding shells at each end and water-shedding washer in the middle. Expanding shells shall be designed to provide positive mechanical anchorage to veneer on one end and backup masonry on the other.
1. **Products:** Subject to compliance with requirements, provide one of the following:
    - a. BLOK-LOK Limited; Torq-Lok.
    - b. Dur-O-Wal, a division of Dayton Superior; Dur-O-Wal Repair Anchor.
    - c. Hohmann & Barnard, Inc.; #521RA-B Restoration Anchor.
    - d. Or approved equal.
- B. Sealant Materials:**
1. Provide manufacturer's standard chemically curing, elastomeric sealant(s) of base polymer and characteristics indicated below that comply with applicable requirements in Division 07 Section "Joint Sealants."
    - a. Single-component, nonsag urethane sealant.
  2. **Colors:** Provide colors of exposed sealants to match colors of masonry adjoining installed sealant unless otherwise indicated.
- C. Joint-Sealant Backing:**
1. **Cylindrical Sealant Backings:** ASTM C 1330, Type C (closed-cell material with a surface skin) or Type B (bicellular material with a surface skin) as appropriate, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
  2. **Bond-Breaker Tape:** Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where acceptable.
- D. Setting Buttons:** Resilient plastic buttons, nonstaining to masonry, sized to suit joint thicknesses and bed depths of masonry units without intruding into required depths of pointing materials.
- E. Miscellaneous Products:** Select materials and methods of use based on the following, subject to approval of a mockup:
1. Previous effectiveness in performing the work involved.
  2. Little possibility of damaging exposed surfaces.
  3. Consistency of each application.
  4. Uniformity of the resulting overall appearance.
  5. Do not use products or tools that could do the following:

- a. Remove, alter, or in any way harm the present condition or future preservation of existing surfaces, including surrounding surfaces not in contract.
- b. Leave a residue on surfaces.

## 2.7 CHEMICAL CLEANING SOLUTIONS

- A. Dilute chemical cleaners with water to produce solutions not exceeding concentration recommended by chemical-cleaner manufacturer.
- B. Acidic Cleaner Solution for Brick: Dilute with water to produce hydrofluoric acid content of 3 percent or less, but not greater than that recommended by chemical-cleaner manufacturer.

## PART 3 - EXECUTION

### 3.1 EXPERIENCED MASONS

- A. Subject to compliance with requirements, firms that may provide masonry restoration and cleaning that meets the standards of the requirements for Special Experience.

### 3.2 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from masonry restoration work.
  1. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during course of restoration and cleaning work.
- B. Comply with chemical-cleaner manufacturer's written instructions for protecting building and other surfaces against damage from exposure to its products. Prevent chemical-cleaning solutions from coming into contact with people, motor vehicles, landscaping, buildings, and other surfaces that could be harmed by such contact.
  1. Cover adjacent surfaces with materials that are proven to resist chemical cleaners used unless chemical cleaners being used will not damage adjacent surfaces. Use materials that contain only waterproof, UV-resistant adhesives. Apply masking agents to comply with manufacturer's written instructions. Do not apply liquid masking agent to painted or porous surfaces. When no longer needed, promptly remove masking to prevent adhesive staining.
  2. Keep wall wet below area being cleaned to prevent streaking from runoff.
  3. Do not clean masonry during winds of sufficient force to spread cleaning solutions to unprotected surfaces.
  4. Neutralize and collect alkaline and acid wastes for disposal off Museum's property.

5. Dispose of runoff from cleaning operations by legal means and in a manner that prevents soil erosion, undermining of paving and foundations, damage to landscaping, and water penetration into building interiors.

C. Prevent mortar from staining face of surrounding masonry and other surfaces.

1. Cover sills, ledges, and projections to protect from mortar droppings.
2. Keep wall area wet below rebuilding and pointing work to discourage mortar from adhering.
3. Immediately remove mortar in contact with exposed masonry and other surfaces.
4. Clean mortar splatters from scaffolding at end of each day.

### 3.3 UNUSED ANCHOR REMOVAL

A. Remove masonry anchors, brackets, wood nailers, and other extraneous items no longer in use unless identified as historically significant or indicated to remain.

1. Remove items carefully to avoid spalling or cracking masonry.
2. Where directed, if an item cannot be removed without damaging surrounding masonry, do the following:
  - a. Cut or grind off item approximately 3/4 inch beneath surface and core drill a recess of same depth in surrounding masonry as close around item as practical.
  - b. Immediately paint exposed end of item with two coats of antirust coating, following coating manufacturer's written instructions and without exceeding manufacturer's recommended dry film thickness per coat. Keep paint off sides of recess.
3. Patch the hole where each item was removed unless directed to remove and replace the masonry unit.

### 3.4 BRICK REMOVAL AND REPLACEMENT

A. At locations indicated, remove bricks that are damaged, spalled, deteriorated or as otherwise indicated. Carefully demolish or remove entire units from joint to joint, without damaging surrounding masonry, in a manner that permits replacement with full-size units.

1. When removing single bricks, remove material from center of brick and work toward outside edges.

B. Support and protect remaining masonry that surrounds removal area. Maintain flashing, reinforcement, lintels, and adjoining construction in an undamaged condition.

C. Notify The Commissioner of unforeseen detrimental conditions including voids, cracks, bulges, and loose units in existing masonry backup, rotted wood, rusted metal, and other deteriorated items.

- D. Remove in an undamaged condition as many whole bricks as possible.
1. Remove mortar, loose particles, and soil from brick by cleaning with hand chisels, brushes, and water.
  2. Remove sealants by cutting close to brick with utility knife and cleaning with solvents.
  3. Store brick for reuse. Store off ground, on skids, and protected from weather.
  4. Deliver cleaned brick not required for reuse to Museum unless otherwise indicated.
- E. Clean bricks surrounding removal areas by removing mortar, dust, and loose particles in preparation for replacement.
- F. Replace removed damaged brick with other removed brick in good quality, where possible, or with new brick matching existing brick, including size. Do not use broken units unless they can be cut to usable size.
- G. Install replacement brick into bonding and coursing pattern of existing brick. If cutting is required, use a motor-driven saw designed to cut masonry with clean, sharp, unchipped edges.
1. Maintain joint width for replacement units to match existing joints.
  2. Use setting buttons or shims to set units accurately spaced with uniform joints.
- H. Lay replacement brick with completely filled bed, head, and collar joints. Butter ends with sufficient mortar to fill head joints and shove into place. Wet both replacement and surrounding bricks that have ASTM C 67 initial rates of absorption (suction) of more than 30 g/30 sq. in. per min.. Use wetting methods that ensure that units are nearly saturated but surface is dry when laid.
1. Tool exposed mortar joints in repaired areas to match joints of surrounding existing brickwork.
  2. Rake out mortar used for laying brick before mortar sets and point new mortar joints in repaired area to comply with requirements for repointing existing masonry, and at same time as repointing of surrounding area.
  3. When mortar is sufficiently hard to support units, remove shims and other devices interfering with pointing of joints.

### 3.5 PAINTING STEEL UNCOVERED DURING THE WORK

- A. Inspect steel exposed during masonry removal. Where The Commissioner determines that it is structural, or for other reasons cannot be totally removed, prepare and paint it as follows:
1. Remove paint, rust, and other contaminants according to SSPC-SP 2, "Hand Tool Cleaning", as applicable to meet paint manufacturer's recommended preparation.
  2. Immediately paint exposed steel with two coats of antirust coating, following coating manufacturer's written instructions and without exceeding manufacturer's recommended rate of application (dry film thickness per coat).
- B. If on inspection and rust removal, the cross section of a steel member is found to be reduced from rust by more than 1/16 inch, notify The Commissioner before proceeding.

### 3.6 CLEANING MASONRY, GENERAL

- A. Proceed with cleaning in an orderly manner; work from top to bottom of each scaffold width and from one end of each elevation to the other. Ensure that dirty residues and rinse water will not wash over cleaned, dry surfaces.
- B. In Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar from fins and smears before tooling joints.
- C. Final Cleaning:
1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels
  2. Test cleaning methods on sample wall panel: leave one-half of panel uncleaned for comparison purposes. Obtain Commissioner's approve of sample cleaning before proceeding with cleaning of masonry.
  3. Protect adjacent stone and non-masonry surfaces from contact with cleaner by covering them with liquid strippable masking agent or polyethylene film and waterproof masking tape.
- D. Use only those cleaning methods indicated for each masonry material and location.
1. Do not use wire brushes or brushes that are not resistant to chemical cleaner being used. Do not use plastic-bristle brushes if natural-fiber brushes will resist chemical cleaner being used.
  2. Use spray equipment that provides controlled application at volume and pressure indicated, measured at spray tip. Adjust pressure and volume to ensure that cleaning methods do not damage masonry.
    - a. Equip units with pressure gages.
  3. For chemical-cleaner spray application, use low-pressure tank or chemical pump suitable for chemical cleaner indicated, equipped with cone-shaped spray tip.
  4. For water-spray application, use fan-shaped spray tip that disperses water at an angle of 25 to 50 degrees.
  5. For high-pressure water-spray application, use fan-shaped spray tip that disperses water at an angle of at least 40 degrees.
  6. For heated water-spray application, use equipment capable of maintaining temperature between 140 and 160 deg F at flow rates indicated.
- E. Perform each cleaning method indicated in a manner that results in uniform coverage of all surfaces, including corners, moldings, and interstices, and that produces an even effect without streaking or damaging masonry surfaces.
- F. Water Application Methods:
1. Water-Soak Application: Soak masonry surfaces by applying water continuously and uniformly to limited area for time indicated. Apply water at low pressures and low

- volumes in multiple fine sprays using perforated hoses or multiple spray nozzles. Erect a protective enclosure constructed of polyethylene sheeting to cover area being sprayed.
2. **Water-Spray Applications:** Unless otherwise indicated, hold spray nozzle at least 6 inches from surface of masonry and apply water in horizontal back and forth sweeping motion, overlapping previous strokes to produce uniform coverage.
- G. **Chemical-Cleaner Application Methods:** Apply chemical cleaners to masonry surfaces to comply with chemical-cleaner manufacturer's written instructions; use brush application. Do not allow chemicals to remain on surface for periods longer than those indicated or recommended by manufacturer.
- H. **Rinse off chemical residue and soil by working upward from bottom to top of each treated area at each stage or scaffold setting.** Periodically during each rinse, test pH of rinse water running off of cleaned area to determine that chemical cleaner is completely removed.
1. Apply neutralizing agent and repeat rinse if necessary to produce tested pH of between 6.7 and 7.5.
- I. After cleaning is complete, remove protection no longer required. Remove tape and adhesive marks.

### 3.7 PRELIMINARY CLEANING

- A. **Removing Plant Growth:** Completely remove visible plant in coordination with the Commissioner, moss, and shrub growth from masonry surfaces. Carefully remove plants, creepers, and vegetation by cutting at roots and allowing to dry as long as possible before removal. Remove loose soil and debris from open masonry joints to whatever depth they occur.
- B. **Preliminary Cleaning:** Before beginning general cleaning, remove extraneous substances that are resistant to cleaning methods being used. Extraneous substances include paint, calking, asphalt, and tar.
1. Carefully remove heavy accumulations of material from surface of masonry with a sharp chisel. Do not scratch or chip masonry surface.
  2. Remove asphalt and tar with solvent-type paint remover.
    - a. Comply with requirements in "Paint Removal" Article.
    - b. Apply paint remover only to asphalt and tar by brush without prewetting.
    - c. Allow paint remover to remain on surface for 10 to 30 minutes.
    - d. Repeat application if needed.

### 3.8 CLEANING BRICKWORK

- A. **Mild Acidic Chemical Cleaning:**
1. Wet masonry with cold water applied by low-pressure spray.



2. Apply cleaner to masonry in two applications by brush or low-pressure spray as best suits the conditions and as agreed to with the Commissioner. Let cleaner remain on surface for period indicated below:
  - a. As recommended by chemical-cleaner manufacturer.
3. Rinse with cold water applied by low-pressure spray or as otherwise recommended by the manufacturer to remove chemicals and soil.
4. Repeat cleaning procedure above where required to produce cleaning effect established by mockup. Do not repeat more than once. If additional cleaning is required, use a steam cleaning.

### 3.9 REPOINTING MASONRY

#### A. Rake out and repoint joints to the following extent:

1. All joints in areas indicated.
2. Joints where mortar is missing or where they contain holes.
3. Cracked joints where cracks can be penetrated at least 1/4 inch by a knife blade 0.027 inch thick.
4. Cracked joints where cracks are 1/16 inch or more in width and of any depth.
5. Joints where they sound hollow when tapped by metal object.
6. Joints where they are worn back 1/4 inch or more from surface.
7. Joints where they are deteriorated to point that mortar can be easily removed by hand, without tools.
8. Joints where they have been filled with substances other than mortar.
9. Joints indicated as sealant-filled joints.

#### B. Do not rake out and repoint joints where not required.

#### C. Rake out joints as follows, according to procedures demonstrated in approved mockup:

1. Remove mortar from joints to depth of 3/4 inch, but not less than 1/2 inch or not less than that required to expose sound, unweathered mortar.
2. Remove mortar from masonry surfaces within raked-out joints to provide reveals with square backs and to expose masonry for contact with pointing mortar. Brush, vacuum, or flush joints to remove dirt and loose debris.
3. Do not spall edges of masonry units or widen joints. Replace or patch damaged masonry units as directed by The Commissioner.
  - a. Cut out mortar by hand with chisel and resilient mallet. Do not use power-operated grinders without The Commissioner's written approval based on approved quality-control program.
  - b. Cut out center of mortar bed joints using angle grinders with diamond-impregnated metal blades. Remove remaining mortar by hand with chisel and resilient mallet. Strictly adhere to approved quality-control program.

D. Notify The Commissioner of unforeseen detrimental conditions including voids in mortar joints, cracks, loose masonry units, rotted wood, rusted metal, and other deteriorated items.

E. Pointing with Mortar:

1. Rinse joint surfaces with water to remove dust and mortar particles. Time rinsing application so, at time of pointing, joint surfaces are damp but free of standing water. If rinse water dries, dampen joint surfaces before pointing.
2. Apply pointing mortar first to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than 3/8 inch until a uniform depth is formed. Fully compact each layer thoroughly and allow it to become thumbprint hard before applying next layer.
3. After low areas have been filled to same depth as remaining joints, point all joints by placing mortar in layers not greater than 3/8 inch. Fully compact each layer and allow to become thumbprint hard before applying next layer. Where existing masonry units have worn or rounded edges, slightly recess finished mortar surface below face of masonry to avoid widened joint faces. Take care not to spread mortar beyond joint edges onto exposed masonry surfaces or to featheredge the mortar.
4. When mortar is thumbprint hard, tool joints to match original appearance of joints as demonstrated in approved mockup. Remove excess mortar from edge of joint by brushing.
5. Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours including weekends and holidays.
  - a. Acceptable curing methods include covering with wet burlap and plastic sheeting, periodic hand misting, and periodic mist spraying using system of pipes, mist heads, and timers.
  - b. Adjust curing methods to ensure that pointing mortar is damp throughout its depth without eroding surface mortar.
6. Hairline cracking within the mortar or mortar separation at edge of a joint is unacceptable. Completely remove such mortar and repoint.

F. Pointing with Sealant:

1. After raking out, keep joints dry and free of mortar and debris.
2. Clean and prepare joint surfaces according to Division 07 Section "Joint Sealants." Prime joint surfaces unless sealant manufacturer recommends against priming. Do not allow primer to spill or migrate onto adjoining surfaces.
3. Fill sealant joints with specified joint sealant according to Division 07 Section "Joint Sealants" and the following:
  - a. Install cylindrical sealant backing beneath the sealant, except where space is insufficient. There, install bond-breaker tape.
  - b. Install sealant using only proven installation techniques that will ensure that sealant will be deposited in a uniform, continuous ribbon, without gaps or air pockets, and with complete wetting of the joint bond surfaces equally on both

sides. Fill joint flush with surrounding masonry and matching the contour of adjoining mortar joints.

- c. Install sealant as recommended by sealant manufacturer but within the following general limitations, measured at the center (thin) section of the bead:
  - 1) Fill joints to a depth equal to joint width, but not more than 1/2 inch deep or less than 1/4 inch deep.
- d. Immediately after first tooling, apply ground-mortar aggregate to sealant, gently pushing aggregate into the surface of sealant. Retool sealant to form smooth, uniform beads, slightly concave. Remove excess sealant and aggregate from surfaces adjacent to joint.
- e. Do not allow sealant to overflow or spill onto adjoining surfaces, or to migrate into the voids of adjoining surfaces, particularly rough textures. Remove excess and spillage of sealant promptly as the work progresses. Clean adjoining surfaces by the means necessary to eliminate evidence of spillage, without damage to adjoining surfaces or finishes, as demonstrated in an approved mockup.

4. Cure sealant according to Division 07 Section "Joint Sealants."

- G. Where repointing work precedes cleaning of existing masonry, allow mortar to harden at least 30 days before beginning cleaning work.

### 3.10 FINAL CLEANING

- A. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water, spray applied at low pressure.
  - 1. Do not use metal scrapers or brushes.
  - 2. Do not use acidic or alkaline cleaners.
- B. Wash adjacent woodwork and other nonmasonry surfaces. Use detergent and soft brushes or cloths.
- C. Clean mortar and debris from roof; remove debris from gutters and downspouts. Rinse off roof and flush gutters and downspouts.
- D. Sweep and rake adjacent pavement and grounds to remove mortar and debris. Where necessary, pressure wash pavement surfaces to remove mortar, dust, dirt, and stains.

### 3.11 FIELD QUALITY CONTROL

- A. Inspectors: The City of New York will engage qualified independent inspectors to perform inspections and prepare test reports. Allow inspectors use of lift devices and scaffolding, as needed, to perform inspections.

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- B. The Commissioner's Project Representatives: The Commissioner will assign Project representatives to help carry out The Commissioner's responsibilities at the site, including observing progress and quality of portion of the Work completed. Allow The Commissioner's Project representatives use of lift devices and scaffolding, as needed, to observe progress and quality of portion of the Work completed.
- C. Notify The Commissioner's Project representatives in advance of times when lift devices and scaffolding will be relocated. Do not relocate lift devices and scaffolding until The Commissioner's Project representatives have had reasonable opportunity to make inspections and observations of work areas at lift device or scaffold location.

END OF SECTION 040120

## SECTION 042200 - CONCRETE UNIT MASONRY

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

##### A. Section Includes:

- 1. Concrete masonry units.
- 2. Bluestone coping
- 3. Mortar and grout.
- 4. Steel reinforcing bars.
- 5. Masonry joint reinforcement.
- 6. Ties and anchors.
- 7. Embedded flashing.
- 8. Miscellaneous masonry accessories.

##### B. Related Sections:

- 1. Division 03 Section "Cast-in-Place Concrete"
- 2. Division 05 Section "Metal Fabrications"
- 3. Division 07 Section "Water Repellents" for water repellents applied to concrete unit masonry.
- 4. Division 32 Section "Metal Fences"

#### 1.3 DEFINITIONS

- A. CMU(s): Concrete masonry unit(s).

- B. Reinforced Masonry: Masonry containing reinforcing steel in grouted cells.

#### 1.4 PERFORMANCE REQUIREMENTS

- A. Match existing units in size, shape, color and texture. Conform to ASTM C90 and as follows:
1. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 2800 psi.
  2. Weight Classification: Normal weight, unless otherwise indicated.
  3. Provide Type I, moisture controlled units.
    - a. Size (width): Manufactured to dimensions 3/8 inch less than nominal dimensions.

#### 1.5 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: The City of New York will engage a qualified independent testing agency to perform preconstruction testing indicated below. Retesting of materials that fail to comply with specified requirements shall be done at Contractor's expense.
1. Concrete Masonry Unit Test: For each type of unit required, according to ASTM C 140 for compressive strength.
  2. Mortar Test (Property Specification): For each mix required, according to ASTM C 109/C 109M for compressive strength, ASTM C 1506 for water retention, and ASTM C 91 for air content.
  3. Mortar Test (Property Specification): For each mix required, according to ASTM C 780 for compressive strength.
  4. Grout Test (Compressive Strength): For each mix required, according to ASTM C 1019.
  5. Prism Test: For each type of construction required, according to ASTM C 1314.

#### 1.6 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: For the following:
1. Masonry Units: Show sizes, profiles, coursing, and locations of special shapes.
  2. Provide plans and elevations necessary to clearly indicate coursing, range of conditions and associated details and attachments or interface with adjacent construction.
  3. Reinforcing Steel: Detail bending and placement of unit masonry reinforcing bars. Comply with ACI 315, "Details and Detailing of Concrete Reinforcement." Show elevations of reinforced walls.
  4. Fabricated Flashing: Detail corner units, end-dam units, and other special applications as may be required or shown on the drawings.
- C. Samples for Initial Selection:
1. CMUs to match sample provided on site.

2. Colored mortar.

D. Samples for Verification: For each type and color of the following:

1. Exposed CMUs.
2. Pigmented and colored-aggregate mortar to match existing. Make Samples using same sand and mortar ingredients to be used on Project.
3. Accessories embedded in masonry.

1.7 INFORMATIONAL SUBMITTALS

A. List of Materials Used in Constructing Mockups: List generic product names together with manufacturers, manufacturers' product names, model numbers, lot numbers, batch numbers, source of supply, and other information as required to identify materials used. Include mix proportions for mortar and grout and source of aggregates.

1. Submittal is for information only. Neither receipt of list nor approval of mockup constitutes approval of deviations from the Contract Documents unless such deviations are specifically brought to the attention of The Commissioner and approved in writing.

B. Material Certificates: For each type and size of the following:

1. Masonry units.
  - a. Include data on material properties material and test reports substantiating compliance with requirements.
  - b. For masonry units used in structural masonry, include data and calculations establishing average net-area compressive strength of units.
2. Cementitious materials. Include brand, type, and name of manufacturer.
3. Preblended, dry mortar mixes. Include description of type and proportions of ingredients.
4. Grout mixes. Include description of type and proportions of ingredients.
5. Reinforcing bars.
6. Joint reinforcement.
7. Anchors, ties, and metal accessories.

C. Mix Designs: For each type of mortar and grout. Include description of type and proportions of ingredients.

1. Include test reports for mortar mixes required to comply with property specification. Test according to ASTM C 109/C 109M for compressive strength, ASTM C 1506 for water retention, and ASTM C 91 for air content.
2. Include test reports, according to ASTM C 1019, for grout mixes required to comply with compressive strength requirement.

D. Statement of Compressive Strength of Masonry: For each combination of masonry unit type and mortar type, provide statement of average net-area compressive strength of masonry units,

mortar type, and resulting net-area compressive strength of masonry determined according to Tables 1 and 2 in ACI 530.1/ASCE 6/TMS 602.

- E. Cold-Weather and Hot-Weather Procedures: Detailed description of methods, materials, and equipment to be used to comply with requirements.

## 1.8 QUALITY ASSURANCE

- A. Testing Agency Qualifications: Qualified according to ASTM C 1093 for testing indicated.
- B. Source Limitations for Masonry Units: Obtain exposed masonry units of a uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, from single source from single manufacturer for each product required.
- C. Source Limitations for Mortar Materials: Obtain mortar ingredients of a uniform quality, including color for exposed masonry, from single manufacturer for each cementitious component and from single source or producer for each aggregate.
- D. Masonry Standard: Comply with ACI 530.1/ASCE 6/TMS 602 unless modified by requirements in the Contract Documents.
- E. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
  - 1. Build mockup of typical wall area as shown on Drawings.
  - 2. Build mockups for each type of exposed unit masonry construction in sizes approximately 48 inches long by 48 inches high by full thickness, including face and backup wythes and accessories.
    - a. Include a sealant-filled joint at least 16 inches long in each mockup.
    - b. Include lower corner of window opening at upper corner of exterior wall mockup. Make opening approximately 12 inches wide by 16 inches high.
    - c. Include through-wall flashing installed for a 24-inch length in corner of exterior wall mockup approximately 16 inches down from top of mockup, with a 12-inch length of flashing left exposed to view (omit masonry above half of flashing).
  - 3. Protect accepted mockups from the elements with weather-resistant membrane.
  - 4. Approval of mockups is for color, texture, and blending of masonry units; relationship of mortar and sealant colors to masonry unit colors; tooling of joints; and aesthetic qualities of workmanship.
    - a. Approval of mockups is also for other material and construction qualities specifically approved by The Commissioner in writing.
    - b. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless such deviations are specifically approved by The Commissioner in writing.



5. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

- F. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination."

#### 1.9 DELIVERY, STORAGE, AND HANDLING

- A. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.
- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- D. Deliver preblended, dry mortar mix in moisture-resistant containers designed for use with dispensing silos. Store preblended, dry mortar mix in delivery containers on elevated platforms, under cover, and in a dry location or in covered weatherproof dispensing silos.
- E. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

#### 1.10 PROJECT CONDITIONS

- A. Protection of Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed masonry when construction is not in progress.
  1. Extend cover a minimum of 24 inches down both sides of walls and hold cover securely in place.
- B. Do not apply uniform floor or roof loads for at least 12 hours and concentrated loads for at least three days after building masonry walls or columns.
- C. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.
  1. Protect base of walls from rain-splashed mud and from mortar splatter by spreading coverings on ground and over wall surface.
  2. Protect sills, ledges, and projections from mortar droppings.
  3. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.

4. Turn scaffold boards near the wall on edge at the end of each day to prevent rain from splashing mortar and dirt onto completed masonry.
- D. **Cold-Weather Requirements:** Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.
  1. **Cold-Weather Cleaning:** Use liquid cleaning methods only when air temperature is 40 deg F and higher and will remain so until masonry has dried, but not less than 7 days after completing cleaning.
- E. **Hot-Weather Requirements:** Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

## PART 2 - PRODUCTS

### 2.1 MASONRY UNITS, GENERAL

- A. **Defective Units:** Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated in the standard. Do not use units where such defects will be exposed in the completed Work.
- B. **Fire-Resistance Ratings:** Where indicated, provide units that comply with requirements for fire-resistance ratings indicated as determined by testing according to ASTM E 119, by equivalent masonry thickness, or by other means, as acceptable to authorities having jurisdiction.

### 2.2 CONCRETE MASONRY UNITS

- A. **Shapes:** Provide shapes indicated and as follows, with exposed surfaces matching exposed faces of adjacent units unless otherwise indicated.
  1. Provide square-edged units for outside corners unless otherwise indicated.
- B. **Integral Water Repellent:** Provide units made with integral water repellent for exposed units and where indicated.
  1. **Integral Water Repellent:** Liquid polymeric, integral water-repellent admixture that does not reduce flexural bond strength. Units made with integral water repellent, when tested according to ASTM E 514 as a wall assembly made with mortar containing integral water-repellent manufacturer's mortar additive, with test period extended to 24 hours, shall show no visible water or leaks on the back of test specimen.
    - a. **Products: Basis of Design:** Custom CMU's manufactured by Glenwood Masonry Supply, 4100 Glenwood Road, Brooklyn

b. Subject to compliance with requirements, provide one of the following or approved equal to match existing construction:

- 1) ACM Chemistries, Inc.; RainBloc.
- 2) BASF Aktiengesellschaft; Rheopel Plus.
- 3) Grace Construction Products, W. R. Grace & Co. - Conn.; Dry-Block.
- 4) Or approved equal.

C. CMUs: ASTM C 90.

1. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 2800 psi.
2. Density Classification: Normal weight.
3. Size (Width): Manufactured to dimensions 3/8 inch less than nominal dimensions.
4. Exposed Faces: Provide color and texture matching existing .

D. BLUESTONE COPING STONES

1. Provide bluestone coping stones to match existing stills on site and in accordance with the drawings.

## 2.3 MORTAR AND GROUT MATERIALS

A. Portland Cement: ASTM C 150, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.

B. Hydrated Lime: ASTM C 207, Type S.

C. Portland Cement-Lime Mix: Packaged blend of portland cement and hydrated lime containing no other ingredients.

D. Masonry Cement: ASTM C 91.

1. Products: Subject to compliance with requirements, provide one of the following or approved equal manufacturer of cement appropriate to match conditions and design requirements:
  - a. Capital Materials Corporation; Flamingo Color Masonry Cement.
  - b. Cemex S.A.B. de C.V.
  - c. Essroc, Italcementi Group
  - d. Holcim (US) Inc.
  - e. Lafarge North America Inc.
  - f. Lehigh Cement Company
  - g. Or approved equal

E. Mortar Cement: ASTM C 1329.

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1. Products: Subject to compliance with requirements, provide one of the following or approved equal:

- a. Lafarge North America Inc.; Lafarge Mortar Cement or Magnolia Superbond Mortar Cement.
- b. Lehigh Cement Company
- c. Cemex SAB de CV
- d. Or approved equal

F. Mortar Pigments: Natural and synthetic iron oxides and chromium oxides, compounded for use in mortar mixes and complying with ASTM C 979. Use only pigments with a record of satisfactory performance in masonry mortar.

1. Products: Subject to compliance with requirements, provide one of the following or approved equal:

- a. Davis Colors; True Tone Mortar Colors.
- b. Lanxess Corporation; Bayferrox Iron Oxide Pigments.
- c. Solomon Colors, Inc.; SGS Mortar Colors.
- d. Or approved equal

G. Aggregate for Mortar: ASTM C 144.

1. For mortar that is exposed to view, use washed aggregate consisting of natural sand or crushed stone.
2. For joints less than 1/4 inch thick, use aggregate graded with 100 percent passing the No. 16 sieve.
3. White-Mortar Aggregates: Natural white sand or crushed white stone.
4. Colored-Mortar Aggregates: Natural sand or crushed stone of color necessary to produce required mortar color.

H. Aggregate for Grout: ASTM C 404.

I. Water: Potable.

## 2.4 REINFORCEMENT

A. Uncoated Steel Reinforcing Bars: ASTM A 615/A 615M or ASTM A 996/A 996M, Grade 60.

B. Masonry Joint Reinforcement, General: ASTM A 951/A 951M.

1. Exterior Walls: Stainless steel.
2. Wire Size for Side Rods: 0.187-inch diameter.
3. Wire Size for Cross Rods: 0.187-inch diameter.
4. Wire Size for Veneer Ties: 0.187-inch diameter.
5. Spacing of Cross Rods, Tabs, and Cross Ties: Not more than 16 inches o.c.
6. Provide in lengths of not less than 10 feet.

- C. Masonry Joint Reinforcement for Single-Wythe Masonry: Either ladder or truss type with single pair of side rods.

2.5 MISCELLANEOUS ANCHORS

- A. Anchor Bolts: Headed or L-shaped steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers; hot-dip galvanized to comply with ASTM A 153/A 153M, Class C; of dimensions indicated.

2.6 EMBEDDED FLASHING MATERIALS

- A. Metal Flashing: Provide metal flashing complying with SMACNA's "Architectural Sheet Metal Manual" and as follows:

1. Fabricate continuous flashings in sections 96 inches long minimum, but not exceeding 12 feet. Provide splice plates at joints of formed, smooth metal flashing.

- B. Flexible Flashing: Use one of the following unless otherwise indicated:

1. Elastomeric Thermoplastic Flashing: Composite flashing product consisting of a polyester-reinforced ethylene interpolymer alloy.

- a. Products: Subject to compliance with requirements, provide one of the following:

- 1) DuPont; Thru-Wall Flashing.
- 2) Hohmann & Barnard, Inc.; Flex-Flash.
- 3) Hyload, Inc.; Hyload Cloaked Flashing System.
- 4) Mortar Net USA, Ltd.; Total Flash.
- 5) Or approved equal

- b. Monolithic Sheet: Elastomeric thermoplastic flashing, 0.040 inch thick.

- c. Self-Adhesive Sheet: Elastomeric thermoplastic flashing, 0.025 inch thick, with a 0.015-inch-thick coating of adhesive.

- d. Self-Adhesive Sheet with Drip Edge: Elastomeric thermoplastic flashing, 0.025 inch thick, with a 0.015-inch-thick coating of rubberized-asphalt adhesive. Where flashing extends to face of masonry, rubberized-asphalt coating is held back approximately 1-1/2 inches from edge.

- 1) Color: Gray.

- e. Accessories: Provide preformed corners, end dams, other special shapes, and seaming materials produced by flashing manufacturer.

- C. Application: Unless otherwise indicated, use the following:

1. Where flashing is fully concealed, use flexible flashing.

- D. Adhesives, Primers, and Seam Tapes for Flashings: Flashing manufacturer's standard products or products recommended by flashing manufacturer for bonding flashing sheets to each other and to substrates.

## 2.7 MISCELLANEOUS MASONRY ACCESSORIES

- A. Compressible Filler: Premolded filler strips complying with ASTM D 1056, Grade 2A1; compressible up to 35 percent; of width and thickness indicated; formulated from urethane.
- B. Preformed Control-Joint Gaskets: Made from styrene-butadiene-rubber compound, complying with ASTM D 2000, Designation M2AA-805 or PVC, complying with ASTM D 2287, Type PVC-65406 and designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated.
- C. Bond-Breaker Strips: Asphalt-saturated, organic roofing felt complying with ASTM D 226, Type I (No. 15 asphalt felt).
- D. Reinforcing Bar Positioners: Wire units designed to fit into mortar bed joints spanning masonry unit cells and hold reinforcing bars in center of cells. Units are formed from 0.148-inch steel wire, hot-dip galvanized after fabrication. Provide units designed for number of bars indicated.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Dayton Superior Corporation, Dur-O-Wal Division; D/A 810, D/A 812 or D/A 817.
    - b. Heckmann Building Products Inc.; No. 376 Rebar Positioner.
    - c. Hohmann & Barnard, Inc.; #RB or #RB-Twin Rebar Positioner.
    - d. Wire-Bond; O-Ring or Double O-Ring Rebar Positioner.
    - e. Or approved equal.

## 2.8 MORTAR AND GROUT MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures unless otherwise indicated.
  - 1. Do not use calcium chloride in mortar or grout.
  - 2. For reinforced masonry, use Portland cement-lime mortar.
- B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.
- C. Mortar for Unit Masonry: Comply with ASTM C 270, Property Specification. Provide the following types of mortar for applications stated unless another type is indicated or needed to provide required compressive strength of masonry.

1. For masonry below grade or in contact with earth, use Type S.
  2. For reinforced masonry, use Type S.
- D. Pigmented Mortar: Use colored cement product.
1. Pigments shall not exceed 10 percent of portland cement by weight.
  2. Mix to match The Commissioner's sample.
  3. Application: Use pigmented mortar for exposed mortar joints with the following units:
    - a. CMUs to match existing.
- E. Grout for Unit Masonry: Comply with ASTM C 476.
1. Use grout of type indicated or, if not otherwise indicated, of type (fine or coarse) that will comply with Table 1.15.1 in ACI 530.1/ASCE 6/TMS 602 for dimensions of grout spaces and pour height.
  2. Proportion grout in accordance with ASTM C 476, Table 1 or paragraph 4.2.2 for specified 28-day compressive strength indicated, but not less than 2000 psi.
  3. Provide grout with a slump of 8 to 11 inches as measured according to ASTM C 143/C 143M.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
1. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of work.
  2. Verify that foundations are within tolerances specified.
  3. Verify that reinforcing dowels are properly placed.
- B. Before installation, examine rough-in and built-in construction for piping systems to verify actual locations of piping connections.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 INSTALLATION, GENERAL

- A. Build chases and recesses to accommodate items specified in this and other Sections.
- B. Leave openings for equipment to be installed before completing masonry. After installing equipment, complete masonry to match the construction immediately adjacent to opening.

- C. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.

### 3.3 TOLERANCES

#### A. Dimensions and Locations of Elements:

1. For dimensions in cross section or elevation do not vary by more than plus 1/2 inch or minus 1/4 inch.
2. For location of elements in plan do not vary from that indicated by more than plus or minus 1/2 inch.
3. For location of elements in elevation do not vary from that indicated by more than plus or minus 1/4 inch in a story height or 1/2 inch total.

#### B. Lines and Levels:

1. For bed joints and top surfaces of bearing walls do not vary from level by more than 1/4 inch in 10 feet, or 1/2 inch maximum.
2. For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.
3. For vertical lines and surfaces do not vary from plumb by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch maximum.
4. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/8 inch in 10 feet, 1/4 inch in 20 feet, or 1/2 inch maximum.
5. For lines and surfaces do not vary from straight by more than 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch maximum.
6. For vertical alignment of exposed head joints, do not vary from plumb by more than 1/4 inch in 10 feet, or 1/2 inch maximum.

#### C. Joints:

1. For bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch.
2. For exposed bed joints, do not vary from bed-joint thickness of adjacent courses by more than 1/8 inch.
3. For head and collar joints, do not vary from thickness indicated by more than plus 3/8 inch or minus 1/4 inch.
4. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch.

### 3.4 LAYING MASONRY WALLS

- A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets.



Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.

- B. **Bond Pattern for Exposed Masonry:** Unless otherwise indicated, lay exposed masonry in bond pattern indicated on Drawings; do not use units with less than nominal 4-inch horizontal face dimensions at corners or jambs.
- C. **Lay concealed masonry with all units in a wythe in running bond or bonded by lapping not less than 4-inches.** Bond and interlock each course of each wythe at corners. Do not use units with less than nominal 4-inch horizontal face dimensions at corners or jambs.
- D. **Stopping and Resuming Work:** Stop work by racking back units in each course from those in course below; do not tooth. When resuming work, clean masonry surfaces that are to receive mortar before laying fresh masonry.
- E. **Built-in Work:** As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items.
- F. **Where built-in items are to be embedded in cores of hollow masonry units,** place a layer of metal lath, wire mesh, or plastic mesh in the joint below and rod mortar or grout into core.
- G. **Fill cores in hollow CMUs with grout 24 inches under bearing plates, beams, lintels, posts, and similar items unless otherwise indicated.**

### 3.5 MORTAR BEDDING AND JOINTING

- A. **Lay hollow CMUs as follows:**
  - 1. With face shells fully bedded in mortar and with head joints of depth equal to bed joints.
  - 2. With webs fully bedded in mortar in all courses of piers, columns, and pilasters.
  - 3. With webs fully bedded in mortar in grouted masonry, including starting course on footings.
  - 4. With entire units, including areas under cells, fully bedded in mortar at starting course on footings where cells are not grouted.
- B. **Set bluestone trim units in full bed of mortar with full vertical joints.** Fill dowel, anchor, and similar holes.
  - 1. Clean soiled surfaces with fiber brush and soap powder and rinse thoroughly with clear water.
  - 2. Allow cleaned surfaces to dry before setting.
  - 3. Wet joint surfaces thoroughly before applying mortar.
- C. **Tool exposed joints slightly concave when thumbprint hard,** using a jointer larger than joint thickness unless otherwise indicated.
- D. **Cut joints flush for masonry walls to receive plaster or other direct-applied finishes (other than paint) unless otherwise indicated.**

### 3.6 MASONRY JOINT REINFORCEMENT

- A. General: Install entire length of longitudinal side rods in mortar with a minimum cover of 5/8 inch on exterior side of walls, 1/2 inch elsewhere. Lap reinforcement a minimum of 6 inches.
  - 1. Space reinforcement not more than 16 inches o.c.
  - 2. Space reinforcement not more than 8 inches o.c. in foundation walls and parapet walls.
- B. Interrupt joint reinforcement at control and expansion joints unless otherwise indicated.
- C. Provide continuity at wall intersections by using prefabricated T-shaped units.
- D. Provide continuity at corners by using prefabricated L-shaped units.
- E. Cut and bend reinforcing units as directed by manufacturer for continuity at corners, returns, offsets, column fireproofing, pipe enclosures, and other special conditions.

### 3.7 ANCHORING MASONRY TO STRUCTURAL STEEL AND CONCRETE

- A. Anchor masonry to structural steel and concrete where masonry abuts or faces structural steel or concrete to comply with the following:
  - 1. Provide an open space not less than 1/2 inch wide between masonry and structural steel or concrete unless otherwise indicated. Keep open space free of mortar and other rigid materials.
  - 2. Anchor masonry with anchors embedded in masonry joints and attached to structure.
  - 3. Space anchors as indicated, but not more than 24 inches o.c. vertically and 36 inches o.c. horizontally.

### 3.8 CONTROL AND EXPANSION JOINTS

- A. General: Install control and expansion joint materials in unit masonry as masonry progresses. Do not allow materials to span control and expansion joints without provision to allow for in-plane wall or partition movement.
- B. Form control joints in concrete masonry as follows or as otherwise indicated on the drawings:
  - 1. Fit bond-breaker strips into hollow contour in ends of CMUs on one side of control joint. Fill resultant core with grout and rake out joints in exposed faces for application of sealant.
  - 2. Install preformed control-joint gaskets designed to fit standard sash block.
  - 3. Install interlocking units designed for control joints. Install bond-breaker strips at joint. Keep head joints free and clear of mortar or rake out joint for application of sealant.
  - 4. Install temporary foam-plastic filler in head joints and remove filler when unit masonry is complete for application of sealant.

### 3.9 FLASHING

- A. General: Install embedded flashing in masonry at lintels, ledges, other obstructions to downward flow of water in wall, and where indicated.
- B. Install flashing as follows unless otherwise indicated:
  - 1. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Where flashing is within mortar joint, place through-wall flashing on sloping bed of mortar and cover with mortar. Before covering with mortar, seal penetrations in flashing with adhesive, sealant, or tape as recommended by flashing manufacturer.
  - 2. Cut flexible flashing off flush with face of wall after masonry wall construction is completed.

### 3.10 REINFORCED UNIT MASONRY INSTALLATION

- A. Temporary Formwork and Shores: Construct formwork and shores as needed to support reinforced masonry elements during construction.
  - 1. Construct formwork to provide shape, line, and dimensions of completed masonry as indicated. Make forms sufficiently tight to prevent leakage of mortar and grout. Brace, tie, and support forms to maintain position and shape during construction and curing of reinforced masonry.
  - 2. Do not remove forms and shores until reinforced masonry members have hardened sufficiently to carry their own weight and other loads that may be placed on them during construction.
- B. Placing Reinforcement: Comply with requirements in ACI 530.1/ASCE 6/TMS 602.
- C. Grouting: Do not place grout until entire height of masonry to be grouted has attained enough strength to resist grout pressure.
  - 1. Comply with requirements in ACI 530.1/ASCE 6/TMS 602 for cleanouts and for grout placement, including minimum grout space and maximum pour height.
  - 2. Limit height of vertical grout pours to not more than 60 inches.

### 3.11 FIELD QUALITY CONTROL

- A. Testing and Inspecting: The City of New York will engage special inspectors to perform tests and inspections and prepare reports. Allow inspectors access to scaffolding and work areas, as needed to perform tests and inspections. Retesting of materials that fail to meet specified requirements shall be done at Contractor's expense.
- B. Concrete Masonry Unit Test: For each type of unit provided, according to ASTM C 140 for compressive strength.

### 3.12 REPAIRING, POINTING, AND CLEANING

- A. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install new units to match adjoining units; install in fresh mortar, pointed to eliminate evidence of replacement.
- B. Pointing: During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance. Prepare joints for sealant application, where indicated.
- C. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- D. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
  - 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
  - 2. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes. Obtain The Commissioner's approval of sample cleaning before proceeding with cleaning of masonry.
  - 3. Protect adjacent stone and nonmasonry surfaces from contact with cleaner by covering them with liquid strippable masking agent or polyethylene film and waterproof masking tape.
  - 4. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water.
  - 5. Clean concrete masonry by cleaning method indicated in NCMA TEK 8-2A applicable to type of stain on exposed surfaces.

### 3.13 MASONRY WASTE DISPOSAL

- A. Salvageable Materials: Unless otherwise indicated, excess masonry materials are Contractor's property. At completion of unit masonry work, remove from Project site.
- B. Waste Disposal as Fill Material: Dispose of clean masonry waste, including excess or soil-contaminated sand, waste mortar, and broken masonry units, by crushing and mixing with fill material as fill is placed.
  - 1. Crush masonry waste to less than 4 inches in each dimension.
  - 2. Mix masonry waste with at least two parts of specified fill material for each part of masonry waste. Fill material is specified in Division 31 Section "Earth Moving."
  - 3. Do not dispose of masonry waste as fill within 18 inches of finished grade.
- C. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above, and other masonry waste, and legally dispose of off The Museum's property.

END OF SECTION 042200

## SECTION 055000 - METAL FABRICATIONS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Steel framing and supports for plumbing and electrical equipment.
  - 2. Steel framing and supports for applications where framing and supports are not specified in other Sections.
  - 3. Miscellaneous steel trim including steel edgings.
  - 4. Loose bearing and leveling plates for applications where they are not specified in other Sections.
  - 5. Metal attachments fasteners required by the scope of the work
  - 6. Restoration of metal guardrails as indicated.
  - 7. Access panels
- B. Products furnished, but not installed, under this Section:
  - 1. Anchor bolts, steel pipe sleeves, slotted-channel inserts, and wedge-type inserts indicated to be cast into concrete or built into unit masonry.
  - 2. Steel weld plates and angles for casting into concrete for applications where they are not specified in other Sections.
- C. Related Sections:
  - 1. Division 03 Section "Cast-in-Place Concrete" for installing anchor bolts, steel pipe sleeves, slotted-channel inserts, wedge-type inserts, and other items cast into concrete.
  - 2. Division 04 Section "Maintenance of Unit Masonry" or "Concrete Unit Masonry" for installing loose lintels, anchor bolts, and other items built into unit masonry.
  - 3. Division 05 Section "Metal Fences."
  - 4. Division 06 Section "Exterior Architectural Woodwork"
  - 5. Division 32 Section "Plants"

### 1.3 PERFORMANCE REQUIREMENTS

- A. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on exterior metal fabrications by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects.

1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

### 1.4 ACTION SUBMITTALS

- A. Product Data: For the following:

1. Paint products.
2. Grout.

- B. Shop Drawings: Show fabrication and installation details for metal fabrications.

1. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items.

- C. Samples for Verification: For each type and finish of visible metal component.

### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified professional engineer.

- B. Mill Certificates: Signed by manufacturers of stainless-steel certifying that products furnished comply with requirements.

- C. Welding certificates.

- D. Paint Compatibility Certificates: From manufacturers of topcoats applied over shop primers certifying that shop primers are compatible with topcoats.

### 1.6 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."

- B. Welding Qualifications: Qualify procedures and personnel according to the following:

1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
2. AWS D1.2/D1.2M, "Structural Welding Code - Aluminum."
3. AWS D1.6, "Structural Welding Code - Stainless Steel."

1.7 PROJECT CONDITIONS

- A. Field Measurements: Verify actual locations of walls and other construction contiguous with metal fabrications by field measurements before fabrication.

1.8 COORDINATION

- A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written recommendations to ensure that shop primers and topcoats are compatible with one another.
- B. Coordinate installation of anchorages and steel weld plates and angles for casting into concrete. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

PART 2 - PRODUCTS

2.1 METALS, GENERAL

- A. Metal Surfaces, General: Provide materials with smooth, flat surfaces unless otherwise indicated. For metal fabrications exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.

2.2 FERROUS METALS

- A. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- B. Stainless-Steel Sheet, Strip, and Plate: ASTM A 240/A 240M or ASTM A 666, Type 304.
- C. Stainless-Steel Bars and Shapes: ASTM A 276, Type 304.
- D. Steel Tubing: ASTM A 500, cold-formed steel tubing.
- E. Steel Pipe: ASTM A 53/A 53M, standard weight (Schedule 40) unless otherwise indicated.

2.3 FASTENERS

- A. General: Unless otherwise indicated, provide Type 304 stainless-steel fasteners for exterior use and zinc-plated fasteners with coating complying with ASTM B 633 or ASTM F 1941, Class Fe/Zn 5, at exterior walls. Select fasteners for type, grade, and class required.
  - 1. Provide stainless-steel fasteners for fastening aluminum.
  - 2. Provide stainless-steel fasteners for fastening stainless steel.

- B. Steel Bolts and Nuts: Regular hexagon-head bolts, ASTM A 307, Grade A; with hex nuts, ASTM A 563; and, where indicated, flat washers.
- C. Steel Bolts and Nuts: Regular hexagon-head bolts, ASTM A 325, Type 3; with hex nuts, ASTM A 563, Grade C3; and, where indicated, flat washers.
- D. Stainless-Steel Bolts and Nuts: Regular hexagon-head annealed stainless-steel bolts, ASTM F 593; with hex nuts, ASTM F 594; and, where indicated, flat washers; Alloy Group 1.
- E. Anchor Bolts: ASTM F 1554, Grade 36, of dimensions indicated; with nuts, ASTM A 563; and, where indicated, flat washers.
  - 1. Hot-dip galvanize or provide mechanically deposited, zinc coating where item being fastened is indicated to be galvanized.
- F. Eyebolts: ASTM A 489.
- G. Machine Screws: ASME B18.6.3.
- H. Lag Screws: ASME B18.2.1.
- I. Wood Screws: Flat head, ASME B18.6.1.
- J. Plain Washers: Round, ASME B18.22.1.
- K. Lock Washers: Helical, spring type, ASME B18.21.1.
- L. Anchors, General: Anchors capable of sustaining, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing according to ASTM E 488, conducted by a qualified independent testing agency.
- M. Cast-in-Place Anchors in Concrete: Either threaded type or wedge type unless otherwise indicated; galvanized ferrous castings, either ASTM A 47/A 47M malleable iron or ASTM A 27/A 27M cast steel. Provide bolts, washers, and shims as needed, all hot-dip galvanized per ASTM F 2329.
- N. Post-Installed Anchors: Torque-controlled expansion anchors or chemical anchors as indicated on the drawings.
  - 1. Material for Interior Locations: Carbon-steel components zinc plated to comply with ASTM B 633 or ASTM F 1941, Class Fe/Zn 5, unless otherwise indicated.
  - 2. Material for Exterior Locations and Where Stainless Steel is Indicated: Alloy Group 1 stainless-steel bolts, ASTM F 593, and nuts, ASTM F 594.
- O. Slotted-Channel Inserts: Cold-formed, hot-dip galvanized-steel box channels (struts) complying with MFMA-4, 1-5/8 by 7/8 inches by length indicated with anchor straps or studs not less than 3 inches long at not more than 8 inches o.c. Provide with temporary filler and tee-head bolts, complete with washers and nuts, all zinc-plated to comply with ASTM B 633, Class Fe/Zn 5, as needed for fastening to inserts.



## 2.4 MISCELLANEOUS MATERIALS

- A. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.
- B. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.
- C. High performance Coatings: Prep and repaint existing rails to match existing color.
- D. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187.
- E. Nonshrink, Metallic Grout: Factory-packaged, ferrous-aggregate grout complying with ASTM C 1107, specifically recommended by manufacturer for heavy-duty loading applications.
- F. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout specifically recommended by manufacturer for interior and exterior applications.

## 2.5 ACCESS PANELS

- A. Insulated access doors of stainless steel with mortise locking mechanism accessible from interior or exterior and suitable for installation in masonry wall as indicated.
- B. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated or comparable product by one of the following:
  - 1. Nystrom, Inc.
  - 2. Babcock-Davis.
  - 3. Karp Associates, Inc.
  - 4. Bilco Company (The).
  - 5. Dur-Red Products.
  - 6. Maxam Metal Products Limited.
  - 7. Milcor Inc.
  - 8. Or approved equal

## 2.6 FABRICATION, GENERAL

- A. Shop Assembly: Preassemble items in the shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
- B. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.

- C. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- D. Form exposed work with accurate angles and surfaces and straight edges.
- E. Weld corners and seams continuously to comply with the following:
  - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  - 2. Obtain fusion without undercut or overlap.
  - 3. Remove welding flux immediately.
  - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and unless directed otherwise, contour of welded surface matches that of adjacent surface.
- F. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners or welds where possible. Where exposed fasteners are required, use Phillips flat-head (countersunk) fasteners unless otherwise indicated. Locate joints where least conspicuous.
- G. Fabricate seams and other connections that will be exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
- H. Cut, reinforce, drill, and tap metal fabrications as indicated to receive finish hardware, screws, and similar items.
- I. Provide for anchorage of type indicated; coordinate with supporting structure. Space anchoring devices to secure metal fabrications rigidly in place and to support indicated loads.
  - 1. Where units are indicated to be cast into concrete or built into masonry, equip with integrally welded steel strap anchors, 1/8 by 1-1/2 inches, with a minimum 6-inch embedment and 2-inch hook, not less than 8 inches from ends and corners of units and 24 inches o.c., unless otherwise indicated.

## 2.7 MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Provide steel framing and supports not specified in other Sections as needed to complete the Work.
- B. Fabricate units from steel shapes, plates, and bars of welded construction unless otherwise indicated. Fabricate to sizes, shapes, and profiles indicated and as necessary to receive adjacent construction.
  - 1. Fabricate units from slotted channel framing where indicated.
  - 2. Furnish inserts for units installed after concrete is placed.
- C. Galvanize miscellaneous framing and supports where indicated.

2.8 MISCELLANEOUS STEEL TRIM

- A. Unless otherwise indicated, fabricate units from steel shapes, plates, and bars of profiles shown with continuously welded joints and smooth exposed edges. Miter corners and use concealed field splices where possible.
- B. Provide cutouts, fittings, and anchorages as needed to coordinate assembly and installation with other work.
  - 1. Provide with integrally welded steel strap anchors for embedding in concrete or masonry construction.
- C. Galvanize exterior miscellaneous steel trim.

2.9 LOOSE BEARING AND LEVELING PLATES

- A. Provide loose bearing and leveling plates for steel items bearing on masonry or concrete construction. Drill plates to receive anchor bolts and for grouting.
- B. Galvanize plates.

2.10 STEEL WELD PLATES AND ANGLES

- A. Provide steel weld plates and angles not specified in other Sections, for items supported from concrete construction as needed to complete the Work. Provide each unit with no fewer than two integrally welded steel strap anchors for embedding in concrete.

2.11 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Finish metal fabrications after assembly.
- C. Finish exposed surfaces to remove tool and die marks and stretch lines, and to blend into surrounding surface.

2.12 STEEL AND IRON FINISHES

- A. Galvanizing: Hot-dip galvanize items as indicated to comply with ASTM A 153/A 153M for steel and iron hardware and with ASTM A 123/A 123M for other steel and iron products.
  - 1. Do not quench or apply post galvanizing treatments that might interfere with paint adhesion.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. **Cutting, Fitting, and Placement:** Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.
- B. **Fit exposed connections accurately together to form hairline joints.** Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
- C. **Field Welding:** Comply with the following requirements:
  - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  - 2. Obtain fusion without undercut or overlap.
  - 3. Remove welding flux immediately.
  - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
- D. **Fastening to In-Place Construction:** Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction. Provide threaded fasteners for use with concrete and masonry inserts, toggle bolts, through bolts, lag screws, wood screws, and other connectors.
- E. **Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.**
- F. **Corrosion Protection:** Coat concealed surfaces of aluminum that will come into contact with grout, concrete, masonry, wood, or dissimilar metals with the following:

### 3.2 INSTALLING MISCELLANEOUS FRAMING AND SUPPORTS

- A. **General:** Install framing and supports to comply with requirements of items being supported, including manufacturers' written instructions and requirements indicated on Shop Drawings.
- B. **Anchor supports for operable partitions securely to and rigidly brace from building structure.**
- C. **Support steel girders on solid grouted masonry, concrete, or steel pipe columns.** Secure girders with anchor bolts embedded in grouted masonry or concrete or with bolts through top plates of pipe columns.
  - 1. Where grout space under bearing plates is indicated for girders supported on concrete or masonry, install as specified in "Installing Bearing and Leveling Plates" Article.

- D. Install pipe columns on concrete footings with grouted baseplates. Position and grout column baseplates as specified in "Installing Bearing and Leveling Plates" Article.
  - 1. Grout baseplates of columns supporting steel girders after girders are installed and leveled.

### 3.3 INSTALLING BEARING AND LEVELING PLATES

- A. Clean concrete and masonry bearing surfaces of bond-reducing materials, and roughen to improve bond to surfaces. Clean bottom surface of plates.
- B. Set bearing and leveling plates on wedges, shims, or leveling nuts. After bearing members have been positioned and plumbed, tighten anchor bolts. Do not remove wedges or shims but, if protruding, cut off flush with edge of bearing plate before packing with grout.
  - 1. Use nonshrink grout, either metallic or nonmetallic, in concealed locations where not exposed to moisture; use nonshrink, nonmetallic grout in exposed locations unless otherwise indicated.
  - 2. Pack grout solidly between bearing surfaces and plates to ensure that no voids remain.

### 3.4 ADJUSTING AND CLEANING

- A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas. Paint uncoated and abraded areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.
  - 1. Apply by brush or spray to provide a minimum 2.0-mil dry film thickness.
- B. Touchup Painting: Cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint are specified in Division 09 painting Sections.
- C. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780.

END OF SECTION 055000

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## SECTION 064013 - EXTERIOR ARCHITECTURAL WOODWORK

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:

1. Exterior garden benches.
2. Exterior ornamental wood screen.
3. Shop priming exterior woodwork.
4. Shop finishing exterior woodwork.

- B. Related Sections include the following:

1. Division 05 Section "Metal Fabrications" for attachments and hardware.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product and process indicated and incorporated into items of exterior architectural woodwork during fabrication, finishing, and installation.

1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements.
2. Include data for fire-retardant treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements.

- B. Shop Drawings: Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices, and other components.

1. Show details full size.
2. Show locations and sizes of blocking and nailers, including concealed blocking and reinforcement specified in other Sections.
3. Apply WI-certified compliance label to first page of Shop Drawings.

- C. Samples for Verification:

1. Lumber for exterior wood stain finish, not less than 5 sq. in., for each species, with 1/2 of exposed surface finished.

2. Lumber for transparent finish, not less than 5 sq. in., for each species, with 1/2 of exposed surface finished.

#### 1.4 QUALITY ASSURANCE

- A. Fabricator Qualifications: Shop that employs skilled workers who custom-fabricate products similar to those required for this Project and whose products have a record of successful in-service performance. Shop is a certified participant in AWI's Quality Certification Program.
- B. Quality Standard: Unless otherwise indicated, comply with AWI's "Architectural Woodwork Quality Standards" for grades of exterior architectural woodwork indicated for construction, finishes, installation, and other requirements.
- C. Quality Standard: Unless otherwise indicated, comply with WI's "Manual of Millwork" for grades of exterior architectural woodwork indicated for construction, finishes, installation, and other requirements.
- D. Fire-Test-Response Characteristics: Where fire-retardant materials or products are indicated, provide materials and products with specified fire-test-response characteristics as determined by testing identical products per test method indicated by UL, ITS, or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify with appropriate markings of applicable testing and inspecting agency in the form of separable paper label or, where required by authorities having jurisdiction, imprint on surfaces of materials that will be concealed from view after installation.

#### 1.5 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation of exterior woodwork only when existing and forecasted weather conditions permit work to be performed and at least one coat of specified finish to be applied without exposure to rain, snow, or dampness.
- B. Field Measurements: Where woodwork is indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
  1. Locate concealed framing, blocking, and reinforcements that support woodwork by field measurements before being enclosed and indicate measurements on Shop Drawings.
  2. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating woodwork without field measurements. Provide allowance for trimming at site, and coordinate construction to ensure that actual dimensions correspond to established dimensions.



## 1.6 COORDINATION

- A. Coordinate sizes and locations of framing, blocking, reinforcements, and other related units of Work specified in other Sections to ensure that exterior architectural woodwork can be supported and installed as indicated.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. General: Provide materials that comply with requirements of AWI's quality standard for each type of woodwork and quality grade specified, unless otherwise indicated.
- B. Certified or Reclaimed Wood: Wood products shall be produced from wood obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship" or documented as reclaimed.
- C. Wood Products: Use wood of quality as specified from the manufacturers listed below or other manufacturers who can provide the same quality and appearance as approved by the Architect.
  - 1. Citilogs: [www.citilogs.com](http://www.citilogs.com)
  - 2. The Hudson Co.: [www.hudson-co.com](http://www.hudson-co.com)
  - 3. M. Fine Lumber Company: [www.mfinelumber.com](http://www.mfinelumber.com)
  - 4. Or approved equal

### 2.2 WOOD-PRESERVATIVE-TREATED MATERIALS

- A. Preservative Treatment by Nonpressure Process: Comply with AWPA N1 using the following preservative for woodwork items indicated to receive water-repellent preservative treatment:
  - 1. Water-Repellent Preservative: Formulation made specifically for dip treatment of woodwork items and containing 3-iodo-2-propynyl butyl carbamate (IPBC) complying with AWPA P8 as its active ingredient.
  - 2. Water-Repellent Preservative/Insecticide: Formulation made specifically for dip treatment of woodwork items and containing 3-iodo-2-propynyl butyl carbamate (IPBC) as its active ingredient, combined with an insecticide containing chlorpyrifos as its active ingredient, both complying with AWPA P8.

### 2.3 FIRE-RETARDANT-TREATED MATERIALS

- A. General: Where fire-retardant-treated materials are indicated, provide materials that comply with performance requirements of AWPA C20 (lumber) and AWPA C27 (plywood), exterior type.

1. Fire-Retardant Chemicals: Use chemical formulations that do not bleed through or otherwise adversely affect finishes. Do not use colorants to distinguish treated materials from untreated materials.
2. Mill lumber before treatment and implement special procedures during treatment and drying processes that prevent lumber from warping and developing discolorations from drying sticks or other causes, marring, and other defects affecting appearance of treated woodwork.
3. Kiln-dry materials before and after treatment to levels required for untreated materials.
4. Do not use treated materials that do not comply with requirements of referenced woodworking standard or that are warped, discolored, or otherwise defective.
5. Identify fire-retardant-treated materials with appropriate classification marking of UL, U.S. Testing, Timber Products Inspection, or another testing and inspecting agency acceptable to authorities having jurisdiction.

#### 2.4 INSTALLATION MATERIALS

- A. Blocking, Shims, and Nailers: Softwood or hardwood lumber, fire-retardant treated, kiln dried to less than 15 percent moisture content.
- B. Nails: stainless steel.
- C. Screws: stainless steel.
  1. Provide self-drilling screws for metal framing supports, as recommended by metal-framing manufacturer.
- D. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide nonferrous-metal or hot-dip galvanized anchors and inserts, unless otherwise indicated. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.

#### 2.5 FABRICATION, GENERAL

- A. Wood Moisture Content: 9 to 15 percent.
- B. Fabricate woodwork to dimensions, profiles, and details indicated. Ease edges to radius indicated for the following:
  1. Edges of Solid-Wood (Lumber) Members 3/4 Inch Thick or Less: 1/16 inch.
  2. Edges of Rails and Similar Members More Than 3/4 Inch Thick: 1/8 inch.
- C. Complete fabrication, including assembly, finishing, and hardware application, to maximum extent possible before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.
- D. Shop cut openings, to maximum extent possible, to receive hardware, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to

produce accurately sized and shaped openings. Smooth edges of cutouts and seal with a water-resistant coating suitable for exterior applications.

## 2.6 EXTERIOR WOOD BENCH WOOD PLANKS FOR TRANSPARENT FINISH

- A. Grade: Premium.
- B. Wood Species: Reclaimed Black Locust
  - 1. Do not use plain-sawn lumber with exposed, flat surfaces more than 3 inches wide.
  - 2. Use solid continuous pieces as shown on the drawings
- C. Woodwork for Transparent Finish: Shop seal woodwork for transparent finish with stain (if required), other required pretreatments, and first coat of finish as specified in Division 09 painting Sections:
- D. Preparations for Finishing: Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces, and similar preparations for finishing architectural woodwork, as applicable to each unit of work.
  - 1. Backpriming: Apply one coat of sealer or primer, compatible with finish coats, to concealed surfaces of woodwork. Apply two coats to surfaces installed in contact with concrete or masonry and to end-grain surfaces.

## 2.7 EXTERIOR SCREENS FOR TRANSPARENT FINISH

- A. Grade: Premium.
- B. Wood Species: Reclaimed Black Locust
  - 1. Do not use plain-sawn lumber with exposed, flat surfaces more than 3 inches wide.
- C. Woodwork for Transparent Finish: Shop seal woodwork for transparent finish with stain (if required), other required pretreatments, and first coat of finish as specified in Division 09 painting Sections:
- D. Preparations for Finishing: Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces, and similar preparations for finishing architectural woodwork, as applicable to each unit of work.
  - 1. Backpriming: Apply one coat of sealer or primer, compatible with finish coats, to concealed surfaces of woodwork. Apply two coats to surfaces installed in contact with concrete or masonry and to end-grain surfaces.

## 2.8 SHOP FINISHING

- A. Grade: Provide finishes of same grades as items to be finished.
- B. Grade: Premium.
- C. General: Entire finish of exterior architectural woodwork is specified in this Section. To greatest extent possible, finish architectural woodwork at fabrication shop. Defer only final touchup and cleaning until after installation.
- D. Preparations for Finishing: Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces, and similar preparations for finishing architectural woodwork, as applicable to each unit of work.
  - 1. Backpriming: Apply one coat of sealer or primer, compatible with finish coats, to concealed surfaces of woodwork. Apply two coats to surfaces installed in contact with concrete or masonry and to end-grain surfaces.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Before installation, condition woodwork to average prevailing humidity conditions in installation areas.
- B. Deliver concrete inserts and similar anchoring devices to be built into substrates well in advance of time substrates are to be built.
- C. Before installing architectural woodwork, examine shop-fabricated work for completion and complete work as required, including removal of packing and backpriming.

### 3.2 INSTALLATION

- A. Quality Standard: Install woodwork to comply with same grade specified in Part 2 for type of woodwork involved.
- B. Install woodwork true and straight with no distortions. Shim as required with concealed shims. Install level and plumb to a tolerance of 1/8 inch in 96 inches.
- C. Scribe and cut woodwork to fit adjoining work, and refinish cut surfaces or repair damaged finish at cuts.
- D. Fire-Retardant-Treated Wood: Handle, store, and install fire-retardant-treated wood to comply with chemical treatment manufacturer's written instructions, including those for adhesives used to install woodwork.

- E. Preservative-Treated Wood: Where cut or drilled in field, treat cut ends and drilled holes according to AWWPA M4.
- F. Anchor woodwork to anchors or blocking built in or directly attached to substrates. Secure to grounds, stripping and blocking with countersunk concealed fasteners and blind nailing. Use fine finishing nails for exposed nailing, countersunk and filled flush with woodwork.
- G. Bench and Screen: Install with minimum number of joints possible, using full-length pieces (from maximum length of lumber available) to greatest extent possible. Do not use pieces less than 36 inches long, except where shorter single-length pieces are necessary. Scarf running joints and stagger in adjacent and related members.
  - 1. Install with no more variation from a straight line than 1/8 inch in 96 inches.
- H. Complete finishing work specified in this Section to extent not completed at shop or before installation of woodwork. Fill nail and screw holes with matching filler where exposed.

### 3.3 ADJUSTING AND CLEANING

- A. Repair damaged and defective woodwork, where possible, to eliminate functional and visual defects; replace woodwork where not possible to repair. Adjust joinery for uniform appearance.
- B. Clean woodwork on exposed and semiexposed surfaces. Touch up shop-applied finishes to restore damaged or soiled areas.

END OF SECTION 064013

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## SECTION 071900 - ELASTOMERIC SHEET WATERPROOFING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Butyl rubber sheet waterproofing.
- B. Related Requirements:
  - 1. Division 03 Section "Cast in Place Concrete"

#### 1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
  - 1. Review waterproofing requirements including surface preparation, substrate condition and pretreatment, minimum curing period, forecasted weather conditions, special details and sheet flashings, installation procedures, testing and inspection procedures, and protection and repairs.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include construction details, material descriptions, and tested physical and performance properties of waterproofing.
  - 2. Include manufacturer's written instructions for evaluating, preparing, and treating substrate.

- B. Shop Drawings: Show locations and extent of waterproofing and details of substrate joints and cracks, sheet flashings, penetrations, inside and outside corners, tie-ins with adjoining waterproofing, and other termination conditions.
  - 1. Include setting drawings showing layout, sizes, sections, profiles, and joint details of pedestal-supported concrete pavers.
- C. Samples: For each exposed product and for each color and texture specified, including the following products:
  - 1. 8-by-8-inch square of waterproofing and flashing sheet.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Field quality-control reports.
- C. Sample Warranties: For special warranties.

#### 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by waterproofing manufacturer.
- B. Mockups: Build mockups to verify selections made under Sample submittals and to set quality standards for installation.
  - 1. Build for each typical waterproofing installation including accessories to demonstrate surface preparation, crack and joint treatment, corner treatment, and protection.
    - a. Each type of wall installation.
    - b. If approved, mock-up can be incorporated into final project.
  - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless The Commissioner specifically approves such deviations in writing.
  - 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

#### 1.7 FIELD CONDITIONS

- A. Environmental Limitations: Apply waterproofing within the range of ambient and substrate temperatures recommended in writing by waterproofing manufacturer. Do not apply waterproofing to a damp or wet substrate.
  - 1. Do not apply waterproofing in snow, rain, fog, or mist.



- B. Maintain adequate ventilation during preparation and application of waterproofing materials.

## 1.8 WARRANTY

- A. **Manufacturer's Warranty:** Manufacturer's standard materials-only warranty in which manufacturer agrees to furnish replacement waterproofing material for waterproofing that does not comply with requirements or that fails to remain watertight within specified warranty period.
  - 1. **Warranty Period:** 3 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MATERIALS, GENERAL

- A. **Source Limitations for Waterproofing System:** Obtain waterproofing materials from single source from single manufacturer.

### 2.2 SHEET WATERPROOFING

- A. **Butyl Rubber Sheet:** ASTM D 6134, Type II, 60-mil- thick flexible sheet, unreinforced, formed from isobutylene-isoprene rubber.
  - 1. **Products:** Subject to compliance with requirements, provide the following available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Carlisle Coatings & Waterproofing Inc.; Sure-Seal Butyl or equal by
    - b. Henry Products
    - c. W. R. Grace & Co.
    - d. Or approved equal

### 2.3 AUXILIARY MATERIALS

- A. **General:** Furnish auxiliary materials recommended by waterproofing manufacturer for intended use and compatible with sheet waterproofing.
  - 1. Furnish liquid-type auxiliary materials that comply with VOC limits of authorities having jurisdiction.
- B. **Concealed Sheet Flashing:** Same material, construction, and thickness as sheet waterproofing or 60-mil- thick, uncured EPDM, as required by manufacturer.

- C. Exposed Sheet Flashing: 60-mil- thick EPDM, cured or uncured, as required by manufacturer.
- D. Bonding Adhesives: For bonding waterproofing sheets and sheet flashings to substrates and projections.
- E. Splicing Cement and Cleaner: Single-component butyl splicing cement and solvent-based splice cleaner.
  - 1. Butyl Gum Tape: 30-mil- thick-by-6-1/4-inch- wide, uncured butyl with polyethylene release film.
- F. Lap Sealant: Single-component sealant.
- G. In-Seam Sealant: Single-component sealant.
- H. Water-Cutoff Mastic: Butyl mastic sealant.
- I. Waterproofing and Sheet-Flashing Accessories: Provide sealants, pourable sealers, cone and vent flashings, inside and outside corner flashings, termination reglets, and other accessories recommended by waterproofing manufacturer for intended use.
- J. Metal Termination Bars: Manufacturer's standard aluminum bars, approximately 1 inch wide, prepunched, with fasteners.
- K. Protection Course: Semirigid sheets of asphalt-impregnated organic mat, mineral surface, with a nominal thickness of 1/8 inch.
- L. Protection Course: Fan folded, with a core of extruded-polystyrene board insulation, a nominal thickness of 1/4 inch, and a compressive strength of not less than 8 psi.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the waterproofing.
  - 1. Verify that concrete has cured and aged for minimum time period recommended in writing by waterproofing manufacturer.
  - 2. Verify that substrate is visibly dry and within the moisture limits recommended in writing by manufacturer. Test for capillary moisture by plastic sheet method according to ASTM D 4263.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 SURFACE PREPARATION

- A. Clean, prepare, and treat substrates according to manufacturer's written instructions. Provide clean, dust-free, and dry substrates for waterproofing application.
- B. Mask off adjoining surfaces not receiving waterproofing to prevent spillage and overspray affecting other construction.
- C. Remove grease, oil, bitumen, form-release agents, paints, curing compounds, and other penetrating contaminants or film-forming coatings from concrete.
- D. Remove fins, ridges, mortar, and other projections and fill honeycomb, aggregate pockets, holes, and other voids.
- E. Prepare, fill, prime, and treat joints and cracks in substrates. Remove dust and dirt from joints and cracks according to ASTM D 4258.
- F. Prepare, treat, and seal vertical and horizontal surfaces at terminations and penetrations through waterproofing and at drains and protrusions.

### 3.3 FULLY ADHERED SHEET INSTALLATION

- A. Install fully adhered sheets over entire area to receive waterproofing according to manufacturer's written instructions and recommendations in ASTM D 5843.
- B. Accurately align sheets and maintain uniform side and end laps of minimum dimensions required. Stagger end laps.
- C. Apply bonding adhesive to substrates at required rate and allow it to partially dry.
- D. Apply bonding adhesive to sheets and firmly adhere sheets to substrates. Do not apply bonding adhesive to splice area of sheet.
- E. Install fully adhered sheets and auxiliary materials to tie into existing waterproofing.
- F. Repair tears, voids, and lapped seams in waterproofing that do not comply with requirements. Slit and flatten fishmouths and blisters. Patch with sheet waterproofing extending beyond repaired areas in all directions.
- G. Horizontal Application: Apply sheets with side laps shingled with slope of deck where possible.
  - 1. Spread sealant bed over deck drain flange at deck drains and securely seal sheet waterproofing in place with clamping ring.

### 3.4 SEAM INSTALLATION

- A. **Cement Splice:** Clean splice areas, apply splicing cement and in-seam sealant, and firmly roll side and end laps of overlapping sheets according to manufacturer's written instructions to produce a splice not less than 6 inches wide and to ensure a watertight seam installation. Apply lap sealant and seal edges of sheet terminations.
- B. **Cement and Tape Splice:** Clean splice areas, apply splicing cement and butyl gum tape, and firmly roll side and end laps of overlapping sheets according to manufacturer's written instructions to ensure a watertight seam installation. Apply lap sealant and seal edges of sheet terminations.

### 3.5 SHEET-FLASHING INSTALLATION

- A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to waterproofing manufacturer's written instructions.
- B. Form wall flashings using exposed sheet flashing.
- C. Extend deck sheet waterproofing to form wall flashings.
  - 1. Flash penetrations and field-formed inside and outside corners with uncured sheet flashing.
  - 2. Clean splice areas, apply splicing cement, and firmly roll side and end laps of overlapping sheets to ensure a watertight installation. Apply lap sealant and seal edges of sheet-flashing terminations.
- D. Cover expansion joints and discontinuous deck-to-wall or deck-to-deck joints by extending deck sheet waterproofing over joints.
- E. Terminate and seal top of sheet flashings with mechanically anchored termination bars.

### 3.6 PROTECTION COURSE INSTALLATION

- A. Install protection course over waterproofing membrane according to manufacturer's written instructions and before beginning subsequent construction operations. Minimize exposure of membrane.
  - 1. Board insulation may be used in place of a separate protection course for vertical applications when approved by waterproofing manufacturer.

### 3.7 FIELD QUALITY CONTROL

- A. Engage a site representative qualified by waterproofing membrane manufacturer to inspect substrate conditions, surface preparation; membrane application, flashings, protection, and drainage components, and to furnish daily reports to The Commissioner.

- B. Prepare test and inspection reports.

3.8 PROTECTION, REPAIR, AND CLEANING

- A. Do not permit foot or vehicular traffic on unprotected membrane.
- B. Protect waterproofing from damage and wear during remainder of construction period.
- C. Protect installed board insulation from damage due to UV light, harmful weather exposures, physical abuse, and other causes. Provide temporary coverings where insulation is subject to abuse and cannot be concealed and protected by permanent construction immediately after installation.
- D. Correct deficiencies in or remove waterproofing that does not comply with requirements; repair substrates, reapply waterproofing, and repair sheet flashings.
- E. Clean spillage and soiling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION 071353

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**SECTION 071990 - WATER REPELLENTS****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

**1.2 SUMMARY**

- A. This Section includes clear water-repellent coatings for the following vertical surfaces:
  - 1. Concrete unit masonry (unpainted and unglazed).
- B. Related Sections include the following:
  - 1. Division 4 Section "Masonry Restoration"

**1.3 PERFORMANCE REQUIREMENTS**

- A. Provide water repellents with the following properties based on testing manufacturer's standard products, according to test methods indicated, applied to substrates simulating Project conditions using same materials and application methods to be used for Project.
  - 1. Absorption: Minimum 90 percent reduction of absorption after 24 hours in comparison of treated and untreated specimens.
    - a. Concrete Unit Masonry: ASTM C 140.
  - 2. Water-Vapor Transmission: Maximum 10 percent reduction in rate of vapor transmission in comparison of treated and untreated specimens, per ASTM E 96.
  - 3. Water Penetration and Leakage through Masonry: Maximum 90 percent reduction in leakage rate in comparison of treated and untreated specimens, per ASTM E 514.

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4. Durability: Maximum 5 percent loss of water repellency after 2500 hours of weathering in comparison to specimens before weathering, per ASTM G 53.
5. Permeability: Minimum 80 percent breathable in comparison of treated and untreated specimens, per ASTM D 1653.

#### 1.4 SUBMITTALS

- A. Product Data: Include manufacturer's specifications, surface preparation and application instructions, recommendations for water repellents for each surface to be treated, and protection and cleaning instructions. Include data substantiating that materials are recommended by manufacturer for applications indicated and comply with requirements.
- B. Material Test Reports: Indicate and interpret test results for compliance of water repellents with requirements indicated.

#### 1.5 QUALITY ASSURANCE

- A. Applicator Qualifications: Engage an experienced applicator who employs only persons trained and approved by water repellent manufacturer for application of manufacturer's products.
- B. Field Samples: The Commissioner will select one representative surface to receive water repellents. Apply water repellent to substrate, with full coverage as directed. Comply with application requirements of this Section.
  1. Obtain The Commissioner's approval of field samples before applying water repellents.
  2. Maintain field samples during construction in an undisturbed condition as a standard for judging the completed Work.

#### 1.6 PROJECT CONDITIONS

- A. Weather and Substrate Conditions: Do not proceed with application of water repellent under any of the following conditions, except with written instruction of manufacturer:
  1. Ambient temperature is less than 40 deg F (4.4 deg C).
  2. Concrete surfaces and mortar have cured for less than 28 days.
  3. Rain or temperatures below 40 deg F (4.4 deg C) are predicted within 24 hours.
  4. Application is earlier than 24 hours after surfaces have been wet.
  5. Substrate is frozen or surface temperature is less than 40 deg F (4.4 deg C).
  6. Windy condition exists that may cause water repellent to be blown onto vegetation or surfaces not intended to be coated.



## 1.7 WARRANTY

- A. **General Warranty:** The special warranty specified in this Article shall not deprive the The City of New York of other rights the The City of New York may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. **Special Warranty:** Submit a written warranty, executed by the applicator and water repellent manufacturer, covering materials and labor, agreeing to repair or replace materials that fail to provide water repellency within the specified warranty period at manufacturer's expense. Warranty does not include deterioration or failure of coating due to unusual weather phenomena, failure of prepared and treated substrate, formation of new joints and cracks in excess of 1/16 inch (1.5 mm) wide, fire, vandalism, or abuse by maintenance equipment.
1. **Warranty Period:** 2 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. **Available Products:** Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
1. **Siloxanes:** With 3.3 lb/gal. (400 g/L) VOCs or less.
    - a. Prime A Pell H<sub>2</sub>O; Chemprobe Technologies, Inc.
    - b. Diedrich 303S-15 Silox Seal; Diedrich Technologies, Inc.
    - c. Hydrozo Clear 16; Harris Specialty Chemicals, Inc.
    - d. Weather Seal Siloxane WB; ProSoCo, Inc.
    - e. or approved equal

### 2.2 WATER REPELLENTS

- A. **Siloxane, Penetrating Water Repellent:** Clear, containing 10 percent or more solids of oligomeric alkylalkoxysiloxanes; with alcohol, ethanol, mineral spirits, water, or other proprietary solvent carrier; and with 600 g/L or less of VOCs.
1. **Products:** Subject to compliance with requirements provide one of the following:
    - a. PROSOCO, Inc.
    - b. Diedrich Technologies, Inc

- c. Euclid Chemical Company (The), an RPM company; Euco-Guard VOX.
- d. Or approved equal

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Clean substrate of substances that might interfere with penetration or performance of water repellents. Test for moisture content, according to repellent manufacturer's written instructions, to ensure surface is sufficiently dry.
- B. Test for pH level, according to water repellent manufacturer's written instructions, to ensure chemical bond to silicate minerals.
- C. Protect adjoining work, including sealant bond surfaces, from spillage or blow-over of water repellent. Cover adjoining and nearby surfaces of aluminum and glass if there is the possibility of water repellent being deposited on surfaces. Cover live plants and grass.
- D. Test Application: Before performing water-repellent work, including bulk purchase and delivery of products, prepare a small application in an unobtrusive location and in a manner approved by The Commissioner to demonstrate the final effect (visual, physical, and chemical) of planned application. Proceed with work only after The Commissioner approves test application or as otherwise directed.
  - 1. Revisions of planned application, if any, as requested by The Commissioner, will be by Change Order if they constitute a departure from requirements of Contract Documents at the time of contracting.

### 3.2 APPLICATION

- A. Apply a heavy-saturation spray coating of water repellent on surfaces indicated for treatment using low-pressure spray equipment. Comply with manufacturer's written instructions for using airless spraying procedure, unless otherwise indicated.
- B. Apply a second saturation spray coating, repeating first application. Comply with manufacturer's written instructions for limitations on drying time between coats and after rainstorm wetting of surfaces between coats. Consult manufacturer's technical representative if written instructions are not applicable to Project conditions.

### 3.3 FIELD QUALITY CONTROL

- A. **Manufacturer's Field Service:** Provide services of a factory-authorized technical service representative to inspect and approve the substrate before application and to instruct the applicator on the product and application method to be used.

3.4 **CLEANING**

- A. **Protective Coverings:** Remove protective coverings from adjacent surfaces and other protected areas.
- B. **Immediately clean water repellent** from adjoining surfaces and surfaces soiled or damaged by water-repellent application as work progresses. Repair damage caused by water-repellent application. Comply with manufacturer's written cleaning instructions.

END OF SECTION 071990

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## SECTION 078446 - FIRE-RESISTIVE JOINT SYSTEMS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Joints in or between fire-resistance-rated constructions.
- B. Related Sections:
  - 1. Division 01 Section "Selective Demolition" for penetrations in fire-resistance-rated walls, horizontal assemblies, and smoke barriers.
  - 2. Divisions 22 and 26 for Plumbing and Electrical work penetrating rated assemblies.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Product Schedule: For each fire-resistive joint system. Include location and design designation of qualified testing agency.
  - 1. Where Project conditions require modification to a qualified testing agency's illustration for a particular fire-resistive joint system condition, submit illustration, with modifications marked, approved by fire-resistive joint system manufacturer's fire-protection engineer as an engineering judgment or equivalent fire-resistance-rated assembly.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer.

- B. **Installer Certificates:** From Installer indicating fire-resistive joint systems have been installed in compliance with requirements and manufacturer's written recommendations.
- C. **Product Test Reports:** Based on evaluation of comprehensive tests performed by a qualified testing agency, for fire-resistive joint systems.

#### 1.5 QUALITY ASSURANCE

- A. **Installer Qualifications:** A firm that has been approved by FM Global according to FM Global 4991, "Approval of Firestop Contractors," or been evaluated by UL and found to comply with UL's "Qualified Firestop Contractor Program Requirements."
- B. **Fire-Test-Response Characteristics:** Fire-resistive joint systems shall comply with the following requirements:
  - 1. Fire-resistive joint system tests are performed by a qualified testing agency acceptable to authorities having jurisdiction.
  - 2. Fire-resistive joint systems are identical to those tested per testing standard referenced in "Fire-Resistive Joint Systems" Article. Provide rated systems complying with the following requirements:
    - a. Fire-resistive joint system products bear classification marking of qualified testing agency.
    - b. Fire-resistive joint systems correspond to those indicated by reference to designations listed by the following:
      - 1) UL in its "Fire Resistance Directory."

#### 1.6 PROJECT CONDITIONS

- A. **Environmental Limitations:** Do not install fire-resistive joint systems when ambient or substrate temperatures are outside limits permitted by fire-resistive joint system manufacturers or when substrates are wet due to rain, frost, condensation, or other causes.
- B. **Install and cure fire-resistive joint systems per manufacturer's written instructions using natural means of ventilation or, where this is inadequate, forced-air circulation.**

#### 1.7 COORDINATION

- A. **Coordinate construction of joints to ensure that fire-resistive joint systems are installed according to specified requirements.**
- B. **Coordinate sizing of joints to accommodate fire-resistive joint systems.**
- C. **Notify The City of New York's testing agency at least seven days in advance of fire-resistive joint system installations; confirm dates and times on day preceding each series of installations.**

## PART 2 - PRODUCTS

### 2.1 FIRE-RESISTIVE JOINT SYSTEMS

- A. Where required, provide fire-resistive joint systems that are produced and installed to resist spread of fire according to requirements indicated, resist passage of smoke and other gases, and maintain original fire-resistance rating of assemblies in or between which fire-resistive joint systems are installed. Fire-resistive joint systems shall accommodate building movements without impairing their ability to resist the passage of fire and hot gases.
- B. Joints in or between Fire-Resistance-Rated Construction: Provide fire-resistive joint systems with ratings determined per ASTM E 1966 or UL 2079:
1. Joints include those installed in or existing between fire-resistance-rated walls floor or floor/ceiling assemblies and roofs or roof/ceiling assemblies.
  2. Fire-Resistance Rating: Equal to or exceeding the fire-resistance rating of construction they will join.
  3. Manufacturers: Subject to compliance with requirements, provide products by one of the following or approved equal:
    - a. A/D Fire Protection Systems Inc.
    - b. CEMCO.
    - c. Fire Trak Corp.
    - d. Grace Construction Products.
    - e. Hilti, Inc.
    - f. Johns Manville.
    - g. Nelson Firestop Products.
    - h. NUCO Inc.
    - i. Passive Fire Protection Partners.
    - j. RectorSeal Corporation.
    - k. Specified Technologies Inc.
    - l. 3M Fire Protection Products.
    - m. Tremco, Inc.; Tremco Fire Protection Systems Group.
    - n. USG Corporation.
- C. Exposed Fire-Resistive Joint Systems: Provide products with flame-spread and smoke-developed indexes of less than 25 and 450, respectively, as determined per ASTM E 84.
- D. Accessories: Provide components of fire-resistive joint systems, including primers and forming materials, that are needed to install fill materials and to maintain ratings required. Use only components specified by fire-resistive joint system manufacturer and approved by the qualified testing agency for systems indicated.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for joint configurations, substrates, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Surface Cleaning: Clean joints immediately before installing fire-resistive joint systems to comply with fire-resistive joint system manufacturer's written instructions and the following requirements:
  - 1. Remove from surfaces of joint substrates foreign materials that could interfere with adhesion of fill materials.
  - 2. Clean joint substrates to produce clean, sound surfaces capable of developing optimum bond with fill materials. Remove loose particles remaining from cleaning operation.
  - 3. Remove laitance and form-release agents from concrete.
- B. Priming: Prime substrates where recommended in writing by fire-resistive joint system manufacturer using that manufacturer's recommended products and methods. Confine primers to areas of bond; do not allow spillage and migration onto exposed surfaces.
- C. Masking Tape: Use masking tape to prevent fill materials of fire-resistive joint system from contacting adjoining surfaces that will remain exposed on completion of the Work and that would otherwise be permanently stained or damaged by such contact or by cleaning methods used to remove stains. Remove tape as soon as possible without disturbing fire-resistive joint system's seal with substrates.

### 3.3 INSTALLATION

- A. General: Install fire-resistive joint systems to comply with manufacturer's written installation instructions and published drawings for products and applications indicated.
- B. Install forming materials and other accessories of types required to support fill materials during their application and in position needed to produce cross-sectional shapes and depths required to achieve fire ratings indicated.
  - 1. After installing fill materials and allowing them to fully cure, remove combustible forming materials and other accessories not indicated as permanent components of fire-resistive joint system.
- C. Install fill materials for fire-resistive joint systems by proven techniques to produce the following results:



1. Fill voids and cavities formed by joints and forming materials as required to achieve fire-resistance ratings indicated.
2. Apply fill materials so they contact and adhere to substrates formed by joints.
3. For fill materials that will remain exposed after completing the Work, finish to produce smooth, uniform surfaces that are flush with adjoining finishes.

#### 3.4 FIELD QUALITY CONTROL

- A. Inspecting Agency: The City of New York will engage a qualified testing agency to perform tests and inspections.
- B. Where deficiencies are found or fire-resistive joint systems are damaged or removed due to testing, repair or replace fire-resistive joint systems so they comply with requirements.
- C. Proceed with enclosing fire-resistive joint systems with other construction only after inspection reports are issued and installations comply with requirements.

#### 3.5 CLEANING AND PROTECTING

- A. Clean off excess fill materials adjacent to joints as the Work progresses by methods and with cleaning materials that are approved in writing by fire-resistive joint system manufacturers and that do not damage materials in which joints occur.
- B. Provide final protection and maintain conditions during and after installation that ensure fire-resistive joint systems are without damage or deterioration at time of Substantial Completion. If damage or deterioration occurs despite such protection, cut out and remove damaged or deteriorated fire-resistive joint systems immediately and install new materials to produce fire-resistive joint systems complying with specified requirements.

END OF SECTION 078446

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## SECTION 079200 - JOINT SEALANTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Silicone joint sealants.
  - 2. Urethane joint sealants.
- B. Related Sections:
  - 1. Division 01 Section Temporary Facilities and Controls
  - 2. Division 02 Section "Selective Demolition"
  - 3. Division 04 Section "Maintenance of Unit Masonry" and "Concrete Unit Masonry" for masonry control and expansion joint fillers and gaskets.
  - 4. Division 07 Section "Fire-Resistive Joint Systems" for sealing joints in fire-resistance-rated construction.
  - 5. Division 32 Section "Concrete Paving Joint Sealants" for sealing joints in pavements, walkways, and curbing.

#### 1.3 PRECONSTRUCTION TESTING

- A. Preconstruction Compatibility and Adhesion Testing: Submit to joint-sealant manufacturers, for testing indicated below, samples of materials that will contact or affect joint sealants.

Use ASTM C 1087 or manufacturer's standard test method whichever is more rigorous, to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.

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2. Submit not fewer than four (4) pieces of each kind of material, including joint substrates, shims, joint-sealant backings, secondary seals, and miscellaneous materials.
3. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
4. For materials failing tests, obtain joint-sealant manufacturer's written instructions for corrective measures including use of specially formulated primers.
5. Testing will not be required if joint-sealant manufacturers submit joint preparation data that are based on previous testing, not older than 24 months, of sealant products for adhesion to, and compatibility with, joint substrates and other materials matching those submitted.

**B. Preconstruction Field-Adhesion Testing:** Before installing sealants, field test their adhesion to Project joint substrates as follows:

1. Locate test joints where indicated on Project or, if not indicated, as directed by The Commissioner.
2. Conduct field tests for each application indicated below:
  - a. Each kind of sealant and joint substrate indicated.
3. Notify The Commissioner seven days in advance of dates and times when test joints will be erected.
  - a. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C 1193 .
    - 1) For joints with dissimilar substrates, verify adhesion to each substrate separately; extend cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
4. Report whether sealant failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each kind of product and joint substrate. For sealants that fail adhesively, retest until satisfactory adhesion is obtained.
5. Evaluation of Preconstruction Field-Adhesion-Test Results: Sealants not evidencing adhesive failure from testing, in absence of other indications of noncompliance with requirements, will be considered satisfactory. Do not use sealants that fail to adhere to joint substrates during testing.

**1.4 ACTION SUBMITTALS**

- A. Product Data: For each joint-sealant product indicated.
- B. Samples for Initial Selection: Manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each product exposed to view.
- C. Samples for Verification: For each kind and color of joint sealant required, provide Samples with joint sealants in 1/2-inch- wide joints formed between two 6-inch- long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
- D. Joint-Sealant Schedule: Include the following information:

1. Joint-sealant application, joint location, and designation.
2. Joint-sealant manufacturer and product name.
3. Joint-sealant formulation.
4. Joint-sealant color.

## 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer.
- B. Product Certificates: For each kind of joint sealant and accessory, from manufacturer.
- C. Sealant, Waterproofing, and Restoration Institute (SWRI) Validation Certificate: For each sealant specified to be validated by SWRI's Sealant Validation Program.
- D. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, indicating that sealants comply with requirements.
- E. Preconstruction Compatibility and Adhesion Test Reports: From sealant manufacturer, indicating the following:
  1. Materials forming joint substrates and joint-sealant backings have been tested for compatibility and adhesion with joint sealants.
  2. Interpretation of test results and written recommendations for primers and substrate preparation needed for adhesion.
- F. Preconstruction Field-Adhesion Test Reports: Indicate which sealants and joint preparation methods resulted in optimum adhesion to joint substrates based on testing specified in "Preconstruction Testing" Article.
- G. Field-Adhesion Test Reports: For each sealant application tested.
- H. Warranties: Sample of special warranties.

## 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Source Limitations: Obtain each kind of joint sealant from single source from single manufacturer.
- C. Product Testing: Provide evidence of joint sealant testing using a qualified testing agency.
  1. Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.
  2. Test according to SWRI's Sealant Validation Program for compliance with requirements specified by reference to ASTM C 920 for adhesion and cohesion under cyclic movement, adhesion-in-peel, and indentation hardness.

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- D. Mockups: Install sealant in mockups of assemblies specified in other Sections that are indicated to receive joint sealants specified in this Section. Use materials and installation methods specified in this Section.
- E. Preinstallation Conference: Conduct conference at Project site.

## 1.7 PROJECT CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
  - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
  - 2. When joint substrates are wet.
  - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
  - 4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

## 1.8 WARRANTY

- A. Special Installer's Warranty: Manufacturer's standard form in which Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
  - 1. Warranty Period: Two years from date of Substantial Completion.
- B. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:
  - 1. Movement of the structure caused by structural settlement or errors attributable to design or construction resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
  - 2. Disintegration of joint substrates from natural causes exceeding design specifications.
  - 3. Mechanical damage caused by individuals, tools, or other outside agents.
  - 4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

## PART 2 - PRODUCTS

### 2.1 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.

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- B. **Liquid-Applied Joint Sealants:** Comply with ASTM C 920 and other requirements indicated for each liquid-applied joint sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.
1. **Suitability for Immersion in Liquids.** Where sealants are indicated for Use I for joints that will be continuously immersed in liquids, provide products that have undergone testing according to ASTM C 1247. Liquid used for testing sealants is deionized water, unless otherwise indicated.
- C. **Stain-Test-Response Characteristics:** Where sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.
- D. **Colors of Exposed Joint Sealants:** As selected by The Commissioner from manufacturer's full range.

## 2.2 SEALANT MATERIALS

- A. **Exterior Wall Sealant:** Provide one (1) part non-sag sealant equal to No. 790 or 795 made by Dow Corning, "Silpruf SCS 2000" or "LM SCS 2700" made by G.E. or "Spectrem 1" or "Spectrem 3" made by Tremco or "Sonolastic 150" by Sonneborn conforming to the minimum standards of ASTM C 920, Type S, Grade NS, Class 50.
- B. **Interior Sealant:** Provide a one (1) part acrylic based sealant conforming to ASTM C 834, equal to "AC-20+ Silicone" made by Pecora, Dow, Tremco or equal.
- C. **Colors:** Custom colors of sealants as selected by the Commissioner.

## 2.3 JOINT SEALANT BACKING

- A. **General:** Provide sealant backings of material that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. **Cylindrical Sealant Backings:** ASTM C 1330, Type C (closed-cell material with a surface skin) or any of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
- C. **Bond-Breaker Tape:** Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint. Provide self-adhesive tape where applicable.

## 2.4 MISCELLANEOUS MATERIALS

- A. **Primer:** Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

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- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
  - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
  - 2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:
    - a. Concrete.
    - b. Masonry.
    - c. Exterior finish systems.
    - d. Gypsum Wall Board
  - 3. Remove laitance and form-release agents from concrete.
  - 4. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:
    - a. Metal.
- B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to



comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

- C. **Masking Tape:** Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

### 3.3 INSTALLATION OF JOINT SEALANTS

- A. **General:** Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. **Sealant Installation Standard:** Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. **Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.**
1. Do not leave gaps between ends of sealant backings.
  2. Do not stretch, twist, puncture, or tear sealant backings.
  3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- D. **Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.**
- E. **Install sealants using proven techniques that comply with the following and at the same time backings are installed:**
1. Place sealants so they directly contact and fully wet joint substrates.
  2. Completely fill recesses in each joint configuration.
  3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- F. **Tooling of Nonsag Sealants:** Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
1. Remove excess sealant from surfaces adjacent to joints.
  2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  3. Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.
  4. Provide flush joint profile where indicated per Figure 8B in ASTM C 1193.
  5. Provide recessed joint configuration of recess depth and at locations indicated per Figure 8C in ASTM C 1193.

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- a. Use masking tape to protect surfaces adjacent to recessed tooled joints.

### 3.4 FIELD QUALITY CONTROL

#### A. Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates as follows:

1. Extent of Testing: Test completed and cured sealant joints as follows:
  - a. Perform 1 test for each kind of sealant and joint substrate.
2. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C 1193 or Method A, Tail Procedure, in ASTM C 1521.
  - a. For joints with dissimilar substrates, verify adhesion to each substrate separately; extend cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
3. Inspect tested joints and report on the following:
  - a. Whether sealants filled joint cavities and are free of voids.
  - b. Whether sealant dimensions and configurations comply with specified requirements.
  - c. Whether sealants in joints connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each kind of product and joint substrate. Compare these results to determine if adhesion passes sealant manufacturer's field-adhesion hand-pull test criteria.
4. Record test results in a field-adhesion-test log. Include dates when sealants were installed, names of persons who installed sealants, test dates, test locations, whether joints were primed, adhesion results and percent elongations, sealant fill, sealant configuration, and sealant dimensions.
5. Repair sealants pulled from test area by applying new sealants following same procedures used originally to seal joints. Ensure that original sealant surfaces are clean and that new sealant contacts original sealant.

#### B. Evaluation of Field-Adhesion Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

### 3.5 CLEANING

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers for joint sealants and of products in which joints occur.

**3.6 PROTECTION**

- A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.**

**END OF SECTION 079200**

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SECTION 220514

COMMON WORK RESULTS FOR PLUMBING

**PART 1 GENERAL**

**1.1 GENERAL REQUIREMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

**1.2 WORK NOT INCLUDED**

- A. Finished painting.
- C. Electrical wiring except as noted.
- D. Temporary Facilities and Controls

**1.3 NOTICE TO BIDDERS**

- A. The specifications and drawings are intended to serve jointly as a basis upon which the Contractor shall submit a contract price for the material and labor provisions.
- B. When conflicts occur in the specifications or on the drawings or between either, provide the item of greater quantity or higher cost.
- C. Provide all items of labor or materials not specifically indicated, but required to complete the intended installations.
- D. Coordinate all work with that of other trades in order that conflicts in space locations do not occur.
- E. Perform the work under this contract simultaneously with the work of other trades, so as not to delay the overall progress of the work.
- F. Be responsible for work until its completion and final acceptance and replace any of same which may be damaged, lost or stolen, without additional cost to the City of New York.

#### 1.4 CONTRACTOR'S RESPONSIBILITY

- A. Contract drawings for plumbing work are in part diagrammatic, intended to convey the scope of work and indicate general arrangement of equipment, piping and approximate sizes and locations of equipment outlets. Plumbing trade shall follow these drawings in layout of their work, consult general construction, structural and electrical and automatic sprinkler drawings to familiarize themselves with all conditions affecting their work, and shall verify spaces in which their work will be installed.
- B. Be responsible for establishing grades and elevations, checking of all interferences, and verify all dimensions and locations in the field prior to the start of any work and/or installation of equipment and piping. The Contractor shall, at his expense, perform all minor rerouting of piping around obstructions from new or existing construction whether or not such conditions are indicated on the plans. Minor rerouting of piping is defined as any rerouting which requires less than 10 linear feet of addition piping over and above that shown on the drawings in order to avoid an obstruction. Such rerouting shall be performed with piping of a size equal to that shown on the original routing. Whenever an obstruction requires more than a minor rerouting as defined above, report the condition to the Commissioner prior to the start of pipework on the affected system. Be responsible for neglect of checking all elevations, clearances, dimensions and locations of piping systems prior to the start of work on same.
- C. All trades shall cooperate and confer with each other as to locations of their materials and equipment before erecting work, so as to avoid interference as much as possible, and in such manner that will in no way retard progress of construction. In instances where interferences develop, relocate the work as required by Commissioner, regardless of which work was installed first.
- D. Additional and supplemental drawings may, from time to time, be furnished and the same when made are to constitute a part of the original contract drawings and will not depart materially therefrom.
- E. The Commissioner specifically reserves the right, up to the time of roughing-in, to exactly define the position of the equipment to be installed and connected to and arrangement of these connections.
- F. The Contractor for General Construction shall be responsible for providing all temporary protection of the Museum during construction operations performed under all separate contracts and trades. Protection shall include, but not necessarily limited to, providing materials and labor; scheduling and coordination between the work of all sub-contracts and the Museum Liaison; preparing and administering the Fire Protection/Prevention Plan and Emergency Action/Recovery Plan; and security.

#### 1.5 DEFINITIONS

- A. The following definitions of terms and expressions used in this section are in addition to listing given in General Conditions:

1. "Commissioner" shall mean "Commissioner".
2. "Provide" shall mean "furnish and install" unless otherwise indicated.
3. "Herein" shall mean the contents of a particular section where this term appears.
4. "Indicated" shall mean "indicated on contract drawings".
5. "Scheduled" shall mean "as scheduled on contract drawings".
6. "Concealed", where used in connection with insulation and painting of piping, ducts and accessories, shall mean that they are hidden from sight, as in trenches, chases, furred spaces, pipe shafts or hung ceilings.
7. "Exposed", where used in conjunction with insulation and painting of pipe, ducts and accessories, shall mean that they are not "concealed" as defined herein above.
8. "Singular Number": In all cases where a device or part of the equipment or system is herein referred to in the singular number (such as pump), it is intended that such reference shall apply to as many such items as are required to complete the installation.

#### 1.6 CARE OF WORK AND SAFEGUARDS

- A. Protect the work from damage by any cause until it is completed and accepted by the City of New York.
- B. Protect from damage any underground service or structure exposed by the execution of this work.
- C. Any damaged property resulting from work performed either by this Contractor, his subcontractors, or anyone in his employ shall be repaired and restored to its original state at no cost to the City of New York.

#### 1.7 SCHEDULE OF WORK

- A. Schedule all work to conform to the job progress schedule as submitted to and approved by the Commissioner.

#### 1.8 SUBMITTALS

- A. Approval shall be obtained for all equipment and material before delivery to the job site. Delivery, storage or installation of equipment or material which has not had prior approval will not be permitted at the job site.
- B. All submittals shall include adequate descriptive literature, catalog cuts, shop drawings and other data necessary ascertain that the proposed equipment and materials comply with specification requirements. Catalog cuts submitted for approval shall be legible and shall

clearly identify equipment being submitted.

- C. Submittals for individual systems and equipment assemblies which consist of more than one item or component shall be made for the system or assembly as a whole. Partial submittals will not be considered for approval.
- D. Submittals shall be marked to show specification reference including the section and paragraph numbers.
- E. Submit each section separately and include the following:
  - 1. Information which conforms to contract requirements. Include the manufacturer's name, model or catalog numbers, catalog information, technical data sheets, shop drawings, pictures, nameplate data and test reports as required.
- F. Submit samples as directed of items called for in the specifications; samples of the materials which the manufacturer will actually ship shall be submitted for approval after award of contract and be properly labeled or identified.

#### 1.9 SHOP DRAWINGS AND COMPOSITE DRAWINGS

- A. Promptly prepare and submit all shop drawings required by the specifications, contract and contract drawings, and also all incidental shop drawings required for the proper performance of the work. The shop drawings shall illustrate fully the requirements of the specifications and the contract drawings, and shall accurately show quantities, kind of materials, methods of assembly and all data required for fabrication, erection and installation. The relationship to adjoining work, whether furnished under other part of this contract or by other contractors, shall be properly shown.

#### 1.10 OPERATION, MAINTENANCE MANUALS AND INSTRUCTIONS

- A. Furnish to the Commissioner six (6) bound and indexed copies of the final approved installation, operations and maintenance manuals.
- B. Manual Contents:
  - 1. Comprehensive detailed information on the approved installation, operation and use, troubleshooting, parts list, lubrication and periodic maintenance, together with the source of replacement parts and service for the items of equipment and the systems covered, including electrical equipment, devices and systems.
  - 2. Where items of equipment or system work in conjunction with one another, the interconnections shall be shown on a single sheet, folded out if necessary. A schematic wiring diagram and a description of operation shall be included.
  - 3. Where separate items of equipment specified herein are combined into a single self-contained unit, the drawings and required data shall treat each item of equipment in such self-contained unit as separate items. Referring to such self-contained unit as one



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item of equipment will not be acceptable.

- C. At the completion of the work, instruct the employees who will have charge of the equipment in the care, adjustment and operation of each piece of equipment. Instruction shall be by competent representatives of the manufacturers involved with adequate time allowed for complete coverage of all owning and operating procedures.
- D. In addition, leave with such employees printed instructions covering the operation and required maintenance of each particular piece of equipment. Instructions shall be bound and titled and submitted to the Commissioner for approval. Submit six (6) sets.

#### 1.11 AS-BUILT DRAWINGS

- A. Furnish as-built drawings on mylar to the Commissioner at completion of the job. Keep drawings current as work progresses.
- B. Record all changes from installations originally indicated. Record final location of underground lines by depth from finished grade and by offset distances in feet and tenths to surface improvement such as building, curb, or edges of walks. Where work appears on two or more drawings, mark changes on all drawings. At completion, furnish the above required information to the Commissioner for approval and record. Drawings shall be certified to be "as-built" and signed by Contractor. Work shall not be accepted until such drawings have been delivered to the Commissioner.

#### 1.12 CODES AND STANDARDS

- A. Work performed under this Contract shall conform to all applicable laws, ordinances, regulations, codes (state, local and federal), and shall be subject to control of public authorities having jurisdiction.
- B. Wherever requirements of such laws, codes, regulations differ from the drawings or specifications, they shall take precedence over the drawings specifications, and are expressly made part of the Contract, except where the drawings or specifications are more stringent or require better materials, which would also be acceptable to authorities (i.e., the more stringent code shall always apply).
- C. Any portion of work which is not subject to the approval of a Commissioner having jurisdiction shall be provided in accordance with National Fire Protection Association requirements.
- D. Comply with applicable utility company rules and regulations.
- E. Comply with Occupational Safety and Health Act (OSHA) requirements.

#### 1.13 REFERENCE DOCUMENTS AND STANDARDS

- A. Accepted plumbing standards and organization whose abbreviations are used to identify such standards are listed below:

1. A.S.M.E., American Society of Mechanical Engineers.
2. A.N.S.I., American National Standards Institute, Inc.
3. A.S.S.E., American Society of Sanitary Engineering.
4. A.S.T.M., American Society for Testing and Materials.
5. A.W.W.A., American Water Works Association.
6. C.S., Commercial Standard - National Bureau of Standards.
7. F.S., Federal Specifications.
8. U.L., Underwriters Laboratories.
9. F.M., Factory Mutual

#### 1.14 GUARANTEE

- A. In addition to the requirements stated in the specifications, guarantee all equipment, materials and appurtenances installed to be free from all defects. Upon written notice from the Commissioner, promptly correct all defects without additional cost to the City of New York. Make good, at no extra cost any defects in materials or workmanship that may appear. The guarantee period shall be as indicated in the General Conditions.

### PART 2 PRODUCTS

#### 2.1 PRODUCT HANDLING

- A. In addition to the requirements of the General Conditions, be responsible for the following:
1. Care and protection of plumbing work until it has been tested and accepted.
  2. After delivery, before, during and after installation, protect equipment and materials against theft, injury and damage for all causes.
  3. Coat polished or plated metal part with Vaseline immediately after installation.
  4. Protect equipment outlets and pipe, openings with caps.
- B. Receive, properly house, handle, hoist, deliver to proper location, equipment and other materials required for the contract.

#### 2.2 MATERIALS

- A. Design:
1. Unless otherwise specified, equipment or material of same type or classification, used for the same purpose, shall be products of the same manufacturer. All material shall be new and of the latest design of manufacturer providing equipment or materials.
  2. Equipment and accessories not specifically described or identified by manufacturer's catalog numbers shall be designed in conformity with ASME, or other applicable technical standards, suitable for maximum working pressure and shall have neat and

finished appearance.

## 2.3 SLEEVES

- A. Extend through construction.
  - 1. For Insulated Piping: Sized to allow for insulation.
- B. No. 22 USSG galvanized iron through:
  - 1. Interior floor slabs.
  - 2. Ceilings
  - 3. Walls and partitions.

## 2.4 ESCUTCHEONS

- A. Cast iron or cast brass set screw type.
- B. Pressed steel.
- C. For exposed piping through floors or walls.
- D. Finish at exposed walls: Chrome plated.

## PART 3 EXECUTION

### 3.1 SUPERVISION

- A. All work shall be performed by competent mechanics under supervision of an experienced erection supervisor. Upon initiation of construction, keep a suitable force of men (including supervisory personnel) on the site at all times in order to place all sleeves, inserts, and fixtures, and provide all other openings as are required for the satisfactory installation of equipment.

### 3.2 COORDINATION

- A. Schedule construction and time limitations for each phase of the work. Work shall be coordinated to permit proper setting of the work of other trades.
- B. Where piping work and appurtenances are in place prior to completion of adjacent concrete and masonry work, they must be protected against damage and displacement until construction is completed.

### 3.3 CUTTING AND PATCHING

- A. All cutting and patching associated with the installation of the Plumbing work is the responsibility of the Contractor.

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- B. Provide sleeves for all items furnished and set in new construction. Sleeves in exterior walls or located where moisture must be restricted shall consist of schedule 40 black steel pipe cut to match thickness of wall or floor. 1/4" thick steel plate extending 2" beyond the outside diameter shall be continuously welded midway of the length of the sleeve. Pipe or conduit shall be accurately centered within the sleeve. The remaining annular space shall not be less than 1/2" for pipe up to 3", 3/4" for pipe greater than 3". Impregnated rope shall be packed in, at both ends to a point giving a 2" recess in the annular space. The remaining 2" recess shall be sealed with a resilient, non-hardening sealer, Tremco Mono-Lasto-Meric or approved equal.
- C. Cutting, chasing, or boring in the existing building shall be done by this Contractor. Where existing foundations or walls below grade are involved, specific instructions shall first be obtained from the Commissioner.
- D. Measure all existing openings such as doorways, shafts, windows, hatchways, etc., through which equipment may have to be transported or moved. Include in bid any and all necessary widening of existing openings, or any other change in the existing structure necessary to place his materials and equipment in the proper position. All such alterations or changes shall be completely restored to the original condition, including patching, immediately after the necessity is passed.
- E. Cutting, chasing or boring will not be permitted in bearing walls, trusses, girders, or similar structural items unless special permission is obtained from the Commissioner. Be responsible for damages resulting from failure to observe this provision.
- F. Patching shall be done by men skilled in the trade but paid for by this Contractor. Finishes shall be restored to match the surrounding or adjacent surfaces perfectly in material, color and texture.
- G. Patch painting shall be done by this Contractor.
- H. Where not indicated on drawings or specified as work by other trades, provide all holes, chases and openings in or through construction elements or equipment required for his work. Where such holes, chases and openings are not permitted by the Commissioner, relocate work to clear obstructions as directed. No additional compensation shall be allowed for this work.

#### 3.4 TEMPORARY OPENINGS

- A. Temporary openings not indicated on the drawings which may be required for purpose of bringing equipment into building shall be provided as required subject to the approval of the Commissioner. Perform work of providing protecting and maintaining openings and of restoring structure.
- B. Holes provided to permit installation of lines for temporary plumbing services shall, after removal of such lines, be patched as specified.

#### 3.5 CLEARANCE FROM ELECTRICAL EQUIPMENT

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- A. Piping: Prohibited in electric room and closets, telephone rooms and closets, elevator machine rooms, and shall not be installed within 5 feet of transformers, substations, switchboards, motor control center, standby power plant, motors.
- B. If 5 foot minimum is totally unavoidable, provide sleeve drained outside of electrical equipment room where approved by Commissioner.

### 3.6 CLEAN-UP

- A. Be responsible for the general clean-up of all areas affected by the work in the Contract. All rubbish and accumulative material shall be removed from the premises and the premises left "broom clean" upon completion.

### 3.7 PAINTING AND FINISHING

- A. Except as specified herein, the finished painting of Plumbing Work within the building and on the roof shall be as specified in Section 220553.
- B. All plumbing equipment shall have a factory applied prime and finish coat of paint. Galvanized surfaces shall be considered as finished surfaces for equipment rooms and items concealed from view. Plastic products shall be acceptable without a finish coat of paint. All items of equipment marred or rusted, even though factory finished, shall be repainted.

### 3.8 IDENTIFICATIONS

#### A. Piping System:

1. All piping systems shall be identified by the name of contents and the direction of flow in accordance with ANSI A13.1 (1981).
2. Name of contents and directional arrows shall be placed near each valve, on both sides of pipes passing through walls, on long pipe runs at 30-foot intervals.
3. Names of contents and directional arrows shall be laminated in plastic and wraparound pipe marker as manufactured by Seton Nameplate Co., or approved equal.

#### B. Equipment:

1. All items of plumbing equipment shall be identified by approved nameplates by Contractor furnishing equipment.
2. Nameplates shall be securely affixed to each individual piece of equipment and also to controls for that equipment.
3. Nameplates shall be aluminum 2-1/2" x 3/4" with black enamel back-ground etched or engraved natural aluminum lettering.

4. Equipment shall be identified as to its type and unit number.

C. Valves:

1. Identify valves and other parts of mechanical systems by means of polished and lacquered brass or aluminum tags, minimum 1-1/2" round or octagonal, with stamped letters and numbers 2" high and filled with black paint. Tag must bear name of particular plumbing or sprinkler system involved and identifying number.

D. Charts:

1. Charts of valves including valve identification number, location and purpose shall be furnished in duplicate.
2. Charts of piping system identification shall be furnished in duplicate. Charts shall include the following:
  - a. Service
  - b. Color field
  - c. Legend
  - d. Color of letters
3. One (1) copy of each chart shall be mounted in a wood frame with clear glass front, and secured to wall, as directed.
4. Second chart shall be prepared for use in location as directed, provided with approved transparent plastic enclosure for permanent protection. Two (2) holes shall be furnished at top of plastic enclosure to allow for affixing an 8" length of nickel-plated bead chain. Each hole to be reinforced by a small brass or nickel grommet.

### 3.9 FIRE-STOP PROTECTION

- A. Where pipes pass through fire partitions, fire walls or floors, install a firestop that provides an effective barrier against the spread of fire, smoke and gases. Fire-stop material shall be packed tight, an completely fill clearances between pipe and sleeves. Provide escutcheon plates on both sides of all rated construction.
- B. Fire-stopping material shall maintain its dimension and integrity while preventing the passage of flame, smoke and gases. Fire-stopping material shall be non-combustible as defined by ASTM E136.

### 3.10 ACCESS PANELS

- A. Supply and install access panels for concealed valves, expansion joints, valves, traps, strainers and other parts requiring accessibility for operation and maintenance.
- B. Access panel size shall be as indicated; when not indicated, make 18" x 18" minimum or larger as directed or required.

- C. Frames shall be 16 gauge steel.
- D. Access panels for use on masonry, tile, drywall shall have frames with flanges to hide rough openings in walls.
- E. When access panels or doors are installed in fire-rated construction they shall be fire rated to match the construction.

END OF SECTION

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SECTION 220523

GENERAL-DUTY VALVES FOR PLUMBING PIPING

**PART 1 GENERAL**

**1.1 GENERAL REQUIREMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

**1.2 WORK INCLUDED**

- A. Work of this Section includes all labor, materials, equipment and services necessary to the installation of valves as shown on the drawings and as specified herein, including but not limited to the following:
  - 1. Furnish and install valves.

**1.3 RELATED WORK**

- A. Plumbing Piping and Fittings
- B. Hangers and Supports for Plumbing Piping and Equipment
- C. Plumbing Insulation
- D. Plumbing Equipment, Specialties & Accessories

**1.4 QUALITY ASSURANCE**

- A. UL - Underwriters Laboratory
- B. New York City Building Code
- C. FM - Factory Mutual
- D. AWWA - American Water Works Association

E. ANSI - American National Standards Institute

## 1.5 SUBMITTALS

A. Shop Drawings:

1. Valves.
2. Valve boxes and accessories.

## 1.6 VALVES - GENERAL

- A. Provide all valves and piping accessories required to complete the installation of all plumbing systems indicated on the drawings and as specified.
- B. To assure uniformity and compatibility, all grooved end valves and adjoining couplings shall be supplied by a single manufacturer.

## PART 2 PRODUCTS

### 2.1 INTERIOR PIPING SYSTEM VALVES

- A. Domestic water and glycol valves tabulated herein are manufactured by Stockham Valve Co., Jenkins Co., Crane Co., Walworth Co. or approved equal.

Check Valves	3" & smaller	threaded solder ends	B319 B309
	4" & larger	flanged	G931
Ball Valves	3" & smaller	threaded	S216BRRT
	2" & smaller	solder	S216BRRS

- B. Ball valves may be used for domestic water piping as an alternate to gate valves for sizes 3" and smaller. If used, provide extended handles.

## PART 3 EXECUTION

### 3.1 INSTALLATION REQUIREMENTS

- A. Valves : Located, arranged and operated as to give a complete regulating control to all fixtures and equipment.
- B. Shut-off valves shall be provided on a branch lines and at each piece of equipment.

- C. Valves, where exposed and used in connection with finished piping, shall be same finish as the pipe.
- D. Install valves where required for proper operation of piping and equipment, including valves in branch lines necessary to isolate sections of piping. Locate valves so as to be accessible.
- E. Install valves with stems pointed up, in vertical position where possible, but in no case with stems pointed downward or horizontal plane unless unavoidable. Install valve drains with hose-end adapter for each valve that must be installed with stem below horizontal plane.
- F. Where insulation is indicated, install extended-stem valves, arranged in proper manner to receive insulation.
- G. Install valves with bodies of bronze where thermal or mechanical shock is indicated or can be expected to occur.
- H. Do not install bronze valves and valve components in direct contact with steel, unless bronze and steel are separated by dielectric insulator. Install bronze valves in steam and condensate service and in other services where corrosion is indicated or can be expected to occur.
- I. Except as otherwise indicated, install gate, ball, globe, and butterfly valves to comply with ANSI B31.1. Where throttling is indicated or recognized as principal reason for valve, install globe or butterfly valves.
- J. Select and install valves with renewable seats, except where otherwise indicated.
- K. Installation of Check Valves:
  - 1. Swing Check Valves: Install in horizontal position with hinge pin horizontally perpendicular to center line of pipe.
- L. Install valves so that they are accessible for repacking. Install with operating clearance for handle and stem.
- M. On equipment isolation valves install so that valve and piping do not interfere with equipment removal or maintenance. Install unions or flanges on equipment side of valves unless valve is flanged type.
- N. Provide valves of a design permitting packing while open and under pressure.
- O. If globe valves are not available in the sizes required for installation in the discharge lines from the large pumps, install valves of the lubricated tapered plug type.
- P. Lubricate tapered plug cocks with the manufacturer's proper lubricant for water service before shipment to the job site. Furnish four (4) hand wrenches for each size valve, where

gear operators are not required.

- Q. Butterfly valves of the lug type are permitted in lieu of valves indicated above for water service only. 150 lb. construction with totally enclosed weather-proof operator replaceable packing bonnet and material combination as follows: Iron body, stainless steel stem and disc, steel ring and Buna seat.
- R. Safety valve discharges shall be piped and extended to drains. From the drain and the elbow provide a common 3/4" drain line extended to discharge down 6" above the nearest floor drain.
- S. Provide chain-operated sheaves and chains were indicated on drawings and for all valves 6" and larger which are more than 6' above the floor.

END OF PAGE

SECTION 220529

HANGERS & SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT

PART 1 GENERAL

1.1 GENERAL REQUIREMENTS

- A. Work of this specification as shown or specified should be in accordance with the requirements of the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

1.2 WORK INCLUDED

- A. Work of this Section includes all labor, materials, equipment and services necessary to provide Hangers and Supports for Plumbing, Piping and Equipment as shown on the drawings and as specified herein, including but not limited to the following:
  - 1. Pipe supports.
  - 2. Anchors and guides.
  - 3. Base supports.

1.3 RELATED WORK

- A. Plumbing Piping and Fittings
- B. Plumbing Insulation

1.4 QUALITY ASSURANCE

- A. Underwriter's Laboratories - U.L.
- B. Factory Mutual - F.M.
- C. Provide Pipe Hangers and Supports - MSS - SP-58
- D. Select and Apply Pipe Hangers - MSS - SP-69.

- E. Fabricate and install Pipe Hangers and Supports - MSS - SP-89.

## 1.5 SUBMITTALS

### A. Shop Drawings:

1. Pipe Hangers and Supports showing adjacent construction, interface and associated details.

## 1.6 SPECIFIC REQUIREMENTS

- A. The Contractor shall be responsible for the proper transfer of the loads of the piping system to the structure. No additional cost to the The City of New York will be allowed for any corrective work during construction.
- B. Supports and hangers shall be provided for all horizontal and vertical piping. The hanger design shall conform to the ANSI Code for Pressure Piping. Hangers shall be kept outside of pipe insulation.
- C. All bracket clamps and rod sizes indicated in these Specifications are minimum size only. This Contractor shall be responsible for structural integrity of all supports. All structural hanging material shall have a safety factor of five (5) built in.
- D. Hangers and supports: UL/FM
- E. All pipes shall be supported in conformance with seismic restraint requirements.

## PART 2 PRODUCTS

### 2.1 PIPE SUPPORTS, HANGERS AND INSERTS

- A. Provide one of the following types of hanger for overhead support of horizontal piping:
  1. For copper tubing where hangers are in direct contact with tubing, use clevis type steel hanger, copper plated with supporting rod to suit.
  2. For all piping 6" and smaller, use clevis type hangers.
  3. Provide supporting rods for hangers of diameter as indicated and where not indicated, as specified under "Horizontal Pipe Supports Schedule" hereinafter, of lengths as required, with double locknuts for each.
- B. Where hanger rods leave unsightly holes in ceilings in finished areas, provide steel ceiling plates or cast iron ceiling plates with set screw.

- C. Provide one of the following to support horizontal piping from wall:
1. Where no provision for expansion and contraction is required and pipe can be located close to wall, use steel J-hook, suitable for pipe sizes up to 3".
  2. For hanger suspension, 750 lb. maximum loading, use light welded steel bracket with hole for one rod up to 3/4" diameter. For additional rod suspension, use with this bracket steel clip for pipe sizes up to 3".
- D. Vertical piping supports for copper tubing where hangers are in direct contact with tubing, use copper tubing riser clamps. For steel cast iron pipe use steel extension pipe clamps.
- E. Where beam clamps are required, use malleable iron "C" clamps with case hardened cup pointed set screw and retaining strap or beam clips as required or directed.
- F. Concrete inserts shall be approved for local use and shall be black malleable iron universal type, for threaded connections with lateral adjustment, top slot for reinforcing rods, lugs for attaching to forms.
- G. All insulated pipe shall be protected at supports by pipe saddles. Pipe saddles for use on hangers shall be Insul-Shield pipe saddles as manufactured by Insul-Coustic Corp. or approved equal.
- H. Steel anchors of an approved design shall be provided where indicated or required for proper control of stress in piping due to expansion. Anchors shall be made of structural materials of heavy cross section and securely fastened to building construction. Submit detail drawings of approval installation.
- I. Provide pipe alignment guides where indicated, required or directed, to guide the expanding pipe to move freely from anchor points in expansion joints, loops or bends. Construct with angles or channels. Submit detail drawings for approval before installation.

## 2.2 ACCEPTABLE MANUFACTURERS

- A. Pipe supports shall be of the following type and figure number, manufactured by C&P, F&M, Grinnell, or equal as approved.

B. Pipe Hanger Schedule:

	C & P	F & M	Grinnell
Beam Clamp	268	282	----
Clevis Hanger	100	239	260
180□ Shield	265P	80	----
Pipe Saddle	351	170 & 180 series	1700 series
Rigid Trapeze U-Bolt	371 382	176	Std. 45 137
Riser Clamp	89 or 126	241	261
Double Bolt Pipe Clamp	304	261	295
Welding Beam Attachment	113B	751	66
Insert	650	----	280
Continuous Slotted Insert	1480	190	----

C. Insulation Protection

For all insulated pipe furnish clevis hangers with welded shields and similar to C&P, Inc., Fig. 100-SH or approved equal.

D. Pipe Supports in Pipe Chases

Supports shall securely hold by, prevent vibration, etc. Provide pipe supports and channels as required made Grade KJA Cicolac DH or approved equal and self-extinguishing ABS as manufactured by the Sumner Corporation or approved equal.

PART 3 EXECUTION

3.1 INSTALLATION REQUIREMENTS

- A. Provide necessary structural members, hangers and supports of approved design to keep piping in proper alignment and prevent transmission of injurious thrusts and vibrations. In all cases where hangers, brackets, etc., are supported from concrete construction, care shall be taken not to weaken concrete or penetrate waterproofing. All hangers and supports shall be capable of screw adjustment after piping is erected. Hangers supporting piping expanding into loops, bends and offsets shall be secured to the building structure in such a manner than horizontal adjustment perpendicular due to expansion. All such hangers shall



be finally adjusted, both in the vertical and horizontal direction.

- B. Where piping is run near the floor and not hung from the ceiling construction but is supported from the floor, such supports shall be of pipe standards with base flange and adjustable top yoke, 101 or equal.
- C. Except where otherwise noted, piping shall be supported from structural steel only. Provide supplementary steel where required.

### 3.2 PIPE SUPPORTS, HANGERS AND INSERTS

- A. Support horizontal piping in accordance with the following schedule:
  - 1. All horizontal copper pipe shall be supported at maximum intervals as follows:
    - a. Copper tube and Brass Pipe - up to 1-1/4" - 6'-0"; 1-1/2" to 2-1/2" - 8'-0"; 3" and larger - 10'-0".
  - B. Support vertical piping with clamps attached to the pipe, resting on the floor slab. In general, one clamp for each two floors, one clamp at each floor for copper tubing. Where pipes are open shaft, provide forged steel bar brackets to wall.
  - C. Support hangers from concrete inserts of beam clamps. Furnish, locate and set such inserts and make sure that such inserts are in place when the concrete is poured. Construct inserts of malleable iron or pressed steel with space for rods of all sizes. Install all inserts for pipes 3" and larger in size with a reinforcing rod 5/8" in diameter, run through a slot in the insert specifically provided for this purpose.
  - D. If any pipe has to be hung in spaces where no inserts have been provided, drill holes in the slab and provide rods and hanger attached to an approved fishplate or install 2 Star No. 7000 double expansion shields connected by a 2" X 2" angle, from which suspended the hanger rod. For pipe size 2" and under use single No. 7000 shields, but the hanger spacing defined herein before reduced to 5'-0". The carrying capacity and size of each shield to be calculated on the basis of the spacing indicated above the minimum size to be 3/8". Install additional shields of the same size so that the number of hangers are of adequate size to support the loads which they carry. Shields may be used in concrete slabs only.
  - E. Regardless of the type of construction (i.e., concrete, concrete-deck-steel or other variations) take particular care to support all main lines and all large and heavy pipes in an approved manner, including the furnishing and installation of supplementary steel, if required. Submit shop drawings, indicating support methods, point loadings to the building structure and hanger locations for review sufficiently in advance of concrete pouring schedules to permit evaluation, critique and any necessary changes to handling and support methods.
  - F. Set all inserts for all pipes in ample time to allow concrete work to be performed on scheduled time.

- G. Hangers may be directly bolted to steel beams of building construction, where they occur. Smaller pipes may be suspended from cross-pieces of pipe or steel angles, which in turn, to be securely fastened to building beams or hung from building concrete construction by means of rods and inserts. The intention is to provide supports which, in each case, shall be amply strong and rigid for the load, but which will not weaken or unduly stress the building construction.
- H. Provide approved roller support, floor stands, wall brackets, etc. for all lines running near the floor or near walls, which can be properly supported or suspended by the floors or walls, which can be near walls may also be hung by hangers carried from approved wall brackets to a higher level than the pipe.
- I. Do not hang piping from other piping. Support of hangers by means of vertical expansion bolts is not permitted.
- J. Whenever hangers using pipe rolls are used provide approved steel pipe covering protection saddles, spot welded to the piping at each hanger location.
- K. Anchor piping where required to localize expansion or to prevent undue strain on piping and branches. Anchors to be entirely separate from hangers and of heavy forged or welded construction of approved design. All anchor designs, when submitted for approval, to include piping reactions which respective anchors are capable of supporting. Provide all indicated or required expansion loops.
- L. Support all line of copper tubing individually by approved type hangers not more than 6' apart, or as shown on the drawings. Hangers for Uncovered Tubing: Broad straps fitting outside of covering.
- M. Hangers for cold piping to support the pipe without piercing the insulation. Use insulation shields to protect the insulation on cold pipes. Weld insulation protection saddles to insulated hot pipes at roller supports. Wherever fibrous glass pipe insulation is installed, install calcium silicate of equal thickness in lieu thereof wherever hangers and insulation shields shall bear only on an insulation material which is of such density that it will not compress, crush or deform.
- N. This Contractor may coordinate with other Contractors to use common means of support. Submit for approval all pertinent design data relating to the support as well as verification of the responsibility for the support.
- O. Support vertical water piping at approximately the mid-height of the riser (unless otherwise indicated) using a clamp, installed so that expansion and contraction does not cause trapping of air or prevent drainage.

- P. Trapeze type hangers shall be made up of angles bolted back-to-back or channels for supporting parallel lines of piping. Trapeze type hangers shall be supported with suspension rods having double nuts, and securely attached to construction with inserts, beam clamps, steel fishplates cantilever brackets, lag screws of other approved means. Use approved type brackets for supporting piping attached along walls. Non-insulated piping (compressed air, gas, etc.) supported by trapeze hangers shall be provided with hold down clamps at the trapeze hangers. If non-ferrous piping (copper, etc.) is supported on the trapeze hangers, the trapeze and hold down clamps shall be copper clad.
- Q. Maximum weights on hanger rods shall be such that stress in tension shall not exceed 9,000 psi, using root area of threaded portion. In no case shall hanger size be less than 3/8" for pipe up to 2", 1/2" for pipe 1-1/2" to 3-1/2", 5/8" for pipe 4" to 5", 3/4" for pipe 6", 7/8" for pipe 8" to 12".

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SECTION 220553

IDENTIFICATION AND PAINTING FOR PLUMBING PIPING AND EQUIPMENT

**PART 1 GENERAL**

**1.1 GENERAL REQUIREMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

**1.2 WORK INCLUDED**

- A. Paint apparatus, equipment, piping, coverings, hangers, supports, foundations, etc. provided by him, except otherwise specified. For performing this work, he shall employ an experienced subcontractor specializing in painting work and approved by the The City of New York.
- B. Where a priming coat or other painting is specified under other sections of the specification, such coat shall not be considered as one of the coats of paint specified in this section.
- C. Piping, covering, etc. concealed in hung ceilings, in furred spaces, in convector enclosures and inaccessible locations are not required to be painted at the site. However, piping, required to be painted at the site. However, piping, insulation facing, etc., located in accessible spaces in basement, pipe space, crawl space or cellar shall be painted as specified. Piping in trenches and piping laid in the ground shall also be painted as specified.

**1.3 RELATED WORK**

- A. Hangers and Supports for Plumbing Piping and Equipment
- B. Plumbing Piping and Fittings
- C. General-Duty Valves for Plumbing Piping
- D. Plumbing Insulation
- E. Plumbing Equipment, Specialties and Accessories

## 1.4 QUALITY ASSURANCE

- A. Local Building Code.
- B. ASTM
- C. Federal Specifications

## 1.5 SUBMITTALS

- A. Paint samples, if requested.
- B. Color chips.

## 1.6 DELIVERY, STORAGE AND HANDLING

- A. Painting materials shall be stored only in assigned spaces which shall be maintained in a clean condition, safe from fire hazards and meeting regulations of the Fire Department. The floors of assigned spaces shall be protected from paint damage by use of drop cloths or building paper. Remove waste material such as oily rags, and empty paint cans from site each night. Provide the City of New York with one (1) key for each of these spaces if locked.

## PART 2 PRODUCTS

## 2.1 PAINTING MATERIALS

- A. Factory mixed and delivered to the premises in original sealed containers, with unbroken seals. Containers shall bear the name and trade brand of the manufacturer and must indicate compliance with Federal Specifications, as noted below. Materials shall be approved by the The City of New York before they are used. Before beginning the painting work submit an affidavit to the The City of New York stating that all materials proposed comply with this specification.
- B. Materials shall comply with the requirements of Federal Specification TT sections as follows:

Aluminum Paint (ready mixed)	P-0038c
Asphaltum Paint	V-51c
Black Paint	P-61d
Colors in Oil	P-381c(2)
Enamel Undercoat	E-543a
Galvanized Iron Primer	P-6411f

Gloss Enamel	E-489f
Iron (Red) Oxide	P-31c
Latex Base Paint	P-29h
Zinc and Titanium Paint	P-102b
Turpentine	T-801c
Zinc Chromate Primer	P-636b

### PART 3 EXECUTION

#### 3.1 WORKMANSHIP

- A. Paints shall be applied in a careful manner by painters experienced and skilled in their trade. Materials or work to which paint is to be applied, whether in factory, in ship, or at the site, shall be properly prepared to receive the same. The surfaces shall be dry, free from foreign matter, dirt, cement, plaster, grease, oil, loose paint, scale, scratches, finger marks, pencil marks, etc. The various surfaces shall be sandpapered or rubbed before and between coats as required to produce a satisfactory surface. No paint, etc. shall be applied until the preceding coating is thoroughly dry. Paint shall be evenly spread and well brushed out. It shall be so applied as to eliminate drops, runs or sagging of materials. Enamel shall be evenly and smoothly flowed on. Painting at the site shall not be commenced until ordered by the The City of New York.
- B. Drop cloths shall be used to prevent drops of paint, oil, etc. from defacing the painted walls, woodwork, floors, stairs, convectors, furniture, etc. Contractor shall be particularly careful not to get paint on nameplates, valve tags, and on other finished surfaces. Paint spots shall be properly removed from glass floors and finished surfaces.
- C. Each separate application or coat of paint or enamel shall be left until it has been inspected and approved by the The City of New York before another coat is applied. Each coat of paint applied prior to finishing coat shall be of a shade different from preceding coat, as directed, and from final coat.
- D. Where the finish of the woodwork, plaster, etc. of the building has become discolored, marred, damaged or otherwise destroyed in the performance of this Contract, the same shall be refinished, painted or varnished (as the case may be) in the best manner of such work and in every respect equal to the work previously existing.

#### 3.2 PIPING IDENTIFICATION

- A. All piping systems to be color coded by paint identifications.
- B. Piping of each given layout first to be neatly painted with two coats of flat enamel in a buff color if existing paint is not satisfactory.

- C. The identification scheme shall be as follows:
1. Pipes identified by a 6" wide colored band located near strategic points such as valves, items of equipment, intersections, with wall, etc.
  2. The colored band to consist of a background color designating the major classification of the material carried by the pipe.
  3. An arrow to be stenciled on each colored band indicating the direction of flow through the pipe. This arrow to be placed in such a location of the perimeter of the pipe as to be readily visible to operating personnel from the floor in the area. The arrow to be black, approximately 3" long; 2" for the "shaft" and approximately 1" for the "head" formed by an equilateral triangle having a base equal to twice the width of the "shaft". The width of the "shaft" to be 1" (2" on pipes 3" or less in diameter).
- D. Stencil a lettered legend in black to further identify the pipe contents. Lettering to be stenciled in the band on the lower quarters of horizontal piping. Size of letters to be 7/8".
- E. For pipes smaller and 3/4" use tape bands or metal tags with lettering etched and filled with colored enamel to identify the pipe contents.
- F. Use the following scheme for the identification of piping systems:

Classification	Band Color	Stenciled Legend
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#### 3.4 PAINTING FOR UNINSULATED PIPING

- A. Excepting for finish brass piping, chrome plated piping and galvanized pipe which shall not be painted, exposed uninsulated piping, including hangers, installed by this Contractor throughout the building, shall be cleaned and then given one (1) coat of primer and one (1) coat of enamel, color as required.
- B. Exposed pneumatic valves and air piping in finished rooms in and above basement or cellar shall be painted. Conduit or troughing enclosing pneumatic tubing shall not be painted.
- C. Piping in floor trenches within the building shall be painted after fabrication with one (1) coat of black asphaltum paint.
- D. Piping buried in the ground shall be protected with one (1) coat of black asphaltum paint.
- E. All exterior, underground, fuel gas piping and fittings shall be coated with Hill-Hubbell Spec. BAX-1 pipe covering or approved equal. Buried tees or elbows shall be similar to pipe. All underground piping shall be mill-wrapped.

END OF PAGE



SECTION 220577

PLUMBING SYSTEM TESTS

PART 1 GENERAL

1.1 GENERAL REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

1.2 WORK INCLUDED

- A. Work of this Section includes all labor, materials, equipment and services necessary to provide Plumbing System Testing as shown on the drawings and as specified herein.

1.3 RELATED WORK

- A. Plumbing Piping and Fittings

1.4 QUALITY ASSURANCE

- A. Local Plumbing Code

1.5 SUBMITTALS

- A. Certification.

1.6 SPECIFIC REQUIREMENTS

- A. All tests shall be made in the presence of the Resident engineer, or their representatives, and the local authorities having jurisdiction of the work to be tested, as may be directed; and at least 72 hours notice shall be given in advance of all tests.
- B. The Work of this Contractor shall include the furnishing of all testing instruments, gauges, pumps, smoke machines, and other equipment required or necessary for tests, required by laws, rules and regulations and as specified.
- C. Provide all other tests required by local inspectors and all other authorities having

jurisdiction.

- D. All appurtenances shall be operated after installation to determine whether or not they meet the requirements of the Specifications.
- E. All defects disclosed in the work by tests and otherwise shall be made good or the Work replaced without additional cost to the The City of New York. No caulking on screwed joint, cracks or holes will be acceptable.
- F. Tests shall be repeated after any defects disclosed thereby have been made good or the work replaced if it is deemed necessary.
- G. All tests shall be made at the expense of the Contractor.
- H. Tests are not permitted to be made with air except as noted.
- I. Contractor to provide required test plug tee fittings during erection of pipe system.
- J. If the pipe, installation fails to meet testing requirements, the Contractor shall determine at his own expense the source or sources of leakage, and he shall repair or replaced all defective materials or workmanship. The completed pipe installation shall meet the requirements of the tests after the leaks have been corrected.
- K. All piping which is to be enclosed in partitions or hung ceilings shall be tested and made tight when directed by the Construction Supervisor and in adequate time to permit the installation of partitions and ceilings. When necessary, the Contractor shall drain the piping and/or take such precautions as required to prevent damage by freezing.
- L. Be responsible for the work of other trades that may be damaged or disturbed by the tests, or the repair or replacement of this Work, and he shall, without extra charges, restore to its original condition, any Work so damaged or disturbed.

## PART 2 PRODUCTS

NOT USED

## PART 3 EXECUTION

### 3.1 WORK PERFORMED PRIOR TO TESTING

#### A. Water Systems:

1. Flushed, filled and vented.

### 3.2 BALANCING

- A. Balance and adjust water systems.

1. Examine system and position valves and cocks in their required open or closed position.
  2. Make all adjustments as required to balance system and equipment.
- B. Mark valve tag of each valve or cock used for balancing to indicate position of valve stem.
- C. Make repairs to all leaks or defects without additional cost to the The City of New York.

### 3.3 TESTING OF AUTOMATIC CONTROLS

- A. In cooperation with the control manufacturer's representative, adjust controls to operate as specified. Testing personnel shall check all controls for proper calibrations and list all controls requiring adjustment by control installers.

### 3.4 DOMESTIC WATER SYSTEM STERILIZATION

- A. The potable water system shall be disinfected prior to use. Samples shall be taken as required by the department of health. The method to be followed shall be that as prescribed by the Department of Health, by the following:
1. The pipe system shall be flushed with clean, potable water until no dirty water appears at the outlets.
  2. The system or part thereof shall be filled with a water-chlorine solution containing at least 50 parts per million of chlorine and the system or part thereof shall be valved off and allowed to stand for 24 hours or, the system or part thereof shall be filled with a water-chlorine solution containing at least 200 parts per million of chlorine and allow to stand for 3 hours.
  3. Following the prescribed standing time, the system shall be flushed with clean potable water until no excess chlorine remains in the water coming from the system.
  4. The procedure shall be repeated if it is shown that contamination still persists in the system.
  5. Certify through an independent testing laboratory the quality of purity. Submit test results to Commissioner.

### 3.5 PIPING SYSTEM TESTS-GENERAL

- A. Each piping system shall be tested prior to application of insulation, painting or placing of backfill. Testing as stipulated herein shall be considered minimum, and where tests stipulated by lawfully jurisdictional authorities exceed these requirements, such more stringent tests shall be performed.
- B. All materials and equipment for testing shall be furnished by the installer of the system. Concealed work shall remain uncovered until required tests have been completed. In the event that the project construction schedule requires it, make arrangements and insert

proper sectionalizing devices so that a portion of a system may be tested.

- C. All piping, unless otherwise specified, shall be tested to a hydrostatic pressure at least 2-1/2 times the maximum designed working pressure (but not less than 50 psig) for a sufficiently long time to detect all leaks and defects, and after testing, shall be made tight in the most approved manner.
- D. Where controls and accessories are not designed to withstand pipe test pressures, they shall be properly protected against damage during such test.
- E. If in any tests leaks are observed, the defective work or material shall be replaced. No caulking of screw joints or holes will be acceptable. Repetition of the entire test will be required as many times as leaks can be observed from the tests, until no leaks result in successful completion of the test.
- F. Make all provisions for removal of test equipment and draining of pipes after tests have been completed. Insulation work shall not be performed prior to inspection and testing of piping.
- G. The Contractor shall inform the A/E in writing when a section of piping is to be tested and subsequently insulated or otherwise concealed. Such notice shall be given a minimum of five (5) working days prior to the start of testing.
- H. Where possible, arrange to conduct tests under constant ambient temperature conditions in order that compensation for temperature change is not necessary.

### 3.6 INTERIOR DOMESTIC WATER SYSTEMS

- A. Domestic cold, hot and hot water circulation system: The entire water supply system shall be tested to a hydrostatic pressure of 150 pounds per square inch or 1-1/2 times the system pressure, whichever is greater, at lowest point of the water system in the building, and proved tight at this pressure before fixtures are installed. Water supply piping, if in any way concealed by structural work, shall be tested to the aforesaid pressure and proved tight before pipes are concealed.
- B. The test procedure shall be held for a period of not less than two (2) hours. The piping system shall be considered tight if the drop in pressure does not exceed 2 pounds per square inch during the test period. If the pressure drop exceeds 2 pounds, all repairs and alternations in the pipe system necessary to meet the test shall be made.

END OF PAGE

SECTION 220700

PLUMBING INSULATION

**PART 1 GENERAL**

**1.1 GENERAL REQUIREMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

**1.2 WORK INCLUDED**

- A. Work of this Section includes all labor, materials, equipment and services necessary to provide Insulation on Plumbing Piping and Equipment as shown on the drawings and as specified herein, including but not limited to the following:
  - 1. Insulation, jacketing and adhesives for plumbing piping.
  - 2. Insulation, jacketing and adhesives for plumbing equipment.

**1.3 RELATED WORK**

- A. Plumbing Piping and Fittings
- B. Hangers and Supports for Plumbing Piping and Equipment
- C. Temporary Facilities and Controls

**1.4 QUALITY ASSURANCE**

- A. Federal Specifications - F.S.
- B. Underwriters Laboratories - U.L.

**1.5 SUBMITTALS**

- A. Shop Drawings:

1. Materials.
2. Jackets.
3. Adhesives

## PART 2 PRODUCTS

### 2.1 INSULATING MATERIALS

- A. All insulation shall have composite (insulation, jacket facing and adhesive used to adhere jacket or facing to the insulation) fire and smoke hazard ratings as tested by Procedure ASTM E-84, NFPA 255 and UL 73, not exceeding flame spread of 25, fuel contributed of 50, and smoke developed of 50. Accessories such as adhesives, mastics, cements, tapes and cloths for fittings shall have component ratings as listed above. Insulation shall be glass fiber with a maximum K factor of 0.23 at 75 degrees F. mean temperature. Density shall not be less than 3 lbs. per cu.ft.
- B. Insulation thickness shall conform to application schedule specified herein for types and thicknesses.
- C. Pipes subject to freezing: cover all piping subject to freezing with an additional layer of 2" glass fiber insulation of the same finish as specified for the particular service when not subject to freezing, but not less than 3" total thickness.
- D. The materials as specified below have been selected from Owens-Corning Fiberglass Corp. and are representative of the quality, design and finish desired. Insulation as manufactured by other manufacturers may be submitted for approval, provided the products meet fully in all respects (such as density, moisture absorption, alkalinity, thermal-conductivity, jacket, etc.) to the materials as delineated below.
- E. Fiberglass Pipe Insulation: FS HH-I-558B (Amend. 3), Form D, Type III, Class as indicated. Provide Class 12 for hot and cold plumbing piping.
- F. Fiberglass Pipe Fitting Insulation: FS HH-I-558, Form E, Class as indicated. Provide Class 16 for use with Class 12 pipe insulation, where temperature does not exceed 450 degrees F.
- G. Flexible Unicellular Pipe Insulation: FS HH-I-523, Class T.
- H. Calcium Silicate Pipe Insulation: FS HH-I-523, Type II, except type I where needed, factory applied jacket Class B.
- I. Vapor Barrier Materials: FS HH-B-100B, Type I, paper-backed aluminum foil, except as otherwise indicated, strength and permeability rating equivalent to adjoining pipe insulation jacketing.
- J. Bends shall be 0.016 inch thick, 1/2" aluminum spaced 18" on center, finish cement shall

be J-M No. 375 or smooth coat by Insulation Industries, Inc.

- K. Wires shall be 20 gauge galvanized annealed steel, sealer shall be layer of J-M duramesh 207 or equal.
- L. Adhesives and Protection Finish shall be Benjamin Foster 30-36 or Insul-Coustic (I-C) or approved equal.
- M. Jacketing Material for Equipment Insulation: provide pre-sized glass cloth or canvas material, not less than 7.8 ounces per square yard.
- N. Fitting and Valves: Zeston 25/50 rated -20 mil. P.V.C. covers over fiberglass insulation.

## 2.2 RELATED MATERIAL AND REQUIREMENTS

- A. At pipe supports Insul-Shield pipe saddles and matching hanger shall be used. Joints of insulation abutting Insul-Shielding pipe saddles shall be butted with IC-405, and the joints firmly pressed together.
- B. All concealed and exposed piping shall be provided with factory ASJ (Owens/Corning Fiberglass or approved equal) secured in place with vapor barrier adhesive IC-225. Provide 1/2" aluminum bands spaced 18" on centers.

## 2.3 INSULATION REQUIREMENTS

### A. Cold Water Piping

- 1. 1" insulation, A.S. jacket with vapor barrier.

### B. Miscellaneous Equipment

- 1. Insulate water meter with 4 pound density 1" thick vapor barrier glass insulation blanket, fitted and contour to shape and secured in place with bends or wire. Apply two coats of mineral wool, cement and trowel to a smooth finish, and finish with two applications of Benjamin Foster 30-36 vapor barrier finish or approved equal.

- C. Except as noted insulate all exposed and concealed vertical and horizontal domestic water piping, and all exposed and concealed horizontal storm drainage piping.

## PART 3 EXECUTION

### 3.1 GENERAL

- A. Maintain integrity of vapor-barrier jackets on pipe insulation, and protect to prevent puncture or other damage. Staples shall not be used on vapor barrier.
- B. Cover valves, flanges, fittings and similar items in each piping system with equivalent thickness and composition of insulation as applied to adjoining pipe run. Install factory,

precut or job fabricated units (at Installer's option) except where a specific form or type is indicated.

- C. Extend piping insulation without interruption through walls, floors and similar piping penetrations, except where otherwise indicated.
- D. Do not apply insulation to hot equipment.
- E. Apply insulation using the staggered joint method for both single and double layer construction, where feasible. Apply each layer of insulation separately.
- F. Coat insulated surfaces of equipment with layer of insulating cement, troweled in a workmanlike manner, leaving a smooth continuous surface. Fill in scored block, seams, chopped edges and depressions, and cover wire netting and joints with cement of sufficient thickness to remove surface irregularities.
- G. Cover insulated equipment surface with jacketing neatly fitted and firmly secured. Lap seams at least two inches. Apply cover vapor barrier where applicable.

### 3.2 INSTALLATION REQUIREMENTS

- A. Install insulation products in accordance with the manufacturer's written instructions, and in accordance with recognized industry practices to ensure that the insulation serves its intended purpose.
- B. Install insulation on pipe systems subsequent to testing and acceptance of tests.
- C. Install insulation materials with smooth and even surfaces. Insulate each continuous run of piping with full-length units of insulation, with a single cut piece to complete the run. Do not cut pieces of scraps abutting each other.
- D. Clean and dry pipe surfaces prior to insulating. But insulation joints firmly together to ensure a complete and tight fit over surfaces to be covered.
- E. Take every precaution necessary to insure that the covering material is in satisfactory condition to receive painting.
- F. Penetration of walls and floors by piping connection to rotating equipment shall be provided with a fiberglass sleeve, the full depth of pipe penetration.
- G. In all cases where new piping connects to existing piping that is insulated, the existing insulation that is removed to make the new connection, shall be replaced with new insulation as hereinafter specified.
- H. Do not insulate hand holes, cleanouts, ASME stamp, and manufacturer's nameplate. Provide neatly finished beveled edge at interruptions of insulation.
- I. Replace damaged insulation which cannot be repaired satisfactorily, including units with



vapor barrier damage and moisture saturated units.

- J. The installer of the piping insulation shall advise this Contractor of required protection for the insulation work during the remainder of the construction period, to avoid damage and deterioration.

END OF SECTION

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SECTION 221000

PLUMBING PIPING AND FITTINGS

**PART 1 GENERAL**

**1.1 GENERAL REQUIREMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

**1.2 WORK INCLUDED**

- A. Work of this Section includes all labor, materials, equipment and services necessary to complete the installation of pipe, tube and fittings as shown on the drawings and as specified herein, including but not limited to the following:
  - 1. Atmospheric pipe systems.
  - 2. Pressure pipe systems.

**1.3 RELATED WORK**

- A. Temporary Facilities and Controls
- B. Common Work Results for Plumbing
- C. Identification and Painting for Plumbing Piping and Equipment
- D. General-Duty Valves for Plumbing Piping
- E. Plumbing Insulation
- F. Hangers and Supports for Plumbing Piping and Equipment
- G. Facility Water Distribution
- H. Testing

**1.4 QUALITY ASSURANCE**

- A. A.G.A. American Gas Association
  - A.N.S.I. American National Standards Institute
  - A.S.A. American Standards Association
  - A.S.T.M. American Society of Testing and Materials
  - A.W.S. American Welding Society
  - A.W.W.A. American Water Works Association
  - C.A.B.R.A. Copper and Brass Research Association
  - C.I.S.P.I. Federal Specifications - U.S. Dept. of Commerce
  - F.M. Factory Mutual
  - I.R.I. Industrial Risk Insurers
  - N.B.S. National Bureau of Standards
  - N.F.P.A. National Fire Protection Associations
  - O.S.H.A. Occupational Safety and Health Act
  - U.L. Underwriters Laboratories
- B. No welder shall be employed who has not been fully qualified and certified by an approved, nationally certified, welding bureau or similar recognized testing agency.
  - C. The competent and experienced welders who have qualified shall be retained at the job at all times when welding is done. Once qualified, they shall not be removed from the job. Each welder shall be in possession of a stamp to identify work performed by him.
  - D. Welding material and labor shall be in accordance with the welding procedures of ANSI piping codes. Mark of welder shall be stamped on each welded joint of pipe.

**1.5 SUBMITTALS**

- A. Shop drawings indicating pipe layout (3/8" scale), sizes, types of materials, details, attachment and installation. Coordinate the work with other trades doing sheet metal work, electrical work and general construction.
- B. Product Data: Manufacturers' printed data, catalog cuts, recommended connections and installation methods. Submit for valves, fittings, strainers, supports, sleeves, anchors and guides.
- C. Samples, when requested.
- D. Manufacturer's test data.
- E. Reports of pipe field hydrostatic test.

**1.6 DELIVERY, STORAGE & HANDLING**

- A. Deliver materials properly identified as to type, size, manufacturer's name, specification code, etc., and undamaged.
- B. Do not store exposed to weather; cover with suitable type material to protect from damage.
- C. Properly protect all piping so as to prevent damage to the pipe or the introduction of foreign material into the pipe. For the purpose of protecting piping from preinstallation contamination, all piping shall be shipped to job site with suitable caps, sheet metal covers or plugs. Pipe caps, etc. shall not be removed until just before installation.
- D. Cap or plug all openings in pipe and pipe fittings during installation.
- E. During loading, transporting and unloading, use care to prevent injury to pipes and pipe fittings. Do not drop pipe or fittings. Examine all pipe and fittings before laying. Do not install any piece that is found to be defective.
- F. Store and protect all materials from injury prior to installation. Do not store any materials directly on the ground or floor. Keep materials as clean and dry as possible and free from damage or deteriorating elements.
- G. Remove and replace with new pipe any defective pipe and pipe fittings discovered after installation without additional expense to the The City of New York.

**PART 2 PRODUCTS****2.1 BASE BID MANUFACTURES****A. Pipe:**

- 1. Copper: Revere Copper Products, NIBCO or approved equal.
- 2. Fittings for Brass Pipe and Copper Tubing: Flagg, Nibco or approved equal.
- 3. Steel: Youngstown, Republic, U.S. Steel or approved equal.
- 4. Flexible connectors: Flexonics, Resistoflex, Flexico or approved equal.
- 5. Sleeves: Thunderline Link-Seal or approved equal

**2.2 INTERIOR PIPE AND FITTINGS****A. Domestic Water**

- 1. Underground: 2" and smaller shall be Type "K" copper tubing, soft temper ASTM B-88 with wrought copper or cast brass brazed fittings, minimum 125 psi WWP. Brazing joints shall be as specified for domestic water piping. Pipe and fittings shall be asphaltum coated. No galvanized piping allowed.

2. Aboveground domestic water piping shall be seamless drawn or extruded copper tubing type "L" hard temper ASTM B-88. Fittings shall be wrought copper or cast bronze, brazing type. Joints shall be made with a brazing alloy (95/5) consisting of copper, silver and phosphorus, and shall conform to Handy Harmon "Silphos" fluxless brazing (1,300 degrees F.) or equal. Brazing material shall meet ANSI/AWS A5.8 Specifications. No galvanized piping allowed.

### 2.3 SLEEVES

- A. Make sleeves of galvanized steel pipe when they are located in concrete beams of concrete fireproofing, waterproofed floors or where subject to moisture.
- B. In all other locations, sleeves shall be constructed of galvanized sheet steel with lock seam joint of following minimum gauges: 24 gauge for 2" and smaller; 22 gauge for 4" to 6" inclusive; 20 gauge for sizes over 6".
- C. Sleeve flashing shall be 16-ounce soft sheet copper, or a 4-pound lead flashing.

### 2.4 ESCUTCHEONS

- A. Escutcheons shall be one piece with set screw except where otherwise noted, constructed of the following material.
  1. White painted sheet brass or steel for pipes passing through white prefinished ceilings.
  2. Cast iron, deep cut type project above finished floor.
  3. Heavy, solid pattern steel or cast iron with set screw for all other piping.
- B. Provide escutcheons on all pipes passing through floors, walls, partitions and ceilings where exposed to view in occupied areas. Also, provide escutcheons within custom or factory-fabricated cabinet enclosures.
- C. At exposed finished walls: chrome plated.

### 2.5 MISCELLANEOUS MATERIALS

- A. Cement: ASTM C-150.
- B. Sand, Stone and Gravel for Concrete: ASTM C-33.
- C. Sand for Mortar and Grout: ASTM C-144.
- D. Reinforcing Rods: ASTM A-615.
- E. Reinforcing Wire mesh: ASTM A-185.

**PART 3 EXECUTION****3.1 INSTALLATION OF PIPING****A. General:**

1. Install in neat and workmanlike manner parallel to walls, column center lines but sloped to drain. Work of each trade shall be fully coordinated to provide the design systems without interference between systems. Piping shall be accurately cut, reamed and threaded with sharp dies. Install copper piping in accordance with best practices requiring accurately cut clean joints and soldered in accordance with the recommended practices for the materials and solder employed.
2. Piping shall be installed so as not to interfere with diffusers and electrical lighting outlets which must be accurately centered and located. Special attention shall be given to piping above ceilings, which must be kept a sufficient distance from the lighting outlets to permit later installation of the lighting fixtures and their reflectors fixtures, piping and equipment.
3. Arrange and install piping as indicated, straight, plumb and as direct as possible, form right angles on parallel lines with building walls. Keep pipe close to walls, partitions and ceilings, offset only where necessary to follow walls, as directed.
4. Locate groups of pipes parallel to each other and space them at a distance to permit access for servicing valves. Risers shall not have couplings in runs from one floor outlet to the next.
5. The installation of copper tubing shall be accomplished in such a way as to not touch or come in contact in any way with ferrous metals. Where copper tubing piping or fittings may come in contact with ferrous metal anchors, supports or construction, an insulating non-conductor spacer, similar to lead, rubber or an approved equal, shall be installed to assure prevention of electrolysis.
6. Piping size change shall be accomplished by reducing ell, reducing tee. Eccentric reduction shall be applied in all piping requiring continuous drainage such as steam, condensate and blowdown piping. Concentric increasers shall be used where flow is in direction of increased size. Provide eccentric reduction, top flat, at pump suction reductions.
7. Gaskets and bolting shall be applied in accordance with the recommendations of the gasket manufacturer and bolting standards of the Code for Pressure Piping (ANSI B31.1.0-1967 par. 108, 135). Strains shall be evenly applied without overstress of bolts.
8. Screw threads (ANSI B31.1.0 par. 135.4) shall be made up with piping compound or other sealing method approved to assure tight joints without overrun of thread into fittings. Compounds shall be approved for service application.

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9. Threaded pipe shall be carefully cut, reamed or filed out to size of bore removing all chips, worked into place without springing. Provide Teflon tape on the male thread only. Threaded joints when tight shall not expose more than two full threads.
10. Copper tubing shall be carefully cut, reamed or filed out to size of bore and worked into place without springing.
11. Dielectric couplings or brass adapters suitable for dielectric service shall be provided at pipe connections between steel or cast iron piping and copper piping.

**B. Expansion Requirements:**

1. All piping shall be installed throughout the project with due regard for expansion to prevent damage to the building, equipment and piping. Provide anchors, loops or approved type expansion joints where indicated or required for the accurate control of movement.
2. Branch connections to mains for risers shall be made with minimum of three 90 degree elbows.
3. Bullhead connections in any piping service are expressly prohibited.
4. Expansion pipe loops shall be supplemented with adequate guides as close to loops as possible to preserve alignment and pitch.
5. Securely support pipe anchors, constructed of steel angles and channels, required to keep pipe movement within area of expansion provision. Submit anchor details for approval before installation.
6. Provide adequate expansion allowance for service temperatures and piping materials.
7. When installing piping with loop or bend expansion, subject piping to cold spring, which will take care of about half of total expansion between hot and cold conditions. Make riser offsets in manner to avoid pocket forming due to expansion. Submit anchor details for approval before installation.

**C. Concealed Piping:**

1. Where so indicated or specified, piping shall be concealed in building construction. Install such piping in time so as not to cause delay to work of other trades, and allow ample time for tests and approval, do not cover before approval is obtained. Wherever possible, run branches passing through floor into partitions, offset above floor close to equipment and expose only as much as necessary for final connection.
2. Where furred spaces are indicated, keep pipes as close to structural members as possible so as to acquire minimum furring. In case of furred beams, obtain approval of resulting headroom clearance before installing pipes. This Contractor is cautioned to



check clearances on General Construction Drawings.

### 3.2 SLEEVES

- A. Provide sleeves for all pipes passing through floors, walls or partitions, hung or furred ceilings, etc. (of sufficient diameter to accommodate pipe covering where such is required). Set sleeves for concrete floors, walls and other masonry work in place before the floors or walls are poured or built and located and secured in place so that space all around the pipes, after the pipes are installed in place, are about equal.
- B. Protect pipes passing through floors with membrane waterproofing and roofs with Schedule 40 pipe extensions (not sheet metal) and provide "Zurn Z-197" or Josam 1880" with cast iron integral flashing flange and clamping ring waterproof type pipe sleeves. For membraned floors, fill void between sleeve and pipe with mineral wool and then seal the top with mastic to prevent sound transmission. Sleeves for Penetrations of the Metal Deck (where applicable): Nail, Cut or drill the metal deck after the deck is poured. Set sleeves in such a manner so that no concrete fills their interior during the concrete pouring and screening operations.
- C. Provide sleeves with an inside diameter at least 1/2" greater than outside of pipe served, including pipe insulation which must be continuous through sleeve.
- D. Use LINK-SEAL only for pipes and sleeves in exterior walls, foundation walls and pits. Where piping penetrates walls (other than foundation walls), partitions, floor slabs, etc., pack space between piping and sleeve with mineral wool.
- E. Do not support pipes by resting clamps on sleeves. Clamps must extend beyond sleeve and be supported outboard of sleeve in an approved manner.
- F. Provide escutcheon plates of the proper size for all piping in sleeves passing through walls, furrings, partitions, hung ceilings, etc. throughout the building where exposed to public and/or tenant view. All exposed escutcheons of cast brass, bell type, with set screws and chromium plated and of sufficient diameter to include any required pipe insulation.
- G. Provide counterflashing for all piping passing through waterproof wall or roof construction consisting of steel rainhood welded all around to pipe and overlapping flashing.
- H. Where space for future pipe and conduits is required, provide sleeves and fill with lightweight concrete.
- I. Firestopping and grouting around pipes and ducts through concrete slabs and walls, and masonry walls with Portland cement grout in the sleeved opening extending full depth through wall or floor slab, with sheet metal over the insulation before grouting in. Around pipes and ducts through drywall construction wrap mineral rope and finish with sheet metal collar on ducts and escutcheons on pipe. Attach escutcheons to wall, not pipe. Use at all fire-rated walls and floors.

3.3 INSTALLATION NOTES FOR INTERIOR PIPING SYSTEMS

- A. It is the intent that each part of the plumbing systems shall be complete in all details and all lines provided with all control valves as indicated on Drawings, or as may be required for the proper control of the pipe lines under this Section so that any fixture, line or piece of apparatus may be removed for repair without interference or interruption of the service to the rest of the building.
- B. The size of water piping shall be as determined by the local rules and regulations for plumbing and drainage, except where specifically noted to be larger by the Specifications or plans; and all fixed rules of installation as set forth in the Rules and Regulations shall be followed as part of the Specifications.
- C. The Contractor shall examine carefully the engineering plans and details and familiarize himself with all conditions relative to the installation of piping, particularly where same is concealed behind furring or in hung ceilings.
- D. In no case shall the Contractor permit his pipes to be exposed beyond finished plaster lines unless specifically shown on Drawings. He shall consult with the other trades in the building and install his piping in such a way as to least interfere with the installation of other trades.
- E. No piping or work shall be concealed or insulated until all required tests have been satisfactorily completed and work has been approved by the Commissioner and all other authorities having jurisdiction.

END OF PAGE

SECTION 221100

FACILITY WATER DISTRIBUTION

**PART 1 GENERAL**

**1.1 GENERAL REQUIREMENTS**

- A. Work of this specification as shown or specified should be in accordance with the requirements of the Contract Documents.

**1.2 WORK INCLUDED**

- A. Work of this Section includes all labor, materials, equipment and services necessary to provide Water Supply Systems as shown on the drawings and as specified herein including:
  - 1. Domestic Cold Water Piping.

**1.3 RELATED WORK**

- A. ITEM 108 Plumbing Piping and Fittings
- B. Hangers and Supports
- C. Plumbing Fixtures
- D. Insulation
- E. Plumbing Equipment, Specialties and Accessories
- F. Motors and Controllers
- G. Testing

**1.4 QUALITY ASSURANCE**

- A. A.N.S.I. - American National Standards Institute
- B. Building Code of the city of New York.
- C. American National Standards Institute: ANSI A112.1.2 - Air Gaps in Plumbing System.
- D. American Society of Sanitary Engineering: ASSE 100 - Pipe Applied Vacuum Breakers; ASSE 1010 - Water Hammer Arrestors.
- F. A.S.H.R.A.E. 90-75

**1.5 SUBMITTALS**

- A. Shop Drawings
  - 1. Pipe and fittings.
  - 2. Valves.
  - 3. Hose bibbs.
  - 4. Backflow prevention devices.

**PART 2 PRODUCTS****2.1 BASE BID MANUFACTURERS**

- A. Backflow Preventors:
  - 1. Wilkins
  - 2. Watts.
  - 3. Ames
- B. Hose Bibbs and Wall Hydrants:
  - 1. JR Smith
  - 2. ZURN
  - 3. Speakman

**2.2 PIPING**

- A. Materials: See Section 2.1 of 221000

**2.3 HOSE BIBBS**

- A. 1/2" chrome-plated angle valve with integral stop, renewable seat, composition washer, metal handle, vacuum breaker and 3/4" hose thread and wall flange on concealed piping, as manufactured by Speakman No. 5911 or approved equal.

**2.4 REDUCED PRESSURE ZONE ASSEMBLY BACKFLOW PREVENTER ASSEMBLY**

- A. UL listed for sized 1" and larger. AWWA compliant.
- B. Bronze body for 3/4" and 1" size.
- C. Two brass independently operated internally spring loaded check valves, two gate valves and four test cocks for field testing. Check valves must be loaded to withstand 1 psi in direction of flow and must have soft rubber discs to assure positive closure. All internal parts must be readily accessible for maintenance without moving device from line, must be installed in a horizontal position and be accessible for periodic testing.
- D. Wilkins 975XL , Watts series 007 or Ames series 4000B

## PART 3 EXECUTION

### 3.1 INSTALLATION

#### A. Piping

##### 1. Free of traps

- a. Grade for complete control and drainage of system.

#### B. Prevention of Water Contamination

##### 1. Water supply connections to plumbing fixtures and equipment.

- a. Provide over-rim water supplies whenever possible.
- b. Provide following with approved vacuum breakers and/or check valves or backflow preventors as noted or required.
  1. Necessary below-rim connections.
  2. Hose connections.
  3. Connections or outlets for HVAC piping systems.

- c. Approved air gaps on water piping where noted or required by local authorities.

##### 2. Equipment supplied under other sections of work and/or by Owner, and having below-rim water supply connections, may not arrive on job in Code-approved condition.

- a. Provide missing vacuum breakers and/or check valves, or relocate same to Code approved positions.

#### C. Connections to Equipment

1. Flanges, unions or threaded adapters.

#### D. Branch Water Connections

1. Provide three elbow swing connections for all water lines connecting to mains, sub-mains or branch mains.

#### E. Terminate plugged or capped connections in threaded plug or threaded nipple and cap as required, except as otherwise noted.

#### F. Brass or Copper Piping connecting to Galvanized Piping.

1. Provide dielectric fittings, or flanges.

#### G. Provide drain valves at all low points in systems.

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SECTION 223000

PLUMBING EQUIPMENT, SPECIALTIES & ACCESSORIES

**PART 1 GENERAL**

**1.1 GENERAL REQUIREMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

**1.2 WORK INCLUDED**

- A. Work of this Section includes all labor, materials, equipment and services necessary to provide Equipment, Specialties and Accessories as shown on the drawings and as specified herein.

**1.3 RELATED WORK**

- A. General-Duty Valves for Plumbing Piping
- B. Plumbing Piping and Fittings
- C. Temporary Facilities and Controls

**1.4 QUALITY ASSURANCE**

- A. A.N.S.I. - American National Standards Institute
- B. A.W.W.A.- American Water Works Association
- C. F.S. - Federal Specifications
- D. U.L. - Underwriters Laboratory

**1.5 SUBMITTALS**

- A. Shop Drawings:
  - 1. Plumbing Equipment.

2. Plumbing Specialties.
3. Plumbing Accessories.

## PART 2 PRODUCTS

### 2.1 ESCUTCHEONS

- A. This Contractor shall provide escutcheons on all exposed pipe wherever they pass through floors, ceilings, walls or partitions.
- B. Escutcheons for pipes passing through outside walls and floor shall be Ritter Pattern and Casting Co., or approved equal, No. 1 solid, cast brass, flat type secured to pipe with set screws.
- C. Escutcheons for pipes passing through interior walls, partitions, and ceilings shall be Ritter Pattern and Casting Co., or approved equal, No. 1, solid, cast brass chromium plated type, secured to pipe with set screws.
- D. Escutcheons for pipes in unfinished areas shall be cast iron, secured with set screws.

### 2.2 DISSIMILAR METALS

- A. Connections between pipe, fittings, hangers and equipment of dissimilar metals shall be avoided.
- B. Dielectric unions or insulated couplings shall be installed between copper or brass piping material and steel piping material or steel tanks. Unions or insulated couplings shall be used for pipe sizes 2" and smaller, and dielectrically gasketed flanges and sleeves for pipes 2-1/2" and larger.
- C. Pipes, fittings, hangers, etc., of dissimilar metals shall be insulated against direct contact one with the other, by using a high quality or grade of dielectric insulating material EPCO or approved equal.

### 2.3 UNIONS

- A. Where required: on inlet and outlet of all apparatus and equipment having connections 2" and smaller. Where valves are adjacent to equipment, unions shall be on downstream side of valves.
- B. Type
  1. Copper tubing: Ground joint, cast iron, 150 lb. WOG pattern.
  2. Gaskets shall be 1/16" thick similar to Garlock, Cranite or FelPro factory cut, one Piece or approved equal.



2.4 FIXED AIR GAPS

- A. Provide where indicated on the Drawings and required by Code a fixed air gap to prevent contamination due to back flow in the stationary drain line. Air gap shall be JR Smith No. 3951 or approved equal to suit piping installation. Finish shall match connection.

2.5 HEAT TRACING

- A. UL listed, self-regulating, 208V single phase.
- B. Raychem XL-Trace 5XL2-CR with required accessories.
- C. 16 AWG copper bus, 5 Watts per foot.
- D. For water piping subject to freezing

PART 3 EXECUTION

Not Used.

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SECTION 260500

COMMON WORK RESULTS FOR ELECTRICAL

**PART 1.00 – GENERAL**

**1.01 GENERAL REQUIREMENTS**

- A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

**1.02 WORK INCLUDED**

- A. Work of this Section includes all labor, materials, equipment, hoisting and rigging, scaffolding and services necessary to complete the Electrical Work as shown on the drawings and specified herein, including, but not limited to, the following:
  - 1. Equipment supports and miscellaneous steel for electrical equipment including seismic restraints per applicable code.
  - 2. Lighting fixtures, lamps, convenience outlet systems, and miscellaneous wiring devices.
  - 3. Miscellaneous electrical equipment and systems, unless otherwise noted.
  - 4. Telephone and miscellaneous empty conduit systems.
  - 5. Sealing of sleeves and other electrical openings.
  - 6. Emergency Lighting Central Inverter.
  - 7. Access doors in general construction.
  - 8. All necessary permits, certificates agency approvals and related fees.
  - 9. Special Inspections for all work installed by this contractor per New York City Building Code and Section 101-06 of the Rules of the City of New York.

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**1.03 NOTICE TO BIDDERS**

- A. The specifications and drawings are intended to serve jointly as a basis upon which the Contractor shall submit a contract price for the material and labor provisions.
- B. When conflicts occur in the specifications or on the drawings or between either, provide the item of greater quantity or higher cost.
- C. Provide all items of labor or materials not specifically indicated, but required to complete the intended installations.
- D. Coordinate all work to that of other trades in order that conflicts in space locations do not occur.
- E. Perform the work under this contract simultaneously with the Work of other trades, so as not to delay the overall progress of Work.
- F. This contractor shall be responsible for his work until completion and final acceptance and shall replace any of same which may be damaged, lost or stolen, without additional cost to City of New York.

**1.04 CONTRACTOR'S RESPONSIBILITY**

- A. Contract drawings for Electrical work are in part diagrammatic, intended to convey the scope of work and indicate general run of conduit and approximate location of outlets. Electrical trades shall follow these drawings in layout of their work, consult general construction, structural and mechanical drawings to familiarize themselves with all conditions affecting their work, and shall verify spaces in which their work will be installed.
- B. The Contractor shall be responsible for establishing grades and elevations, checking of all interferences, and shall verify all dimensions and locations in the field prior to the start of any work and/or installation of equipment, conduits and fixtures. The contractor shall, at his expense, perform all minor rerouting of conduit around obstructions from new or existing construction whether or not such conditions are indicated on the plans.

Minor rerouting of conduit and wiring is defined as any rerouting which requires less than 10 linear feet of additional conduit and wire (measured along the centerline) over and above that shown on the drawings in order to avoid an obstruction. Such rerouting shall be performed with conduit and wire of a size equal to that shown in the original routing. Whenever an obstruction requires more than a minor rerouting as defined above, the Contractor shall report the condition to the Commissioner prior to the start of work on the affected system. The Contractor shall be responsible for his neglect in checking all elevations, clearances, dimensions and locations of piping equipment and ductwork systems prior to the start of the work. Contractor shall be responsible for all remedial

work, as directed by The Commissioner, associated with the Contractors failure to check items described above prior to commencement of his work.

- C. The Contractor shall verify with the Commissioner, before bidding any item, system, or equipment arrangement which may be incomplete, incorrect or indefinite. After contract is let, the Commissioner's decision shall be final.
- D. All trades shall cooperate and confer with each other as to locations of their materials and equipment before erecting work, so as to avoid interference as much as possible, and in such a manner that will in no way retard progress of construction. In instances where interferences develop, the Contractor shall relocate the work as required by the Commissioner, regardless of which work was installed first.
- E. Additional and supplemental drawings may, from time to time, be furnished and the same when made are to constitute part of the original contract. These drawings will be made to clarify the contract drawings and will not depart materially therefrom.
- F. The Commissioner specifically reserves the right, up to the time of rouging, to exactly define the position of the equipment to be installed and connected to and arrangement of these connections.
- G. Special attention is called to the contract drawings and specifications involving general construction, mechanical work and details thereon. Bidders are notified to carefully scrutinize these documents for the details affecting the performance of the electrical trade.

1.05 DEFINITIONS

- A. The following definitions of terms and expressions used in this Section are in addition to listing given in General Conditions:
  - 1. "Provide" shall mean "furnish and install" unless otherwise indicated.
  - 2. "Herein" shall mean the contents of a particular section where this term appears.
  - 3. "Indicated" shall mean "indicated on contract drawings".
  - 4. "Scheduled" shall mean "as scheduled on contract drawings".
  - 5. "Concealed", where used in connection with conduit and wiring and accessories, shall mean that they are hidden from sight, as in trenches, chases, furred spaces, pipe shafts or hung ceilings.
  - 6. "Exposed", where used in conjunction with conduit and wiring and accessories, shall mean that they are not "concealed" as defined herein above.

7. "Conduit" or "wiring" includes, in addition to conduit and wire also fittings, outlet boxes, pull boxes, hangers, and other accessories which comprise a system.
8. "Singular Number": In all cases where a device or part of the equipment or system is herein referred to in the singular number (such as lighting fixture, fire alarm pull station, etc.), it is intended that such reference shall apply to as many such items as are required to complete the installation.
9. "Remove" shall mean "remove from site" unless otherwise noted.

1.06 SITE INSPECTION

- A. All bidders on this work shall visit the job site and become thoroughly familiar with the conditions under which the work will be performed. The submission of a proposal shall be construed as evidence that the bidder has visited the site and has knowledge of site conditions. Any later claim for extra payment because of difficulties encountered will not be allowed.

1.07 CARE OF WORK AND SAFEGUARDS

- A. Contractor shall protect the work from damage by any cause until it is completed and accepted by the City of New York.
- B. The Contractor shall protect from damage any underground service or structure exposed by the execution of this work.
- C. Any damaged property resulting from work performed either by this Contractor, his subcontractors, or anyone in his employ shall be repaired and restored to its original state at no cost to the City of New York.

1.08 SCHEDULE OF WORK

- A. Schedule all work to conform to the job progress schedule as submitted to and approved by the Commissioner.

1.09 SUBMITTALS

- A. Approval shall be obtained for all equipment and material before delivery to the job site. Delivery, storage or installation of equipment or material which has not had prior approval will not be permitted at the job site.
- B. All submittals shall include adequate descriptive literature, catalog cuts, shop drawings, operation, maintenance manuals and instructions and other data necessary to ascertain that the proposed equipment and materials comply with specification requirements. Catalog cuts submitted for approval shall legible and shall clearly identify equipment being submitted.

- C. A minimum period of ten (10) working days, exclusive of transmittal time, will be required in the Commissioner's office each time a shop drawing, product data and/or samples is submitted for review. This time period must be considered by the Contractor when scheduling his work.
- D. Submittals for individual systems and equipment assemblies which consist of more than one item or component shall be made for the system or assembly as a whole. Partial submittals will not be considered for approval.
- E. Submittals shall be marked to show specification reference, including the section and paragraph numbers.
- F. Submit each section separately and include the following:
  - 1. Information which conforms to contract requirements. Include the manufacture's name, model or catalog numbers, catalog information, technical data sheets, shop drawings, pictures, nameplate data and test reports as required.
  - 2. Submittals on all systems shall be complete with sequence of operation indicating intended function and applicable capacities, sizes, ratings, etc. indicating compliance with design.
  - 3. Submittals on all equipment shall be complete with all power and control wiring diagrams.
  - 4. Name, manufacturer, catalogue number, and finish of the following devices and appurtenances shall be submitted in list form for approval, unless otherwise directed.
    - a. Cover Plates.
    - b. Each Receptacle Type.
    - c. Each Switch Type.
    - d. Each Special Outlet Type.
    - e. Conduit and Fittings Indicating Application.
    - f. Each Outlet Boxes Type Indicating Application.
    - g. Each Wire and Cable Type Indicating Application.
    - h. Grounding System Hardware.
    - i. Each Lamp Type Indicating Application.

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- G. Submit as directed for items called for in specifications; samples of the materials which the manufacturer will actually ship. Materials shall be submitted for approval after award of contract and be properly labeled or identified.

#### 1.10 SHOP DRAWINGS

- A. Submit shop drawings to A/E for review in accordance with the requirements of the contract documents, and as specified in other sections of this specification.
- B. Electrical Contractor shall prepare shop drawing to indicate routing for all feeders, branch circuits, control conduits, empty conduit systems, and location of all required access panels.
- C. When any shop drawings, have not been approved by the A/E, the Contractor shall revise and resubmit shop drawings as required until the submission is approved by the A/E at no additional cost to City of New York.

#### 1.11 OPERATION, MAINTENANCE MANUALS AND INSTRUCTIONS

- A. Furnish to the Commissioner for each item listed below five (5) bound and indexed copies of the final approved installation, operations and maintenance manuals.
1. Central Inverter System.
- B. Manual Contents:
1. The manual shall provide comprehensive detailed information on the approved installation, operation and use, troubleshooting, parts list, together with the source of replacement parts and service for the items of equipment and the systems covered, devices and systems.
  2. Where items of equipment or systems work in conjunction with one another, the interconnections shall be shown on a single sheet, folded out if necessary. A schematic wiring diagram and a description of operation shall be included.
- C. At the completion of work, the Contractor shall instruct the employees who will have charge of the equipment in the care, adjustment and operation of each piece of equipment. Instruction shall be by competent representatives of the manufacturers involved with adequate time allowed for complete coverage of all owning and operating procedures.
- D. In addition, the Contract shall leave with such employees printed instructions covering the operation and required maintenance of each particular piece of equipment. Instructions shall be bound and titled and submitted to the Commissioner for approval. Submit five (5) sets.



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**1.13 CODES AND STANDARDS**

- A. Work performed under this Contract shall conform to all applicable laws, ordinances, regulations, codes (state, local and federal), and shall be subject to control of public authorities having jurisdiction.
- B. Wherever requirements of such laws, codes, regulations differ from the drawings or specifications, they shall take precedence over the drawings or specifications, and are expressly made part of the contract, except where the drawings or specifications are more stringent or require better materials, which would also be acceptable to authorities (i.e., the more stringent code shall always apply).
- C. Any portion of work which is not subject to the approval of an authority having jurisdiction shall be provided in accordance with National Fire Protection Association requirements.
- D. Comply with applicable utility company rules and regulations.
- E. Comply with Occupational Safety and Health Act (OSHA) requirements.
- F. All equipment shall be equal to or exceed the minimum requirements of N.E.M.A, I.E.E.E. and Underwriters Laboratories.
- G. The electrical installation shall be in compliance with the requirements of New York City Electrical Code.
- H. Seismic Restraints shall be provided per 2008 New York City Building Code.

**1.15 GUARANTEE**

- A. In addition to the requirements stated in the specifications, the Contractor must guarantee all equipment, materials and appurtenances installed by him to be free from all defects. Upon written notice from the Commissioner, the Contractor shall promptly correct all defects without additional cost to the City of New York. The Contractor shall adjust each part of the entire installation for proper working order.

Reports are to be submitted to the Commissioner and adjustments repeated until the entire system is satisfactory. The Contractor must make good, at his own expense, any defects in materials or workmanship that may appear. The guarantee period shall be for one (1) year after final inspection and acceptance of the project.

1.17 SEISMIC RESTRAINTS

- A. Design and provide restraints per applicable code for all equipment installed by this contractor. Submit calculations and details to the Commissioner and code enforcement authority for approval.

PART 2.00 – PRODUCTS

2.01 QUALITY OF MATERIALS AND SUBSTITUTIONS

- A. Where a specific model and manufacturer of equipment is specified, the contractor shall provide what is specified without substitution. Where specified as "or approved equal", the contractor may substitute equipment except that the burden is upon the Bidder to prove such equality. If the Bidder elects to prove such equality, he must request the City of New York's and The Commissioner's approval in writing to substitute such item for the specified item, stating the cost difference involved with supporting data, and samples, if required, to permit a fair evaluation of the proposed substitute with respect to quality, serviceability, warranty and cost. A submittal for a proposed substitution must include comparative data of all performance criteria contained in manufacturers data, the specifications, schedules and drawings and delineate all differences between the proposed substitution and the specified equipment in terms of space requirements, access requirements, supports, connections, power wiring, controls, and all other differences which may require changes to other work, or performance.
- B. Substituted equipment, where permitted, must conform to space requirements (including required access space). Any substituted equipment that cannot meet space requirements shall be replaced at the Contractor's expense. Any modification of related systems (piping, ductwork, architectural, structural, electrical, plumbing, fire protection, etc.) or additional cost that result from substituted equipment shall be borne by this Contractor.
1. In addition, for substitutions of emergency lighting fixtures or emergency ballasts, this Contractor shall prepare and provide for approval prior to purchase of equipment a computer generated point by point, footcandle printout for egress paths, on a 1 foot by 1 foot grid, starting at the edge of the egress path. Additional points shall be calculated to provide points one foot on center on all edges of the egress path, including the identified "minimum point". In addition, provide maximum footcandle point within the egress path and the maximum to minimum ratio, along with the average footcandle level 18" AFF. Printout shall include complete documentation on basis of calculations.

2.02 PRODUCT HANDLING

- A. In addition to the requirements of the General Conditions, the contractor shall be responsible for the following:

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1. Responsibility for care and protection of Electrical work rests with the contractor until it has been tested and accepted.
  2. After delivery, before, during and after installation, protect equipment and materials against theft, injury and damage from all causes.
  3. Protect equipment outlets and pipe openings with caps.
  4. At the completion of the work, clean and polish fixtures, equipment, and materials.
- B. The contractor shall receive, properly house, handle, hoist, deliver to proper location, equipment and other materials required for the contract. Save materials in a manner which will protect them from damage, weather, and entry of debris.
- C. In the event of damage, immediately make all repairs and replacements necessary for the approval of the Commissioner and at no additional cost to the City of New York.

## 2.03 MATERIALS

### A. Design:

1. Unless otherwise specified, equipment or material of same type of classification, used for the same purpose, shall be products of the same manufacturer. All material shall be new and of the latest design of manufacturer providing equipment or materials. All materials are to be free of defects and corrosion.
2. Equipment and accessories not specifically described or identified by manufacturer's catalog numbers shall be designed in conformity with NEMA, IEEE, or other applicable technical standards, suitable for maximum working voltage, current and available short circuit current and shall have neat and finished appearance.
3. **NOMINAL VOLTAGES (UNLESS OTHERWISE NOTED)**
  - a. Convenience outlets: 120 volt, single phase, 2-wire.
  - b. Lighting: 120 volt single phase, 2-wire.
  - c. Motors smaller than ½ horsepower: 120 volt, single phase.
  - d. Provide equipment of sufficient poles and voltage rating to correctly function at the above voltage.
4. **WIRE TERMINATIONS**
  - a. All terminations shall be U.L. approved for use with minimum 75°C wire.

2.04 FIRE STOP PROTECTION

- A. Provide systems or devices listed in the U.L. Fire Resistance directory under categories XHCR (firestop devices) and XHEZ (firestop systems) as applicable, providing they conform to the construction type, penetrant type, annular space requirements and fire rating involved in each separate instance, and that the system is symmetrical for wall applications. Materials must be asbestos-free.
- B. Provide fire stop protection for penetrations to all fire rated construction.

PART 3.00 - EXECUTION

3.01 SUPERVISION

- A. All work shall be performed by competent mechanics under supervision of an experienced supervisor. The Contractor shall, upon initiation of construction, keep a suitable force of men (including supervisory personnel) on the site at all times in order to place all sleeves, inserts, outlet boxes and fixtures, and all other openings as are required for the satisfactory installation of equipment.

3.02 COORDINATION

- A. Contractor's attention is directed to scheduling of construction and time limitations for each phase of the work. Work shall be coordinated to permit proper setting of the work of other trades.
- B. Where conduit work and electrical equipment are in place prior to completion of adjacent concrete and masonry work, they must be protected against damage and displacement until construction is completed.
- C. Provide all anchor bolts, sleeves, inserts and supports for the required Work.
- D. Adjust locations of pipes, ducts, electrical raceways, switches, panels, equipment, fixtures, etc., to accommodate the Work and to prevent interferences anticipated and encountered. Determine the exact route and location of each pipe, duct and electrical raceway prior to fabrication.
- E. Lines which pitch shall have the right-of-way over those which do not pitch. For example: Plumbing drains normally have the right-of-way. Lines whose elevations cannot be changed shall have the right-of-way over lines whose elevations can be changed.
- F. Make offsets, transitions and changes in direction in pipes, ducts, and electrical raceways as required to maintain proper headroom and ceiling heights as shown on architectural drawings and pitch of sloping lines whether or not indicated on the Drawings.

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- G. Install all Work to permit removal (without damage to other parts) of all parts requiring periodic maintenance or replacement. Arrange pipes, ducts, raceways, to clear the openings of swinging doors and of access panels.
- H. Where Work is to be installed in close proximity to Work of other Contractors, and there is evidence that the Work will interfere with Work of other Contractors, assist in working out space conditions to make a satisfactory adjustment.
- I. Equipment installed by the electrical trade shall be installed in accordance with the requirements of approved manufacturers submittals or shop drawings. This Contractor shall carefully review approved shop drawings of all equipment to be installed by him to ascertain particular requirements. Any equipment or work installed which is not in accordance with the manufacturers shop drawings or installation instructions will be removed, replaced and installation corrected by this Contractor to comply with the manufacturers shop drawings at no additional cost.
- J. The locations of lighting fixtures, outlets, panels and other equipment indicated on the wiring plans are approximately correct, they are understood to be subject to such revision as may be found necessary or desirable at the time the work is installed in order to meet field conditions or to coordinate with modular requirements of ceilings, or to simplify the work, or for other legitimate causes.
- K. The drawings show only the general run of conduits and approximate location of outlets. Any significant changes in location of outlets, cabinets, etc., necessary in order to meet field conditions shall be brought to the immediate attention of the Commissioner and receive his approval before such alterations are made.
- L. Obtain from the Commissioner in the field the location of such outlets or equipment not definitely located on the drawings.
- M. Circuit "tags" in the form of arrows are used where shown to indicate the home runs of conduit to electrical distribution panels and switchboards. These tags show the circuits in each home run and the panel distribution. Show the actual circuit numbers on the finished record tracing and on panel directory card. Where circuiting is not indicated, contractor shall provide required circuiting in accordance with the loading indicated on the drawings.
- N. The drawings generally do not indicate the exact number of wires in each conduit for the branch circuit wiring of fixtures and outlets or the actual circuiting. Conduit runs shall contain quantity of circuits as shown on plans. Combining circuits or wiring to effect a reduction in conduit home runs to panel will not be permitted. Provide the correct wire size and quantity as required by the indicated circuiting and/or circuit numbers indicated and control wiring diagrams, if any, specified voltage drop or maximum distance limitations, and the applicable requirements of the New York City Electrical Code.
- O. These specifications are basically equipment and performance specifications. Actual installations shall be as shown on the drawings.

3.03 CUTTING AND PATCHING

- A. All cutting and patching associated with the installation of the Electrical work is the responsibility of this contractor.
- B. No cutting of bearing walls, beams, etc. shall be done without the approval of the Commissioner. All materials, patching and finishing, etc. shall match the surroundings. All cutting and patching shall be done by workmen skilled in the trades and in the employ of the Contractor for the project. All cutting shall be done with saw-type edges to give a neat and workmanlike appearance. All pipe and sleeve holes shall be core drilled unless specified otherwise.
- C. The work shall be carefully laid out in advance. Where cutting, channeling, chasing or drilling of floors, walls, partitions, ceilings or other surfaces is necessary for the proper installation, support or anchorage of raceway, outlet or other electrical equipment, the work shall be carefully done. Any damage to the building, piping, equipment or defaced finish plaster, woodwork or metalwork shall be repaired by skilled mechanics of the trades involved at no additional cost.

3.04 TEMPORARY OPENINGS

- A. Temporary openings not indicated which may be required or purpose of bringing equipment into building shall be as approved. The contractor will perform work of providing and maintaining openings and of restoring structure, as required to facilitate installation of equipment within building at locations indicated.
- B. Holes provided in General Construction work to permit installation of lines for temporary Electrical services will, after removal of such lines, be patched as specified.

3.05 CLEAN-UP

- A. The Contractor shall be held responsible for the general clean-up of all areas affected by the work in the Contract. All rubbish and accumulative material shall be removed from the premises and the premises left "broom clean" upon completion.

3.06 CLEARANCES FOR ELECTRICAL EQUIPMENT

- A. No electrical equipment, panels, switchboards, disconnect switches, splice boxes, starters, etc., shall be installed where less than required working space clearances, as defined by applicable National or Local Electrical Code, can be maintained. Bring such conditions to attention of The Commissioner immediately. Equipment found to be installed with less than required clearances shall be relocated as directed by The Commissioner at no additional cost.

3.07 TESTING, ADJUSTING AND BALANCING LOADS

- A. Make all required adjustments to electrical systems until all specified performances are met. Contractors shall furnish necessary labor to test for conformance to specifications. Include manufacturers representative. Test shall be witnessed by The Commissioner and City of New Yorks representative. The following system shall be tested for conformance to specifications:
  - 1. Central Inverter System.
- B. Phase legs of all existing and/or new panels shall be balanced at supply point. Any panel with unbalanced loads shall have its circuits rearranged as required to balance phase legs.

**3.08 ACCEPTANCE TESTING**

- A. This contractor shall provide all Acceptance Tests required by applicable codes including the following:
  - 1. Emergency Power System per New York City Electrical Code Section 700.4.
  - 2. Public Assembly Emergency Lighting per New York City Building Code 28-116.2.2.
- B. Contractor shall include the following as applicable for all required Acceptance Testing:
  - 1. Notification of appropriate City Agencies when tests are to be witnessed by either the Department of Buildings or the New York City Fire Department, and coordination of time and date of test with respective agencies.
  - 2. Provide sign-off on contractor's letterhead, signed and sealed certifying system has functioned properly in all required tests.
  - 3. Provide detailed documentation of tests as prescribed by applicable code.
  - 4. Provide labor and material, as required, to demonstrate performance of each system component and compliance with all mandatory tests.

**3.09 EQUIPMENT SUPPORTS AND HOUSEKEEPING PADS**

- A. Where supports, for equipment are indicated or specified in electrical work sections, perform as follows:
  - 1. Provide structural supports for the proper attachment of electrical equipment supplied and also for equipment, such as motor controllers, supplied by others, for mounting, connection, and installation under this Division.

2. Mount wall-mounted equipment directly to wall by means of steel bolts. Maintain at least 1/2" air space between equipment and supporting wall. Mount groups or arrays of equipment on adequately sized steel channels, such as those manufactured by Kindorf and Unistrut.
3. Support equipment suspended from ceiling by adjustable threaded steel rods of adequate diameter and strength anchored to the floor arch or the structural steel. Support auxiliary steel, if required, from the building steel. Do not secure hangers to furred ceilings, ductwork, or other piping.
4. Secure equipment and steel to solid masonry by means of screw and bolt anchors and expansion bolts. On structural steel use clamps that do not depend primarily on set-screw pressure for security.
5. Do not drill or pierce structural and pre-stressed concrete members without prior approval.
6. Unless otherwise indicated, where equipment is indicated or specified to be floor mounted on stands or legs, brace and fasten with flanges bolted to floor.

**B. Housekeeping Pads:**

1. Where concrete housekeeping pads are indicated or specified, use concrete mix reinforcement where required.
  - a. Where floor is waterproofed, construct foundation so that anchor bolts will not pierce waterproofing hardener; paint to match finished floor.
  - b. Where pad design is not indicated on the drawings, provide housekeeping pads for all floor-mounted equipment. Pad dimensions, size of foundation bolts, methods of setting, aligning and anchoring of equipment shall be as recommended by manufacturer of equipment and as approval. Make minimum height above finished floor 4" and extend outer edges 2" minimum beyond machinery bedplate. Submit shop drawings for approval.
  - c. For equipment on pad, provide foundation bolts, sleeves, washers, nuts and templates to locate position of bolts. Make sleeves of steel pipe; finish flush with top of rough concrete. For anchorage, make embedded end of bolts hooked, or threaded with nut and square plate.
  - d. Provide 1" thick grouting between machinery base plate and concrete pad; fill completely the space between them. Clean



top of pad; wet if before grouting. Do not remove leveling wedges before grout wedges before grout reaches its final set. Fill voids left by removal of wedges with grout; finish exposed surface to grout to make neat appearance.

### 3.10 SEISMIC REQUIREMENTS

- A. Conduit, cable tray and equipment shall be supported and properly braced in accordance with 2008 New York City Building Code Section 1621.
- B. Seismic plans and calculations shall be prepared and designed by a licensed Professional Engineer with a minimum of three years experience in seismic design.

### 3.11 PAINTING AND FINISHING

- A. Except as specified herein, the finished painting of Electrical Work within the building and on the roof shall be as specified in Architectural.
- B. All Electrical equipment shall have a factory applied prime and finish coat of paint. Galvanized surfaces shall be considered as finished surfaces for equipment rooms and items concealed from view. Plastic products shall be acceptable without a finish coat of paint. All items of equipment marred or rusted, even though factory finished, shall be repainted.
- C. Where conduits, outlet, junction, or pull boxes are mounted on a painted surface, or a surface to be painted, they shall be painted to match the surface. Whenever support channels are cut, the bare metal shall be cold galvanized.

### 3.12 IDENTIFICATION

- A. Furnish a nameplate for each fuse cutout, disconnect switch, relay, bus duct, and equipment enclosure including all panelboards and switchboards. Unless otherwise noted, use aluminum minimum size, 2 ½" x ¾", with black enamel background with etched or engraved upper case letters, enclosed by natural aluminum border, or black and white laminated Acrylic plate with beveled edges and same size and lettering. Inscribe name and number of equipment as shown on the Drawings include feeder size and identify source of power (panel and circuit) and as approved by the Commissioner. Secure to equipment with brass or stainless steel screws. Approved: Seton Nameplate Company, or approved equal.
- B. Tag each conductor passing through a splice or pullbox with a gray, fire retardent rigid polyethylene tag indicating point of origination and termination of the conduit. Use minimum #2 font. Brady or approved equal.
- C. Nameplates for equipment which is part of the emergency system are to be yellow backgrounds with black lettering, permanently affixed with brass or

stainless steel screws to equipment, including all transfer switches, central inverters, and emergency distribution equipment.

3.13 FIRE-STOP PROTECTION

- A. Where conduits, troughs, cable tray, cables, bus duct, etc. pass through fire rated partitions, fire rated walls, ceilings or floors, install a firestop that provides an effective barrier against the spread of fire, smoke and gases. Fire-stop material shall be packed tight, and completely fill clearances between pipe and sleeves. Provide escutcheon plates on both sides of all rated construction in accordance with U.L. listing.
- B. Install through penetration fire stop systems in accordance with manufacturers written installation instructions and published drawings for products and applications. Install in accordance with all requirements of U.L. listing.

3.14 ACCESS PANELS

- A. The Contractor shall furnish access panels for installation by the Contractor for General Construction for concealed junction boxes, pull boxes and other parts requiring accessibility for operation and maintenance. Location of all access panels to be shown on coordinated shop drawings. Location to be approved by The Commissioner prior to installation.

3.15 PREMIUM TIME WORK

- A. The following work shall be performed at night or weekends other than holiday weekends as directed and coordinated with the City of New York:
  - 1. Any work requiring interruption of existing services.
  - 2. Any work which interferes with or interrupts the normal work being performed in spaces or buildings adjacent to the work site.

END OF SECTION

SECTION 260519

BASIC MATERIALS AND METHODS

PART 1.00 - GENERAL

1.01 GENERAL REQUIREMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

1.02 WORK INCLUDED

- A. Work of this Section includes all labor, materials, equipment and services necessary to complete the Electrical Work as shown on the drawings and specified herein, including, but not limited to the following:
  - 1. Provide basic materials and methods.

1.03 RELATED WORK

- A. Finish painting.

1.04 QUALITY ASSURANCE

- A. Manufacturers Instructions:
  - 1. In addition to the requirements of these Specifications, comply with manufacturers instructions and recommendations for all phases of the work.
- B. Except as modified by governing codes and by the Contract Documents, comply with the applicable provisions and recommendations of the following:
  - 1. American National Standards Institute, Institute of Electrical and Electronic Engineers, National Electrical Manufacturers Association and Underwriters' Laboratories, New York City Electrical Code.
  - 2. Electrical Metallic Tubing: Comply with the latest edition of Underwriters' Laboratories Standard UL-797, American National Standards Institute C80.3.
  - 3. Intermediate Metal Conduit: Comply with the latest editions of Underwriters' Laboratory Standard UL-1242 and ANSI C80.6.

4. Rigid Conduit: Comply with the latest edition of Underwriters Laboratories Standard UL-6, and American National Standards Institute C80.1.
5. Conductors: Comply with American Society of Testing Materials and International Power Cable Engineering Associations.
6. Rigid Non-Metallic Conduit: Comply with latest editions of UL-651, and NEMA TC-3.
7. Electrical Wireways: Comply with latest edition of UL-870.
8. Dimmers (Wall Box Type): Comply with latest edition of UL-20.

#### 1.05 SUBMITTALS

- A. Shop Drawings: Submit shop drawings for the following items:
  1. Approved fire stop.
  2. Wire and Cable: Identify for what purpose each type will be used.
  3. Raceways: Catalog Cuts of each type, with proposed use identified.
  4. Switch and Wiring Devices: Sample of each type.

#### 1.06 TESTS

- A. Test all conductors for continuity and proper connection after installation.
- B. Perform standard 500-volt insulation test with "Megger" tester on all wiring AWG #8 and larger installed. Tests are to show insulation resistance in excess of 50 megohms. Replace any conductors failing to meet this test.

### PART 2.00 - PRODUCTS

#### 2.01 RACEWAY SYSTEM

- A. Provide raceway as required for all wiring systems. Provide conduits whose sizes are not noted on the Drawings in accordance with the requirements of the New York City Electrical Code for the quantities and size of wire installed therein, including required ground conductors.
- B. Provide electrical metallic tubing manufactured of steel, galvanized and coated with a chromate coating on the outside and a silicone epoxy-ester lubricant on the inside. Use steel compression gland fittings, as manufactured by O.Z Gedney or approved equal where running exposed within building. Set screw type fittings may be used for concealed work. EMT shall be Allied Tube and Conduit type EMT or approved equal.

Where installed in slab or fill, provide concrete tight fittings. Utilize rigid heavy wall conduit bends and elbows where exiting from slab.

- C. Provide intermediate metal conduit manufactured of hot dipped galvanized steel, all threads shall be galvanized after cutting, and shall have chromate coating on the outside and a silicone epoxy-ester lubricant coating on the inside. Intermediate metal conduit shall be Allied Tube and conduit type IMC, or approved equal.
- D. Provide rigid conduit manufactured of hot-dipped galvanized rigid steel, with chromate coating. All threads shall be galvanized after cutting. Rigid conduit shall be Allied Tube and Conduit type GRC or approved equal.
- E. Flexible Steel Conduit: Maximum length, 6 feet, unless specifically noted elsewhere. Single strip, continuous, flexible, interlocked, double wrapped steel, galvanized inside and outside forming smooth internal wiring channel, as manufactured by National Electric Products, Triangle, Clifton Conduit or approved equal. Flexible metal conduit must contain an equipment bonding jumper wire bonded at each end or an equipment ground conductor, sized as required, except as permitted by code for 20 ampere branch circuits only. Provide connectors with insulated grounding type bushings.
- F. Liquid-Tight Flexible Electrical Conduit.
1. Same as flexible steel conduit except with tough, inert watertight plastic outer jacket, "Seal-Tite" Type U.S. (American Brass Company) "Flexible Seal Type LX", (Columbia Cable and Electric Corporation), "Electric-Flex" (International Metal Hose) or approved equal.
  2. Fittings: Cast malleable iron body and gland nut, cadmium plated with grounding lug cast integrally with gland nuts. Spiral molded nylon or vinyl-sealing ring between gland nut and bushing and nylon-insulated throat, as manufactured by Gedney type 4QL, Appleton, Thomas & Betts or approved equal.
- G. Non-Metallic Conduit: Rigid, heavy wall, Schedule 40, polyvinyl chloride (PVC) plastic conduit, suitable for direct burial and Underwriters' Laboratory listed. Acceptable manufacturers are: Borg Warner, Corlon, Ethyl, Karloy, Triangle or approved equal. Provide offsets and 90° of rigid steel plastic coated or painted (2 coats) conduit. Where exiting slab provide rigid steel plastic coated conduit and extend a minimum of 2 inches above floor or equipment foundation. PVC may be utilized to exterior luminaries. Provide Ground wire in accordance with code requirements in addition to wiring indicated on drawings.
- H. Expansion Fittings: Provide at all building expansion joints or where required to compensate for raceway expansion and contraction. Provide with bonding jumper. Shall be O.Z./Gedney Type AXB, TX, EXE, AXDX or DXX as required, with type BJ, bonding Jumper or approved equal.
- I. Sleeves through fire-rated floors and walls: Conform to New York Electrical Code and New York City Building Codes to prevent fire spread. All floors are fire rated. Refer to Architectural Drawings for fire walls.
- Where approved for use by local authorities utilize O.Z. Gedney CFS series fire seal or approved equal for conduit penetration and CAFS series or approved equal for cable penetrations of fire rated structure up to 3 hour rating. Utilize O.Z. Gedney PTFS series fire seal or approved equal for non-fire rated, power or telephone service heads supplied via

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flexible steel conduit.

- J. Special seals shall be provided where penetrating roof slab. A malleable iron, watertight entrance sealing device, gland sealing assembly shall be pressure type permitting tightening by wrench after concrete has been poured. Unit to be similar to OZ Gedney type FSK, or approved equal. Install copper tubing or brass pipe sleeve through the roof. Solder 20 oz. copper or 6 lb. lead plate to the sleeve and mount on roof membrane waterproofing. Plate shall extend a minimum of 12" all around from the outside of the sleeve. After conduit is installed, fill space between conduit and sleeve with oakum or untarred, unoiled jute and seal the top and bottom to a depth of at least 1-1/2" with "Special Condensed" Duxsealer 4951 or other compound as acceptable to The Commissioner.
- K. A malleable iron watertight entrance sealing device shall be provided where conduits enter exterior walls. Unit shall be gland sealing assembly on inside and outside of wall of pressure type, capable of being tightened with wrench after concrete is poured. Unit OZ Gedney type WSK or approved equal.
- L. Raceway fittings shall be malleable iron and steel galvanized or cadmium plated for steel conduit.
- M. Bushings shall be insulated type made of iron, threaded type with conduit end stop and integrally molded, non-combustible phenolic insulated surfaces rated 150°C. Grounding type bushings shall, in addition, have tin plated copper grounding path. Bushings shall be O.Z. Gedney type HB or approved equal. Grounding type shall be O.Z. Gedney type HBLG or approved equal.
- N. Raceway Supports
  - 1. Support raceways on accepted types of wall brackets, specialty steel clips, or hangers, ceiling trapeze hangers, or malleable iron straps. Plumbers perforated straps are not permitted. Acceptable manufacturer's brackets or hangers are Kindorf, Elcan, Binkley, Multi-Frame, Power-Strut, or Unistrut, or an approved equal. Do not suspend raceways or equipment from other raceways, steam, water, or other piping or ductwork. Provide independent and secure support methods.

## 2.02 OUTLET, JUNCTION AND PULL BOXES

- A. Provide zinc coated or cadmium plated sheet steel outlet boxes not less than 4 inches octagonal or square, unless otherwise noted. Use shallow outlet boxes in columns millwork, mullions, and other areas where structural or physical conditions prohibit use of ordinary outlet boxes. Equip fixture outlet boxes with 3/8" no-bolt fixture studs. Where fixtures are mounted on or in an accessible type ceiling, provide a junction box and extend flexible conduit to each fixture. Outlet boxes in finished ceilings or walls shall be fitted with appropriate covers, set to come flush with the finished surface. Where more than one switch or device is located at one point, use gang boxes and covers unless otherwise indicated. Sectional switch boxes or utility boxes will not be permitted. Provide Steel City Series "GW" tile box, or as accepted, or a 4" square box or for multi-gang Steel City Series "G", with tile ring in masonry walls which will not be plastered or furred, or where "Drywall" type materials are applied. Provide outlet boxes of the type and size suitable for the specific application.
- B. Construct junction or pullboxes not over 150 cubic inches in size as standard outlet boxes, and

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those over 150 cubic inches shall be code gauge galvanized steel with screw on covers of same gauge metal. Provide cable supports (3/4" conduit covered by loose fitting fiber tubes) for two (2) or more horizontal rows of conduit entering box. Provide ground lug in all junction/pull box, larger than 4" X 4" standard outlet, box O.Z. Gedney type "KG" or approved equal for each conduits pair.

- C. Plug any open knockouts not utilized.
- D. Provide surface mounted outlet and junction boxes of cast metal with threaded hubs in unfinished indoor locations and where exposed to moisture and all outdoor locations.
- E. Provide barriers in all boxes with ganged devices when voltage between adjacent devices exceeds 300 volts.

### 2.03 WIRE AND CABLE

- A. Provide wire with a minimum insulating rating of 600 volts. Communications, circuits, and low tension systems, including fire alarm system wiring.

- B. Conductor:

- 1. Electrical grade, annealed copper, and fabricated in accordance with ASTM standards. Minimum size number 12 for branch circuits; number 14 for control wiring.

- C. Stranding and Number of Conductors

- 1. Number 12 and 10 solid.
- 2. Cables larger than number 10, stranded, in accordance with ASTM Class B stranding designations.
- 3. Control wires stranded in accordance with ASTM Class B stranding designations.
- 4. Cables, multi-conductor, and as specified elsewhere for low-tension systems.

- D. Insulation

- 1. Type THWN/THHN insulation suitable for use in wet locations up to 90°C Centigrade. Use for lighting, receptacles and motor circuits and for panel, switchboard, service and equipment feeders, unless otherwise noted on drawings.
- 2. Type THHN or THWN/THHN - Flame retardant: Heat-resistant thermoplastic insulation, nylon jacket rated for 90° Centigrade operation. Use for lighting branch circuit wiring installed and passing through the ballast channels of fluorescent fixtures, wiring in metal roofdecks in or near roof insulation, in joist spaces, or in raceways exposed to the sun.
- 3. Type FEP: Fluorinated Ethylene Propylene insulated heat resistant wire suitable for 200°C operation. Use for any wiring within 3 feet horizontally or 10 feet above any furnace, boiler or similar appliance, or where high temperature wire is indicated.

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4. Type RHW- Polymer insulated U.L. listed, 2 hour, fire rated cable when installed in conduit accordance with manufacturers instructions for installation and listing procedures. Cable shall meet all requirements of an "Electrical circuit protective system" as referred to in NEC articles 695 and 700. Shall be suitable for use on wet locations to 75°C and dry locations to 90°C. Cable shall have low toxicity index per NES-713. Cable shall be used for all Emergency System feeders in Rigid Steel Conduit.
- E. Manufacturers: General Electric, Phelps-Dodge, Triangle, Anaconda, Kaiser, General Cable, Okonite, Simplex, National Electrical Products, Collyer, Kerite, Raychem, or approved equal.
- F. Color code all wiring for control systems installed in conjunction with mechanical and/or miscellaneous equipment sections of this Specification in accordance with the wiring diagrams furnished with the equipment. Color code all branch circuit wiring, including circuits to motors, and all feeders by line and/or phase.

120/208 V 3-Phase

Phase A	Black
Phase B	Red
Phase C	Blue
Neutral	White
Ground	Green

Factory color code wire No. 2 and smaller. Wire No. 1 and larger may be color coded by field color taping of the entire length of the exposed ends.

G. Connectors:

1. General: Make all connections, splices, taps and joints with solder less devices, mechanically and electrically secure. Protect exposed wires and connecting devices with electrical tape or insulation to provide insulation values not less than on conductor. Make splices only in junction pullboxes, or panelboards with oversized wiring gutters to accommodate tap. All splices, taps, terminations, shall be approved for the temperature rating of the conductor.
2. Large Cables (No. 8 and larger):
  - a. Use compression type connectors, taps and splices specifically designed for the particular connection. Insulate splice with "Bake-lite" covers designed to fit around splice.
  - b. Manufacturer: Burndy Engineering Co., Inc; Thomas & Betts, or approved equal.
3. Branch Circuit Wires (No. 10 and smaller): Use any of the following type of terminals and connecting devices:
  - a. Hand Applied: Coiled tapered, spring wound devices with a conducting corrosion-resistant coating over the spring steel and a plastic cover and skirt providing full insulation for splice and wire ends. Screw connector on by hand. Manufacturer: Ideal Industries "Wing Nut"; Thomas & Betts "Piggy"; 3M Co.



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"Scotch-Lok", or approved equal.

- b. Tool Applied: Steel cap, with conducting and corrosion resistant metallic plating, open at both ends, fitted around the twisted ends of the wire and compressed or crimped by means of a special die designed for the purpose. Specially fitted plastic or rubber insulating cover wrap over each connector. Manufacturer: Thomas & Betts "Stakon"; Ideal Industries" No. 410 Crim Connector" and "Wrap Cap"; Buchanan; Burndy or approved equal.

#### H. Electrical Tape:

- 1. Specially designed for use as insulating tape.
- 2. Manufacturer: Johns-Manville; Minnesota Mining, or approved equal.

I. Lubricant: Use lubricant only where the possibility of damage to conductors exists. Use only a lubricant which is inert to cable and conduit and in no way restrict ease of pulling through conduit with passage of time.

#### J. Cable Systems:

##### 1. Type MC

- a. Approved cable consisting of plastic insulated, 90°C rated copper conductors, insulated grounding conductor per UL 1569 plus additional grounding and/or isolated ground conductors as specified elsewhere. Conductors shall be twisted and covered with a polyethylene terephthalate (polyester) assembly tape. A galvanized steel armor shall be applied over the inner cable assembly in compliance with U.L. 1569 Section 10. Cable shall comply with NEC article 330, U.L. 1569 and UL 83. Cable shall be as manufactured by AFC cable systems type MC and Super Neutral MC or approved equal.

##### 2. Mineral-Insulated, Metal-Sheathed cable (Type MI)

- a. MI cable shall consist of a factory assembly of one or more conductors insulated with a highly compressed refractory mineral insulation and enclosed in a liquid tight and gas tight continuous copper sheath. Cable shall have a fire rating as classified by Underwriters laboratories Inc. (U.L.) and shall be listed in the U.L. Building materials directory as follows: One (1) hour for all emergency system feeders. MI cable shall not exceed 350 MCM.
- b. MI cable shall be pyrotenax system 1850 or approved equal. Cable shall be approved by the New York City Advisory Board for the application.
- c. Factory installed fire-rated joints or field installed fire-rated joints installed by manufacturers field technician shall be used where circuit length exceeds coil length.
- d. Lug Connection

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When connecting MI cable to panel boards, motor starters, circuit breakers, etc. ILSCO lugs, approved for solid conductors, will be used as follows:

CONDUCTOR SIZE-ILSCO CATALOGUE NUMBER

#1-250 kcmil Lo-250

350 CRA-300

Or approved equal

If manufacturers termination kits are used to provide a solid copper conductor to 90°C standard conductor connection, standard 90°C rated lugs may be used in lieu of specified ILSCO solid conductor lugs.

**K. Fire Alarm Wiring**

1. Fire Alarm wiring shall be:

- a. Of the size and configuration type recommended by the manufacturer for each type of circuit in the system and meet the requirements below listed in b. through h.
- b. Copper conductors only. Aluminum conductors or copper clad, plated or coated aluminum conductors shall not be acceptable.
- c. Color-coded throughout.
- d. In conformance with Section 4000-06 of the Rules of the City of New York.
- e. Approved by the New York City Fire Department and New York City Building Department.
- f. A minimum of No. 12 A.W.G. for power wiring (above 75 volts) and No. 16 A.W.G. for low voltage wiring (75 volts or less), unless otherwise noted.
- g. All low voltage wiring (75 volts and less) shall be Type FPLP, 15 mil insulation, 150°C, colored red, 25 mil overall jacket, cable printing per UL1424, labeled "Classified NYC Cert. Fire Alarm Cable".
- h. All power conductors (above 75 volts) shall be TFFN, TFN, THHN, THWN, or FEP minimum 600 volts, 90°C.

2.05

SWITCHES AND WIRING DEVICES

**A. General:**

1. All devices shall be specification grade flush mounting. Duplex receptacles shall have ivory. Face, local wall switches shall have ivory handle.

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2. Cover Plates: Provide cover plates for all wall receptacles outlets, including telephone and switches. Submit sample to Commissioner and obtain approval prior to installation. When two (2) or more switches or devices are shown at one location, mount under a common plate. Plates shall be smooth plastic with ivory finish.

**B. Local Wall Switches:**

1. Quiet operating, alternating current type, with rocker operator and heat resistant plastic housing. Silver allow contacts. Rated 20 Amperes, for use at 120 and capable of full capacity on tungsten, fluorescent, or HID lamp load. Designed for wiring with up to AWG No. 10 wire.
2. Use single pole, double pole, 3-way, 4-way, pilot or keyed type as shown on drawings.
3. Local wall switches shall be Hubbell whose catalog numbers are indicated below unless otherwise noted, Pass & Seymour or approved equal.

	<u>Device</u>	<u>Standard Line</u>	<u>Decora Line</u>
		<u>Catalog #</u>	<u>Catalog #</u>
a.	Single Pole Toggle Switch	HBL1221	5621-2
b.	Three Way Switch	HBL1223	5623-2
c.	Four Way Switch	HBL1224	5624-2
d.	Single Pole Switch and Pilot Light (120 V)	HBL1221-IL	5628-2
e.	Single Pole Switch and Pilot Light (277 V)	HBL1221-IL	5629-2
f.	Three Way Switch with Pilot Light (120V)	HBL1223-IL	5638-2
g.	Three Way Switch with Pilot Light (277V)	HBL1223-IL	5639-2
h.	Single Pole Locking Toggle Switch	HBL1221-L	NA
i.	Single pole, momentary Contact, double throw, Center off.	HBL1557	5657-2

- C. Space Saver Switches:** Use smaller compact switches where specifically shown on drawings or where required to facilitate installation of switch. Switches shall be Pass and Seymour Series 201, 2, 3, 4 or approved equal.

**D. Duplex Convenience Receptacles:**

1. Three-pole, National Electrical Manufacturers Association and American National Standards Institute standard type, with bronze contacts which accept plug with two (2) parallel blades and one (1) grounding blade. Heat-resistant plastic enclosure. Two (2) grounding screws. Break-off terminals for two (2) circuit wiring. Rated at 120 volts alternating current.
2. Manufacturers: Hubbell Cat. # 5362 (20 Amperes) In damp or wet locations protected by

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GFI type C.B., use 5362WR, equivalent Pass and Seymour or Leviton or approved equal.

3. Ground Fault protection Type (GFI-Tamper resistant) shall be Hubbell Cat # GFTR20, or equivalent of Pass & Seymour or Leviton or approved equal.
4. Surge Protection duplex receptacles shall be Hubbell Cat # HBL 83621SA or approved equal.

F. Outdoor Locations and Ground Fault Interrupter Receptacles:

1. Protect receptacles located outdoors or where indicated to be weatherproof by a GFI receptacle, Hubbell Catalog #GF-5362, GFTR20 or approved equal.
2. Protect exterior receptacles by a cast aluminum weatherproof metal plate with a stainless steel spring-loaded, casketed lift cover. Plate shall be U.L. listed for wet locations with cover open and with cover closed.

- G. Special Receptacles: Furnish and install special purpose receptacles to match cord and plug of equipment supplied or indicated circuiting, including twist lock type where indicated. Receptacles shall be Specification grade as manufactured by Hubbell or approved equal.

PART 3.00 - EXECUTION

3.01 RACEWAY SYSTEMS

A. General:

1. Securely fasten all raceways at intervals and locations required by the New York City Electrical Code. Install capped bushings on conduits as soon as installed and remove only when wires are pulled. Securely tie embedded raceway in place prior to embedment. Conduits installed below or in floor slabs must extend minimum of 6 inches above the finished slab to the first connector. Lay out the work in advance to avoid excessive concentrations of multiple raceway runs. Locate raceways so that the strength of structural members is unaffected and they do not conflict with the services of other trades. Install 1-inch or larger raceways in or through structural members (beams, slab, etc.) only when in the manner accepted by the The Commissioner. Draw up couplings and fittings full and tight. Protect threads from corrosion with one (1) coat red lead or zinc chromate after installation. Where galvanized conduit is used, use only steel pullboxes or malleable iron fittings.
2. Where a space of over 24 inches to suspended ceilings occurs, the suspending hangers may be utilized to support conduits of 1 inch or less trade size. Where suspended ceilings are 24 inches or less below the structure, provide independent support from the structure for all raceways.
3. Mount conduits a minimum of 8 inches above any accessible type ceiling or with spacing as required to permit relocation of recessed fixtures to any location.
4. Provide insulated grounding type bushings for all feeder conduits and for all branch circuit conduits entering enclosures, panels, pull/splice box etc. grounding bushings not

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required for branch circuit conduit terminations at standard 4" X 4" or smaller outlet box. Provide insulated bushings for all conduits not requiring insulated grounding type bushings. Secure conduit to all boxes and enclosures, by means of double locknuts one on inside and one on outside. Provide appropriate connectors, couplings for use with EMT to utilize specified bushings.

5. Minimum size conduit shall be 1/2" except 3/4" minimum shall be utilized for homerun from panel to first outlet box.

B. Above Grade - Define as the area above finished grade for a building exterior and above top surface of any slabs (or other concrete work) on grade for a building interior. Above-grade raceways to comply with the following:

1. Install raceways concealed except at surface cabinets and for motor and equipment connection in electrical and mechanical rooms. Install a minimum of 6 inches from insulation when crossing or 12 inches from insulation when running parallel to flues, steam pipes, or other heated lines. Do not install within 36" from uninsulated flues, steam pipes, or other heated lines. Provide flashing and counter-flashing for waterproofing of raceways, outlets, fittings, etc., which penetrate the roof. Route exposed raceways parallel or perpendicular to building lines with right-angle turns and symmetrical bends. Run concealed raceways in a direct line and, where possible, with long sweep bends and offsets. Provide sleeves in forms for new concrete walls, floor slabs and partitions for passage of raceways. Waterproof sleeved raceways where required. Seal in an approved manner all raceway openings and sleeves through fire rated walls, floors, and ceilings after raceway installation.
2. Provide raceway expansion joints with necessary bonding conductor at building expansion joints and where required to compensate for raceway or building thermal expansion and contraction.
3. Provide raceway installation (with appropriate sealoffs, explosion-proof fittings, etc.) in all special occupancy areas, as defined and classified in Article 500 of the National Electrical Code, in accordance with that article. Provide conduit sealoffs where portions or an interior raceway system pass through walls, ceilings or floors which separate adjacent rooms having substantially different maintained temperatures, as in refrigerated or cold storage room.
4. Rigid Galvanized Steel Conduit: Install in the following above grade areas:
  - a. Embedded concrete walls and floor slabs.
  - b. Where exposed to mechanical injury.
  - c. For fire alarm, communication and smoke detection systems.

Circuits supplying power to jockey pumps, boosters pumps, fire alarm, communication and smoke detection systems, smoke exhaust fans, and all other feeder and branch circuits supplied by emergency transfer switch and supplying power to emergency transfer switch; shall utilize specified RHW wire in rigid galvanized steel conduit for U.L. listed 2 hour rating.

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- e. Where specifically required by the New York Electrical Code.
  - f. For underground or exterior work.
  - g. All remaining areas except as permitted or specifically required in the following paragraphs:
5. Intermediate Metal Grade Conduit:
    - a. IMC conduit with fittings as approved by the The Commissioner may be utilized when permitted by codes and local authorities having jurisdiction in all areas listed under Item 4 Rigid Conduit except for items listed in paragraphs 4c and 4d which shall be rigid conduit.
  6. Electric Metallic Tubing:
    - a. EMT may be used in lieu of rigid conduit or IMC for areas listed in sub paragraphs 4a and 4g only, provided that where installed in slab or fill, conduit is protected on all sides by a layer of non-cinder concrete at least 2 inches thick and concrete tight fittings shall be utilized and rigid conduit or IMC conduit bends and elbows shall be employed where exiting slab. EMT shall not be used for underground or exterior installations.
  7. Provide flexible metal conduit in sufficient lengths not exceeding 6 feet for:
    - a. Branch circuits serving makeup of motor, transformer and/or raceway connections where isolation of sound and vibration transmission is required. For connections in locations exposed to weather and in interior locations subject to moisture, and motor connections use liquid-tight flexible metal conduit.
    - b. Connections to recessed lighting fixtures.
    - c. Provide separate grounding conductor. Securely grounded on each end of sections of flexible raceways. Size in accordance with New York City Electrical Code.
- C. Below Grade: Defined as the area below finished grade for a building exterior and below or within the bottom floor slab for a building interior. Below grade raceways to conform to the following:
1. Extend below-grade raceways two (2) inches minimum above the floor or equipment foundation.
  2. Install exterior underground conduits 24 inches minimum below finished grade. Do not penetrate waterproof membranes unless proper seals are provided and penetration is approved by the The Commissioner.
    1. Below grade raceways shall be rigid galvanized steel. Where permitted by local codes and local authorities.
    2. Underground raceways run on site shall have a continuous warning ribbon installed 12" above raceway. Ribbon shall be a minimum 3" wide, with

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"Electric Line" in black letters on a bright red background.

- D. Provide separate code size ground conductor in surface metal raceways.
- E. Fire Alarm Wiring
1. Fire Alarm wiring installation shall comply with the requirements of the City of New York Building Department, the City of New York Fire Department, the Rules of the City of New York Section 4000-06 and all other local codes and authorities having jurisdiction.

### 3.02 OUTLET, JUNCTION AND PULL BOXES

- A. Provide all outlet, junction cable support and pullboxes as indicated on the Drawings and as required for the complete installation of the various electrical systems, and to facilitate proper pulling of wires and cables. In general, install pull boxes, or pull fittings, no less than every 100 feet of straight horizontal run conduit or three (3) 90° bends, unless otherwise noted. Junction boxes and pullboxes shall be sized and supported per New York City Electric Code, unless otherwise noted. Provide barriers in boxes to separate wiring from different services per NYC Electrical Code Requirements.
- B. Provide bare copper ground wires, in all junction/pull box, larger than 4" X 4" interconnecting each conduit pair grounding bushings via ground lug. Size ground wire as follows:

<u>Feeder</u>	<u>Ground Wire</u>
up to #2	#8
#1 thru 1/0	#6
2/0 thru 3/0	#4
4/0 thru 350 MCM	#2
400 MCM thru 600 MCM	1/0

- C. The exact location of outlets and equipment is governed by structural conditions and obstructions, or other equipment items. When necessary relocate outlets so that when fixtures or equipment are installed, they will be symmetrically located according to the room layout and will not interfere with other work or equipment. Verify final location of all outlets, panels, equipment, etc., with The Commissioner.
- D. Back-to-back outlets in the same wall, or "thru-wall" type boxes not permitted. For non-fire rated walls provide 12 inches (minimum) long nipple to offset for all outlets shown on opposite sides of a common wall to minimize sound transmission. Provide 24" (minimum) horizontal separation for outlets shown on opposite sides of a common, rated, fire wall or party wall. Where The Commissioners dimensioned drawings call for back to back spacing less than 24", provide listed putty pads in each box.
- E. Where outlets are installed in steel stud type systems, provide additional cross bracing, bridging, and/or straps to make the outlet completely rigid prior to the application of the wall

facing material.

- F. Unless otherwise noted on Architectural plans, locate outlets as follows. Heights listed are from finished floor to center of device. Mounting heights for other equipment are as shown on the Electrical or Architectural Plans or as herein further indicated.
1. Convenience and signal outlets: 15 inches above finished floor unless otherwise noted.
  2. Lighting Switches: 3 feet, 6 inches, unless otherwise noted.
  4. Wall Telephone Outlets: 4 feet 6 inches.
  5. Exit Lights: Wall mounted nine inches below ceiling to center line.
  6. Wall Mounted Fixtures: As indicated on drawings.
  7. Where counters occur, mount outlets above counter.
  8. Where bookcases occur, mount outlets in toe space.
  9. Fire Alarm Pull Stations: 4 feet, 0 inches to handle.
  10. Fire Alarm Strobes: Wall mounted, minimum 80" AFF; maximum 96" AFF but minimum 6" below ceiling. When ceiling mounted, no other devices or building appurtenances within 5'-0".
  11. Wall Mounted Fire Alarm System Sounding Device: The centerline shall be a minimum of 8'-0" above floor, except in locations where ceilings prevent installation at this height, the centerline of the device shall be 6" below ceiling.
  12. Wall Mounted Battery Packs for Emergency Lighting: 8'-0" minimum above floor.
  13. Wall Mounted Fixtures: 7 feet, 6 inches or over mirrors as applicable or 1 foot below ceiling lower than 8 inches. Stairwell fixtures shall be 8 feet, 6 inches above finished floor or 1 foot below ceiling.
- G. Provide a standard access panel, having a hinged metal door neatly fitted into a flush metal trim, where a junction box or equipment is located above non-accessible ceilings or behind finished walls. Coordinate location and type with the The Commissioner. Removable covers must be accessible at all times.

### 3.03 WIRES AND CABLES

- A. Provide a complete system of conductors in raceway system. Mount all wiring through a specified raceway, regardless of voltage application, unless specifically noted elsewhere.
- B. Drawings do not indicate size of branch circuit wiring. Unless specifically noted elsewhere in this Specification, minimum wire size is to be No. 12 except for motor starter control circuit which may be No. 14. For branch circuits whose length from panel to first outlet exceeds 75



feet for 120 volt circuits or 175 feet for 277 volt circuits, use AWG No. 10.

- C. Do not install wire in incomplete conduit runs nor until all moisture is swabbed from conduits. Insulation resistance to ground is not to be less than that approved by the New York City Electrical Code. Eliminate splices wherever possible. Where necessary, splice in readily accessible pull, junction, or outlet box. Clear interior of raceway of burrs, dirt, and obstructions before wires are pulled.
- D. Provide cable supports for all vertical risers in accord with New York City Electrical Code requirements.
- E. Flashover or insulation value of joints is to be equal to that of the conductor. Provide Underwriters' Laboratories listed connectors rated at 600 volts for general use, and 1,000 volts for use between ballasts and lamps of gaseous discharge fixtures.
- F. Use terminating fittings, connectors, etc., of a type suitable for the specified cable furnished. Provide compression equipment connectors, terminals or splices for all terminations or splices. Make bends in cable at termination prior to installing compression device. Make up all fittings tight. Recheck all splices and terminations and make mechanically and electrically tight during a fifteen (15) day period immediately prior to final acceptance of the work.
- G. Install wire in raceways and make up all terminations in strict accordance with manufacturer's recommendations using special washers, nuts, etc., as required.
- H. Extend wire sizing for the entire length of a circuit unless otherwise noted.
- I. Conduit runs shall contain quantity of circuits as shown on drawings. Combining circuits or wiring to effect a reduction in conduit homeruns will not be permitted except as per paragraph M this section.
- J. Type MC Metal Clad Cable:
  - 1. Application: May be utilized concealed in hollow spaces of building for receptacle and lighting branch circuiting. May not be used where prohibited by code.
  - 2. Install only with approved bushings.

K. Common Neutral:

Panel schedules are based upon utilizing separate neutral conductors for each 120 volt and 277 volt branch circuit. Contractor, at his option, may substitute multi-wire branch circuits, utilizing common neutral, where permitted by their specifications; provided the single pole circuit breakers are regrouped in panel and replaced with two (2) pole and three (3) pole circuit breakers for all multi-wire branch circuits utilizing a common neutral. A Common Neutral will be permitted for two or three, single pole, 15 Ampere or 20 Ampere branch circuits, except as noted below:

- 1. Common Neutral will not be permitted on circuits served via a dimmer.
- 2. Common Neutral will not be permitted on circuits serving any duplex receptacles.

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3. Common Neutral will not be permitted on circuits supplied via a Ground Fault interrupter Type C.B.
- L. Circuiting indicated on drawings is diagrammatic and intended to show devices on a common branch circuit. Contractor may, at his option regroup indicated single pole 20 amp circuits into homeruns of his choice within the following criteria:
1. Circuits requiring individual neutral: Maximum of four (4) circuits per homerun. Contractor may increase quantity to a maximum of nine (9) circuits per homerun provided all conductors are increased to #10 AWG, when homerun contains more than four (4) circuits.
  2. Circuits utilizing a common neutral: Maximum of six (6) circuits per homerun. Contractor may increase quantity to a maximum of nine (9) per homerun provided all conductors are increased to #10 AWG, when homerun contains more than six(6) circuits.
  3. All homerun conduits shall be minimum 3/4"C up to six (6) circuit homeruns, increase size as required by code for ground and/or isolated ground conductors. For seven to a maximum of 9 circuits per homerun. Minimum size conduit shall be 1". Increase size as required by code for ground and/or isolated ground conductors as indicated on drawings or specified elsewhere.
  4. When homeruns are regrouped from those indicated on drawings, contractor shall provide 20% of the eliminated homeruns, but not less than one (1) per panel, as spare, empty conduit, for future use. Run from electric panel locations to centrally located, uniformly spaced locations on floor as directed by The Commissioner. Terminate in junction box with Nylon pull cord.
- M. All emergency circuits as defined in section 700.9 of the New York City Electric Code shall be a listed electric circuit protective system with a minimum 1 hour rating.

### 3.07 GROUNDING

- A. Provide grounding in accordance with the New York City Electrical Code and as noted on Drawings, and described elsewhere in specifications.
- B. In addition, furnish a separate insulated green equipment ground conductor for the following branch circuits:
  1. Circuits serving any wall box dimmer.

END OF SECTION

SECTION 263353

EMERGENCY LIGHTING CENTRAL INVERTER

PART 1.00 - GENERAL

1.01 GENERAL REQUIREMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the contract documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

1.02 WORK INCLUDED

- A. Work of this section includes all labor, materials, equipment and services necessary to complete the electrical work as shown on the drawings and specified herein, including, but not limited to, the following:
  - 1. Emergency Lighting Central Inverter

1.03 RELATED WORK

- A. Equipment supports and nameplates.
- B. Basic materials and methods.

1.04 QUALITY ASSURANCE

- A. Manufacturer's Instructions:
  - 1. In addition to the requirements of these specifications, comply with manufacturer's instructions and recommendations for all phases of work.
- B. Except as modified by governing codes and the contract documents, comply with the applicable provisions and recommendations of the following:
  - 1. UL 924 Standard for Emergency Lighting and Power Equipment
  - 2. New York City Electrical Code, OSHA and Life Safety Code

1.05 SUBMITTALS

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- A. Shop drawings: Submit shop drawings and manufacturers data for the central inverter, including but not limited to the following:
1. Wiring diagram
  2. Physical dimensions, weight. Submit dimensioned elevation drawing of inverter including all existing site appurtenances within six (6) feet of edge of inverter enclosure.
  3. Nameplate data.
  4. Manufacturers recommended installation procedure.
- B. Maintenance Manual:
1. Assemble from manufacturer a complete manual consisting of Shop Drawings and manufactures operation and maintenance instructions, as well as manufacturers suggested spare parts list. Upon approval of the shop drawings provide five (5) copies to the The Commissioner for approval.

#### 1.06 PRODUCT HANDLING

- A. Protection: Use all means necessary to protect the materials of this section before, during and after installation and to protect the installed work and materials of all other trades.
- B. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the The Commissioner and at no additional cost to the the Commissioner.

### PART 2.00 - PRODUCTS

#### 2.01 CATEGORY AND TYPE

- A. Furnish and install an Emergency Lighting Inverter System that will supply a minimum of 2.1KVA @ unity power factor, for a period of 90 minutes (1.5 hours) upon interruption, brownout, or failure of the monitored AC utility line.

#### 2.02 OPERATION

- A. The system's operation shall be fully automatic and utilize a linear transformer. The inverter shall be of the Pulse Width Modulated (PWM) design, and shall provide continuous power to the load at all times.

During normal operation, the charger maintains the batteries at full capacity. The on-board microprocessors continuously monitor charger settings and system's overall readiness. The system's circuitry shall also include an automatic, multi-rate, software controlled charger able to recharge batteries per UL924 guidelines.

The inverter section shall be off-line during standby operation to increase overall efficiency up to 98%. Continuously running double conversion systems shall not be permitted.

The automatic overload circuit protection shall shut down the system at 115% of its rated capacity, regardless of whether it is in normal or emergency operations. The system protection shall also include AC lockout, low battery voltage disconnect, AC input circuit breaker, DC input fuse and circuit breaker, and an AC output fuse. Three (3) Single pole 20 amp integral output circuit breakers shall be provided. The system shall supply a digitally generated sinusoidal output waveform with less than 5% total harmonic distortion at rated linear load.

2.03 INPUT VOLTAGE

- A. The available input voltage to the systems shall be 120 volts, +10% to -15%, single phase, with a frequency of 60Hz.

2.04 OUTPUT VOLTAGE

- A. The available output voltage of the system shall be the same as the input voltage, 120 volts, +/- 5% single phase sine wave, with a frequency of 60Hz + 0.05Hz on inverter. The output voltage and frequency, when on utility power, shall be as supplied by the utility.

2.05 SYSTEM DIAGNOSTICS

- A. System shall be supplied with intelligent multipurpose LED indicators to notify the user as to system changes or possible problems. The LED illumination pattern can be interpreted as to the system's condition; these include:

Normal standby operation	Inverter on (AC input interruption)	AC input interruption
Battery charger malfunction	Overload shutdown	Circuit breaker tripped
No load connected	Temperature probe malfunction	High temperature shutdown

2.06 ALARMS

- A. An audible alarm shall be provided for all alarm and shutdown conditions.

2.07 MANUAL TESTING

- A. The system shall incorporate a push to test switch to initiate an inverter test at anytime. During this test, a power failure will be simulated and the batteries shall power the connected load through the inverter.

2.08 BATTERY CHARGER

- A. The charger shall be software controlled, temperature compensated, three-step float type charger. The charger shall maintain the batteries fully charged during normal standby condition. Following a power failure the charger will start in constant current mode until battery voltage reaches Equalize. Equalize voltage will then be maintained until charging

current drops to .5 amps or .3% of the battery amp/hour rating; battery voltage will then be allowed to drop down to float.

## 2.09 BATTERIES

- A. The batteries will provide sufficient power to maintain the output voltage of the inverter for a period of 1.5 hours, without dropping below 87.5% of nominal battery voltage. The batteries shall be Sealed Lead Calcium VRLA type, enclosed in a cabinet that permits easy maintenance without requiring removal. Batteries shall require no addition of water over the life of the battery. The case and cover shall be constructed of polypropylene, contain low-pressure UL recognized safety release vents, and be non-gassing in normal use. Batteries shall have a 10-year design life expectancy at 77°F (25°C).

## 2.10 SYSTEM OPTIONS

- A. The following factory installed optional equipment shall be provided per unit.
1. 3 Normally-Off Output Breaker Options: Normally-off output circuit breakers are used when the lighting fixtures are to be energized only during a power outage. The Normally Off circuit breakers are programmed for a 15 minute retransfer delay to allow HID fixtures to come up to full brightness. A maximum of 4 positions are available. Single pole 120V and 277V breakers use one position each.

## 2.11 MECHANICAL

- A. The system shall be contained in a NEMA 1 steel cabinet with conduit knockouts at the top with front access. Provide all necessary mounting hardware. All components must be front accessible. All inverter components shall have a modular design to facilitate field service.

## 2.12 MANUFACTURERS

- A. Emergency Lighting Central Inverters shall be as manufactured by Dual-Lite, Perfect Power Systems, LightAlarms or approved equal.

## PART 3.00 - EXECUTION

### 3.01 WIRING

- A. All wiring shall be installed within NEC guidelines in conduit and shall be sized as required for voltage drop purposes to assure proper operation of connected loads. Input and output wiring shall enter the cabinet in separate conduits.

### 3.02 SYSTEM OPERATION

- A. The system shall allow connection of "normally off" loads. Connected loads shall be carried via the transfer circuit by the utility during normal operation or by the system inverter during utility failures without interruption.

3.03 CONNECTED LOADS

- A. The system shall be designed to maintain the normal operation and performance integrity of all connected loads, including voltage and frequency sensitive equipment, by providing a no break digitally generated sinusoidal output. Refer to plans for type and location of loads served by the system.

3.04 DRAWINGS AND MANUALS

- A. Drawings and manuals supplied with each system shall include:
1. Installation/Users manual(s) with complete instructions for locating, mounting, interconnection, and wiring of the system with operating and preventive maintenance procedures.

3.05 INSTALLATION

- A. The system shall be installed in accordance with all appropriate manufacturers' installation instructions and in compliance with all appropriate codes.

END OF SECTION

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SECTION 263400

10KW Uninterruptible Power Supply

PART 1.00 - GENERAL

1.01 GENERAL REQUIREMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the contract documents.

1.02 WORK INCLUDED

- A. Work of this section includes all labor, materials, equipment and services necessary to complete the electrical work as shown on the drawings and specified herein, including, but not limited to, the following:
  - 1. 10KW Uninterruptible Power Supply for backup of (2) existing dewatering pumps.

1.03 RELATED WORK

- A. Equipment supports and nameplates.
- B. Basic materials and methods.

1.04 QUALITY ASSURANCE

- A. Manufacturer's Instructions:
  - 1. In addition to the requirements of these specifications, comply with manufacturer's instructions and recommendations for all phases of work.
- B. Except as modified by governing codes and the contract documents, comply with the applicable provisions and recommendations of the following:
  - 1. New York City Electrical Code.

1.05 SUBMITTALS

- A. Shop drawings: Submit shop drawings and manufacturers data for the UPS, including but not limited to the following:
1. Wiring diagram
  2. Physical dimensions, weight. Submit dimensioned elevation drawing of inverter including all existing site appurtenances within six (6) feet of edge of inverter enclosure.
  3. Nameplate data.
  4. Manufacturers recommended installation procedure.
- B. Maintenance Manual:
1. Assemble from manufacturer a complete manual consisting of Shop Drawings and manufactures operation and maintenance instructions, as well as manufacturers suggested spare parts list. Upon approval of the shop drawings provide five (5) copies to the Commissioner for approval.

1.06 PRODUCT HANDLING

- A. Protection: Use all means necessary to protect the materials of this section before, during and after installation and to protect the installed work and materials of all other trades.
- B. Replacements: In the event of damage, immediately make all repairs and replacements necessary to the approval of the Commissioner and at no additional cost to the City of New York.

PART 2.00 - PRODUCTS

2.01 CATEGORY AND TYPE

- A. Furnish and install a UPS System that will supply a minimum of 10KVA @ unity power factor, for a period of 90 minutes (1.5 hours) upon interruption, brownout, or failure of the monitored AC utility line. UPS shall be Dual-lite LSN D-Series with Type S battery or approved equal.

2.02 OPERATION

- A. The system's operation shall be fully automatic and utilize a linear transformer. The inverter shall be of the Pulse Width Modulated (PWM) design, and shall provide continuous power to the load at all times.

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During normal operation, the charger maintains the batteries at full capacity. The on-board microprocessors continuously monitor charger settings and system's overall readiness. The system's circuitry shall also include an automatic, multi-rate, software controlled charger able to recharge batteries per UL924 guidelines.

The inverter section shall be off-line during standby operation to increase overall efficiency up to 98%. Continuously running double conversion systems shall not be permitted.

The automatic overload circuit protection shall shut down the system at 115% of its rated capacity, regardless of whether it is in normal or emergency operations. The system protection shall also include AC lockout, low battery voltage disconnect, AC input circuit breaker, DC input fuse and circuit breaker, and an AC output fuse. Three (3) Single pole 20 amp integral output circuit breakers shall be provided. The system shall supply a digitally generated sinusoidal output waveform with less than 5% total harmonic distortion at rated linear load.

### 2.03 INPUT VOLTAGE

- A. The available input voltage to the systems shall be 208 volts, +10% to -15%, single phase, with a frequency of 60Hz.

### 2.04 OUTPUT VOLTAGE

- A. The available output voltage of the system shall be, 120 volts, +/- 5% single phase sine wave, with a frequency of 60Hz + 0.05Hz on inverter. The output voltage and frequency, when on utility power, shall be as supplied by the utility.

### 2.05 SYSTEM DIAGNOSTICS

- A. System shall be supplied with intelligent multipurpose LED indicators to notify the user as to system changes or possible problems. The LED illumination pattern can be interpreted as to the system's condition; these include:

Normal standby operation	Inverter on (AC input interruption)	AC input interruption
Battery charger malfunction	Overload shutdown	Circuit breaker tripped
No load connected	Temperature probe malfunction	High temperature shutdown

### 2.06 ALARMS

- A. An audible alarm shall be provided for all alarm and shutdown conditions.

### 2.07 MANUAL TESTING

- A. The system shall incorporate a push to test switch to initiate an inverter test at anytime. During this test, a power failure will be simulated and the batteries shall power the connected load through the inverter.

**2.08 BATTERY CHARGER**

- A. The charger shall be software controlled, temperature compensated, three-step float type charger. The charger shall maintain the batteries fully charged during normal standby condition. Following a power failure the charger will start in constant current mode until battery voltage reaches Equalize. Equalize voltage will then be maintained until charging current drops to .5 amps or .3% of the battery amp/hour rating; battery voltage will then be allowed to drop down to float.

**2.09 BATTERIES**

- A. The batteries will provide sufficient power to maintain the output voltage of the inverter for a period of 1.5 hours, without dropping below 87.5% of nominal battery voltage. The batteries shall be Sealed Lead Calcium VRLA type, enclosed in a cabinet that permits easy maintenance without requiring removal. Batteries shall require no addition of water over the life of the battery. The case and cover shall be constructed of polypropylene, contain low-pressure UL recognized safety release vents, and be non-gassing in normal use. Batteries shall have a 10-year design life expectancy at 77°F (25°C).

**2.10 SYSTEM OPTIONS**

- A. The following factory-installed optional equipment shall be provided per unit.
1. 3 Normally-On Output Breaker Options: Single pole 20Amp 120V breakers.

**2.11 MECHANICAL**

- A. The system shall be contained in a NEMA 1 steel cabinet with conduit knockouts at the top with front access. Provide all necessary mounting hardware. All components must be front accessible. All inverter components shall have a modular design to facilitate field service.

**2.12 MANUFACTURERS**

- A. UPS shall be as manufactured by Dual-Lite, Perfect Power Systems, LightAlarms or approved equal.

**PART 3.00 - EXECUTION****3.01 WIRING**

- A. All wiring shall be installed within NEC guidelines in conduit and shall be sized as required for voltage drop purposes to assure proper operation of connected loads. Input and output wiring shall enter the cabinet in separate conduits.

3.02 SYSTEM OPERATION

- A. The system shall allow connection of "normally on" loads. Connected loads shall be carried via the transfer circuit by the utility during normal operation or by the system inverter during utility failures without interruption.

3.03 DRAWINGS AND MANUALS

- A. Drawings and manuals supplied with each system shall include:
  - 1. Installation/Users manual(s) with complete instructions for locating, mounting, interconnection, and wiring of the system with operating and preventive maintenance procedures.

3.05 INSTALLATION

- A. The system shall be installed in accordance with all appropriate manufacturers' installation instructions and in compliance with all appropriate codes.

END OF SECTION

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SECTION 265600 - EXTERIOR LIGHTINGPART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

## 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Exterior luminaires with lamps and ballasts.

## 1.3 DEFINITIONS

- A. CRI: Color-rendering index.
- B. HID: High-intensity discharge.
- C. Luminaire: Complete lighting fixture, including ballast housing if provided.

## 1.4 SUBMITTALS

- A. Product Data: For each luminaire, and support component, arranged in order of lighting unit designation. Include data on features, accessories, finishes, and the following:
  - 1. Physical description of luminaire, including materials, dimensions, effective projected area, and verification of indicated parameters.
  - 2. Details of attaching luminaires and accessories.
  - 3. Details of installation and construction.
  - 4. Luminaire materials.
  - 5. Photometric data based on laboratory tests of each luminaire type, complete with indicated lamps, ballasts, and accessories.
    - a. For indicated luminaires, photometric data shall be certified by a qualified independent testing agency. Photometric data for remaining luminaires shall be certified by manufacturer.

- b. Photometric data shall be certified by manufacturer's laboratory with a current accreditation under the National Voluntary Laboratory Accreditation Program for Energy Efficient Lighting Products.
  6. Ballasts, including energy-efficiency data.
  7. Lamps, including life, output, and energy-efficiency data.
  8. Means of attaching luminaires to supports, and indication that attachment is suitable for components involved.
- B. Samples for Verification: For products designated for sample submission in Exterior Lighting Device Schedule. Each sample shall include lamps and ballasts.
- C. Qualification Data: For agencies providing photometric data for lighting fixtures.
- D. Field quality-control test reports.
- E. Operation and Maintenance Data: For luminaires to include in emergency, operation, and maintenance manuals.
- F. Warranty: Special warranty specified in this Section.

## 1.5 QUALITY ASSURANCE

- A. Luminaire Photometric Data Testing Laboratory Qualifications: Provided by manufacturers' laboratories that are accredited under the National Volunteer Laboratory Accreditation Program for Energy Efficient Lighting Products.
- B. Luminaire Photometric Data Testing Laboratory Qualifications: Provided by an independent agency, with the experience and capability to conduct the testing indicated, that is an NRTL as defined by OSHA in 29 CFR 1910.7.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- D. Comply with IEEE C2, "National Electrical Safety Code."
- E. Comply with NFPA 70.

## 1.6 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace products that fail in materials or workmanship; that corrode; or that fade, stain, perforate, erode, or chalk due to effects of weather or solar radiation within specified warranty period. Manufacturer may exclude lightning damage, hail damage, vandalism, abuse, or unauthorized repairs or alterations from special warranty coverage.
1. Warranty Period for Luminaires: Five years from date of Substantial Completion.
  2. Warranty Period for Metal Corrosion: Five years from date of Substantial Completion.
  3. Warranty Period for Color Retention: Five years from date of Substantial Completion.



4. Warranty Period for Lamps: Replace lamps and fuses that fail within 12 months from date of Substantial Completion; furnish replacement lamps and fuses that fail within the second 12 months from date of Substantial Completion.

## 1.7 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  1. Lamps: 10 for every 100 of each type and rating installed. Furnish at least one of each type.
  2. Glass and Plastic Lenses, Covers, and Other Optical Parts: 10 for every 100 of each type and rating installed. Furnish at least one of each type.
  3. Ballasts: 10 for every 100 of each type and rating installed. Furnish at least one of each type.
  4. Globes and Guards: 10 for every 20 of each type and rating installed. Furnish at least one of each type.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
- B. In Exterior Lighting Device Schedule where titles below are column or row headings that introduce lists, the following requirements apply to product selection:
  1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.
  2. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.
  3. Basis of Design Product: The design of each item of exterior luminaire and its support is based on the product named. Subject to compliance with requirements, provide either the named product or a comparable product by one of the other manufacturers specified.

### 2.2 LUMINAIRES, GENERAL REQUIREMENTS

- A. Luminaires shall comply with UL 1598 and be listed and labeled for installation in wet locations by an NRTL acceptable to authorities having jurisdiction.
- B. Comply with IESNA RP-8 for parameters of lateral light distribution patterns indicated for luminaires.
- C. Metal Parts: Free of burrs and sharp corners and edges.
- D. Sheet Metal Components: Corrosion-resistant aluminum, unless otherwise indicated. Form and support to prevent warping and sagging.

- E. **Housings:** Rigidly formed, weather- and light-tight enclosures that will not warp, sag, or deform in use. Provide filter/breather for enclosed luminaires.
- F. **Doors, Frames, and Other Internal Access:** Smooth operating, free of light leakage under operating conditions, and designed to permit relamping without use of tools. Designed to prevent doors, frames, lenses, diffusers, and other components from falling accidentally during relamping and when secured in operating position. Doors shall be removable for cleaning or replacing lenses. Designed to disconnect ballast when door opens.
- G. **Exposed Hardware Material:** Stainless steel.
- H. **Plastic Parts:** High resistance to yellowing and other changes due to aging, exposure to heat, and UV radiation.
- I. **Light Shields:** Metal baffles, factory installed and field adjustable, arranged to block light distribution to indicated portion of normally illuminated area or field.
- J. **Reflecting surfaces shall have minimum reflectance as follows, unless otherwise indicated:**
  - 1. **White Surfaces:** 85 percent.
  - 2. **Specular Surfaces:** 83 percent.
  - 3. **Diffusing Specular Surfaces:** 75 percent.
- K. **Lenses and Refractors Gaskets:** Use heat- and aging-resistant resilient gaskets to seal and cushion lenses and refractors in luminaire doors.
- L. **Luminaire Finish:** Manufacturer's standard paint applied to factory-assembled and -tested luminaire before shipping. Where indicated, match finish process and color of pole or support materials.
- M. **Factory-Applied Finish for Steel Luminaires:** Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
  - 1. **Surface Preparation:** Clean surfaces to comply with SSPC-SP 1, "Solvent Cleaning," to remove dirt, oil, grease, and other contaminants that could impair paint bond. Grind welds and polish surfaces to a smooth, even finish. Remove mill scale and rust, if present, from uncoated steel, complying with SSPC-SP 5/NACE No. 1, "White Metal Blast Cleaning," or SSPC-SP 8, "Pickling."
  - 2. **Exterior Surfaces:** Manufacturer's standard finish consisting of one or more coats of primer and two finish coats of high-gloss, high-build polyurethane enamel.
    - a. **Color:** As selected from manufacturer's standard catalog of colors.
    - b. **Color:** Match The Commissioner's sample of manufacturer's standard color.
    - c. **Color:** As selected by The Commissioner from manufacturer's full range.
- N. **Factory-Applied Finish for Aluminum Luminaires:** Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
  - 1. **Finish designations prefixed by AA** comply with the system established by the Aluminum Association for designating aluminum finishes.
  - 2. **Natural Satin Finish:** Provide fine, directional, medium satin polish (AA-M32); buff complying with AA-M20; and seal aluminum surfaces with clear, hard-coat wax.

3. Class I, Clear Anodic Finish: AA-M32C22A41 (Mechanical Finish: medium satin; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class I, clear coating 0.018 mm or thicker) complying with AAMA 611.
4. Class I, Color Anodic Finish: AA-M32C22A42/A44 (Mechanical Finish: medium satin; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class I, integrally colored or electrolytically deposited color coating 0.018 mm or thicker) complying with AAMA 611.

### PART 3 - EXECUTION

#### 3.1 LUMINAIRE INSTALLATION

- A. Install lamps in each luminaire.
- B. Fasten luminaire to indicated structural supports.
  1. Use fastening methods and materials selected to resist seismic forces defined for the application and approved by manufacturer.

#### 3.2 INSTALLATION OF INDIVIDUAL GROUND-MOUNTING LUMINAIRES

- A. Luminaires shall be direct burial, refer to detail on drawings and manufacturers recommendations.

#### 3.3 CORROSION PREVENTION

- A. Aluminum: Do not use in contact with earth or concrete. When in direct contact with a dissimilar metal, protect aluminum by insulating fittings or treatment.

#### 3.4 FIELD QUALITY CONTROL

- A. Inspect each installed fixture for damage. Replace damaged fixtures and components.
- B. Illumination Observations: Verify normal operation of lighting units after installing luminaires and energizing circuits with normal power source.
- C. Prepare a written report of tests, inspections, observations, and verifications indicating and interpreting results. If adjustments are made to lighting system, retest to demonstrate compliance with standards.

EXTERIOR LIGHTING LUMINAIRE SCHEDULE

TYPE	LAMP	MANUFACTURER	NOTES	APPROVED EQUALS
NOG-1	100W (max)/ 120V Par 30 Tungsten Halo- gen	LUMASCAPE #LS343-252-A-X-X-AR- LS685-LS688-LS636-XX- X-4  Accessories: A – OptiClear Lens Recessed Cover LS685 – Linear spread- er lens LS688 – Wallwash lens LS636 – Brass grill	Recessed in ground, nominal 13.8" deep by 7" diameter body with 9.5" diameter cover plate. adjustable up-light wall wash luminaire. Provide fixture with OptiClear lens in recessed type cover, linear spreader lens, wall wash lens, and brass grill. Fixture to be wet listed. Finish of recessed cover to be determined by the Com- missioner. Contractor to provide electrical and mechanical installation hardware as required. Electrical engineer to verify voltage require- ments.	Altman ERCO Sternner
NOG-2	300W (max)/ 120V Par 56 Tungsten Halo- gen	BEGA #7820  Accessories: None	Fixture to be wet listed. Finish of recessed cover to be determined by the Commissioner. Contrac- tor to provide electrical and mechanical installa- tion hardware as re- quired. Electrical engi- neer to verify voltage requirements.	Altman ERCO Sternner

END OF SECTION 265600

## SECTION 311000 - SITE CLEARING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

##### A. Section Includes:

1. Removing existing vegetation.
2. Stripping and stockpiling topsoil.
3. Removing above- and below-grade site improvements.
4. Salvage of existing items to be reused or recycled.
5. Temporary erosion- and sedimentation-control measures.

##### B. Related Sections:

1. Section 015639 "Temporary Tree and Plant Protection".
2. Section 329300 "Exterior Plants"
3. Section 329600 "Transplanting" for removing existing plants to be salvaged for transplanting.

#### 1.3 DEFINITIONS

- A. **Subsoil:** All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.
- B. **Surface Soil:** Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.
- C. **Topsoil:** Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil and is the zone where plant roots grow.

- D. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil and is the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of subsoil and weeds, roots, toxic materials, or other nonsoil materials.
- E. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and indicated on Drawings.
- F. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction, and indicated on Drawings.
- G. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.
- H. Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.

#### 1.4 MATERIAL CITY OF NEW YORKSHIP

- A. Except for stripped topsoil and other materials indicated to be stockpiled or otherwise remain City of New York's property, cleared materials shall become Contractor's property and shall be removed from Project site.

#### 1.5 PREINSTALLATION MEETINGS

- A. Predemolition Conference: Conduct conference at Project site.
  - 1. Inspect and discuss condition of construction to be selectively demolished.
  - 2. Review structural load limitations of existing structure.
  - 3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
  - 4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
  - 5. Discuss coordination of landscape operations, protection of plants and protection of all on site materials including sculptures.

#### 1.6 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples for Verification: For each type of the following:
  - 1. Erosion Control Fabric: 12" x 12" Sample.

## 1.7 INFORMATIONAL SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
  - 1. Use sufficiently detailed photographs or videotape.
  - 2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plants designated to remain.
- B. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.
- C. Proposed Protection Measures: Submit report, including drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control and, for noise control. Indicate proposed locations and construction of barriers.
- D. Schedule of Selective Demolition Activities: Indicate the following:
  - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure City of New York's on-site operations are uninterrupted.
  - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
  - 3. Coordination for shutoff, capping, and continuation of utility services.
  - 4. Coordination of City of New York's continuing occupancy of portions of existing building and of City of New York's partial occupancy of completed Work.
- E. Inventory: Submit a list of items to be removed and salvaged and deliver to City of New York prior to start of demolition.
- F. Predemolition Photographs or Video: Submit before Work begins.

## 1.8 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
  - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from City of New York and authorities having jurisdiction.
  - 2. Provide alternate routes around closed or obstructed traffic ways if required by City of New York or authorities having jurisdiction.
- B. Salvable Improvements: Carefully remove items indicated to be salvaged and store on City of New York's premises as directed by the City of New York.
- C. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.
- D. Immediately after trench excavation install erosion control fabrics.
- E. The following practices are prohibited within protection zones:

1. Storage of construction materials, debris, or excavated material.
  2. Parking vehicles or equipment.
  3. Foot traffic.
  4. Erection of sheds or structures.
  5. Impoundment of water.
  6. Excavation or other digging unless otherwise indicated.
  7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- F. Do not direct vehicle or equipment exhaust towards protection zones.
- G. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.
- H. Soil Stripping, Handling, and Stockpiling: Perform only when the topsoil is dry or slightly moist.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Planting Soil: Requirements for planting soil material are specified in Section 329300 "Plants."
- B. Erosion Control / Landscape Filter Fabric: Provide a 5 oz. woven, needle punched, polypropylene fabric designed for professional and commercial use.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Prior to starting any work the Contractor shall verify that all existing museum sculptures have been properly protected. Do not start work until items have been protected.
- B. Protect and maintain benchmarks and survey control points from disturbance during construction.
- C. Locate and clearly identify trees, shrubs, and other vegetation to remain. Wrap a 1-inch blue vinyl tie tape flag around each tree trunk at 54 inches above the ground or as directed.
- D. Protect existing site improvements to remain from damage during construction.
  1. Restore damaged improvements to their original condition, as acceptable to City of New York.

### 3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways,



according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.

- B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

### 3.3 TREE AND PLANT PROTECTION

- A. General: Protect trees and plants remaining on-site according to arborist recommendations.
- B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Commissioner.

### 3.4 TREE ROOT PRUNING

- A. General: Protect trees and plants remaining on-site according to arborist recommendations.
- B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Commissioner.

### 3.5 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
  - 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
  - 2. Grind down stumps and remove roots, obstructions, and debris to a depth of 30 inches below exposed finished grade.
  - 3. Use only hand methods for grubbing within protection zones.
  - 4. Chip removed tree branches and dispose of off-site.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
  - 1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches, and compact each layer to a density equal to adjacent original ground.

### 3.6 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.

**B. Removing and reinstalling traprock:**

1. Remove all traprock as indicated on plans down to the exposed earth.
2. All traprock shall be consolidated into containers or "Construction Material Big Bags" and temporarily stored outside the project limits.
3. Traprock shall be washed clean of all debris prior to being delivered back to the site.
4. A layer of Landscape Filter Fabric shall be installed on prepared subgrade and the traprock shall be reinstalled to the original thicknesses.

**3.7 DISPOSAL OF SURPLUS AND WASTE MATERIALS**

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off City of New York's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities. Do not interfere with other Project work.

**END OF SECTION 311000**

## SECTION 312000 - EARTH MOVING

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.
- C. "Noguchi Museum - Test Pit Investigation", dated 10 February 2012, geo-technical memorandum is available for reference from the Commissioner.

## 1.2 SUMMARY

## A. Section Includes:

- 1. Hand-excavation or use of small motorized tools only will be allowed on site.
- 2. Preparing subgrades for walks, pavements, plants and landscape components specified elsewhere.
- 3. Excavating and backfilling for structures.
- 4. Subbase course for concrete walks and pavements.
- 5. Subsurface drainage backfill for walls and trenches.
- 6. Excavating and backfilling trenches for utilities and pits for buried utility structures.

## B. Related Sections:

- 1. Division 01 Section "Temporary Facilities and Controls" for temporary controls, utilities, and support facilities; also for temporary site fencing if not in another Section.
- 2. Division 03 Section "Cast-in-Place Concrete" for granular course if placed over vapor retarder and beneath the slab-on-grade.
- 3. Divisions 22, 26 Sections for installing underground utilities and buried associated structures.
- 4. Division 31 Section "Site Clearing" for site stripping, grubbing, stripping and stockpiling topsoil, and removal of above- and below-grade improvements and utilities.
- 5. Division 31 Section "Excavation Support and Protection" for shoring, bracing and sheet piling of excavations.
- 6. Division 32 Section "Plants" for finish grading in planting areas and tree and shrub pit excavation and planting.

### 1.3 DEFINITIONS

- A. Backfill: Soil material or controlled low-strength material used to fill an excavation.
  - 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
  - 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.
- C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.
- D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.
- E. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.
- F. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- G. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.
- H. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- I. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of the following manufactured products required:
  - 1. Geotextiles.
  - 2. Controlled low-strength material, including design mixture.
- B. Samples for Verification: For the following products, in sizes indicated below:
  - 1. Geotextile: 12 by 12 inches.

### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified testing agency.

- B. **Material Test Reports:** For each on-site and borrow soil material proposed for fill and backfill as follows:
  - 1. Classification according to ASTM D 2487.
  - 2. Laboratory compaction curve according to ASTM D 698.
- C. **Pre-excavation Photographs or Videotape:** Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by earth moving operations. Submit before earth moving begins.

#### 1.6 QUALITY ASSURANCE

- A. **Pre-excavation Conference:** Conduct conference at Project site.

#### 1.7 PROJECT CONDITIONS

- A. **Traffic:** Minimize interference with adjoining sculpture garden, roads, streets, walks, and other adjacent occupied or used facilities during earth moving operations.
  - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from The City of New York and authorities having jurisdiction.
  - 2. Provide alternate routes around closed or obstructed traffic ways if required by The City of New York or authorities having jurisdiction.
- B. **Improvements on Adjoining Property:** Authority for performing earth moving indicated on public property adjoining Museum's property will be the responsibility of the Contractor.
  - 1. Do not proceed with work on adjoining property until all approvals and permits for this work are in place.
- C. Do not commence earth moving operations until temporary erosion- and sedimentation-control measures, specified in Division 01 Section "Temporary Facilities and Controls," and Division 31 Section "Site Clearing," are in place.
- D. Do not commence earth moving operations until plant-protection measures specified in Division 01 Section "Temporary Tree and Plant Protection" are in place.
- E. The following practices are prohibited within protection zones:
  - 1. Storage of construction materials, debris, or excavated material.
  - 2. Parking vehicles or equipment.
  - 3. Foot traffic.
  - 4. Erection of sheds or structures.
  - 5. Impoundment of water.
  - 6. Excavation or other digging unless otherwise indicated.
  - 7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

- F. Do not direct vehicle or equipment exhaust towards protection zones.
- G. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

## PART 2 - PRODUCTS

### 2.1 SOIL MATERIALS

- A. General: Provide borrowed soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D 2487, or a combination of these groups; free of rock or gravel larger than 4" in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487, or a combination of these groups, or a combination of these groups; free of rock or gravel larger than 4 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
  - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- H. Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and 0 to 5 percent passing a No. 8 sieve.
- I. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand; ASTM D 448; coarse-aggregate grading Size 67; with 100 percent passing a 1-inch sieve and 0 to 5 percent passing a No. 4 sieve.

- J. Sand: ASTM C 33; fine aggregate.
- K. Impervious Fill: Clayey gravel and sand mixture capable of compacting to a dense state.

## 2.2 GEOTEXTILES

- A. Separation Geotextile: Woven geotextile fabric, manufactured for separation applications, made from polyolefins or polyesters; with elongation less than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:
  - 1. Survivability: Class 2; AASHTO M 288.
  - 2. Grab Tensile Strength: 247 lbf; ASTM D 4632.
  - 3. Sewn Seam Strength: 222 lbf; ASTM D 4632.
  - 4. Tear Strength: 90 lbf; ASTM D 4533.
  - 5. Puncture Strength: 90 lbf; ASTM D 4833.
  - 6. Apparent Opening Size: No. 60 sieve, maximum; ASTM D 4751.
  - 7. Permittivity: 0.02 per second, minimum; ASTM D 4491.
  - 8. UV Stability: 50 percent after 500 hours' exposure; ASTM D 4355.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth moving operations.

#### Subgrade preparation

- 1. The subgrade should be over-excavated for at least one foot and proof-rolled with at least six overlapping passes of a 1.5-ton walk-behind vibratory drum roller. Soft or loose zones exhibiting excessive pumping, rutting or weaving during proof-rolling should be removed. The over-excavation is to be replaced with ¾-inch crushed stone wrapped in filter fabric.
- 2. The foundation contractor should protect the foundation subgrade during periods of prolonged precipitation and cold weather. If the concrete is not poured the same day the subgrade was prepared, the contractor should also use blankets or other acceptable means to protect the subgrade against freezing weather. The contractor should also take all necessary precaution to prevent undermining the soil under the sidewalk which is immediately adjacent to the existing CMU block wall.

- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

### 3.2 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
  - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.

### 3.3 EXPLOSIVES

- A. Explosives: Do not use explosives.

### 3.4 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
  - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
  - 2. Remove rock to lines and grades sufficient to permit installation of permanent construction.
  - 3. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; together with soil, boulders, and other materials not classified as rock or unauthorized excavation.
  - 4. Rock excavation includes removal and disposal of rock. Remove rock to lines and subgrade elevations indicated to permit installation of permanent construction.

### 3.5 EXCAVATION FOR STRUCTURES

- A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.



1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
- B. Excavations at Edges of Tree- and Plant-Protection Zones:
1. Consult landscape documents for limits and handling of work in these areas. Do not proceed until an agreed-upon method and sequence of work has been agreed to.
  2. Excavate by hand to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
  3. Cut and protect roots according to requirements in Division 01 Section "Temporary Tree and Plant Protection."

### 3.6 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

### 3.7 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
1. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.
- B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.
1. Clearance: As indicated.
- C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.
1. For pipes and conduit less than 6 inches in nominal diameter, hand-excavate trench bottoms and support pipe and conduit on an undisturbed subgrade.
  2. For pipes and conduit 6 inches or larger in nominal diameter, shape bottom of trench to support bottom 90 degrees of pipe or conduit circumference. Fill depressions with tamped sand backfill.
  3. For flat-bottomed, multiple-duct conduit units, hand-excavate trench bottoms and support conduit on an undisturbed subgrade.
  4. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

- D. **Trench Bottoms:** Excavate trenches 4 inches deeper than bottom of pipe and conduit elevations to allow for bedding course. Hand-excavate deeper for bells of pipe.
1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.
- E. **Trenches in Tree- and Plant-Protection Zones:**
1. Consult landscape documents for limits and handling of work in these areas. Do not proceed until an agreed-upon method and sequence of work has been agreed to.
  2. Hand-excavate to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
  3. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.
  4. Cut and protect roots according to requirements in Division 01 Section "Temporary Tree and Plant Protection."

### 3.8 SUBGRADE INSPECTION

- A. Notify The Commissioner when excavations have reached required subgrade.
- B. If The Commissioner determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
1. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by The Commissioner, and replace with compacted backfill or fill as directed.
- C. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by The Commissioner, without additional compensation.

### 3.9 UNAUTHORIZED EXCAVATION

- A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by The Commissioner.
1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by The Commissioner.

### 3.10 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

### 3.11 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
  1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
  2. Surveying locations of underground utilities for Record Documents.
  3. Testing and inspecting underground utilities.
  4. Removing concrete formwork.
  5. Removing trash and debris.
  6. Removing temporary shoring and bracing, and sheeting.
  7. Installing permanent or temporary horizontal bracing on horizontally supported walls.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

### 3.12 UTILITY TRENCH BACKFILL

- A. Place backfill on subgrades free of mud, frost, snow, or ice.
- B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
- C. Backfill voids with satisfactory soil while removing shoring and bracing.
- D. Place and compact initial backfill of subbase material or satisfactory soil, free of particles larger than 1 inch in any dimension, to a height of 12 inches over the pipe or conduit.
  1. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.
- E. Controlled Low-Strength Material: Place initial backfill of controlled low-strength material to a height of 12 inches over the pipe or conduit. Coordinate backfilling with utilities testing.
- F. Place and compact final backfill of satisfactory soil to final subgrade elevation.
- G. Controlled Low-Strength Material: Place final backfill of controlled low-strength material to final subgrade elevation.

### 3.13 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:
  - 1. Under grass and planted areas, use satisfactory soil material.
  - 2. Under walks and pavements, use satisfactory soil material.
  - 3. Under footings and foundations, use engineered fill.
- C. Place soil fill on subgrades free of mud, frost, snow, or ice.

### 3.14 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
  - 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
  - 2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

### 3.15 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 1557:
  - 1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent.
  - 2. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 92 percent.
  - 3. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.
  - 4. For utility trenches, compact each layer of initial and final backfill soil material at 85 percent.

**3.16 GRADING**

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
1. Provide a smooth transition between adjacent existing grades and new grades.
  2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.

**3.17 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS**

- A. Place subbase course and base course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place subbase course and base course under pavements and walks as follows:
1. Install separation geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.
  2. Place base course material over subbase course under hot-mix asphalt pavement.
  3. Shape subbase course and base course to required crown elevations and cross-slope grades.
  4. Place subbase course and base course 6 inches or less in compacted thickness in a single layer.
  5. Place subbase course and base course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
  6. Compact subbase course and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.
- C. Pavement Shoulders: Place shoulders along edges of subbase course and base course to prevent lateral movement. Construct shoulders, at least 12 inches wide, of satisfactory soil materials and compact simultaneously with each subbase and base layer to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.

**3.18 FIELD QUALITY CONTROL**

- A. Special Inspections: The City of New York will engage a qualified special inspector to perform the following special inspections:
1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
  2. Determine that fill material and maximum lift thickness comply with requirements.
  3. Determine, at the required frequency, that in-place density of compacted fill complies with requirements.
  4. Coordinate special inspections as required by code.

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- B. **Testing Agency:** The City of New York will engage a qualified geotechnical engineering testing agency to perform tests and inspections.
- C. **Allow testing agency to inspect and test subgrades and each fill or backfill layer.** Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
- D. **Footing Subgrade:** At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by The Commissioner.
- E. **Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2922, and ASTM D 2937, as applicable. Tests will be performed at the following locations and frequencies:**
  - 1. **Paved and Building Slab Areas:** At subgrade and at each compacted fill and backfill layer, at least one test for paved area or building slab, as determined by the Special Inspector .
  - 2. **Foundation Wall Backfill:** At each compacted backfill layer, as determined by the Special Inspector .
  - 3. **Trench Backfill:** At each compacted initial and final backfill layer as determined by the Special Inspector .
- F. **When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.**

### 3.19 PROTECTION

- A. **Protecting Graded Areas:** Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. **Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.**
  - 1. **Scarify or remove and replace soil material to depth as directed by The Commissioner; reshape and recompact.**
- C. **Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.**
  - 1. **Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.**

3.20 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off The Museum's property.
- B. Transport surplus satisfactory soil to designated storage areas on The Museum's property. Stockpile or spread soil as directed by The Commissioner.
  - 1. Remove waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off The Museum's property.

END OF SECTION 312000

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## SECTION 315000 - EXCAVATION SUPPORT AND PROTECTION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

- A. Section includes temporary excavation support and protection systems.
- B. Related Sections:
  - 1. Division 01 Section "Temporary Facilities and Controls" for temporary utilities and support facilities.

#### 1.3 PERFORMANCE REQUIREMENTS

- A. Design, furnish, install, monitor, and maintain excavation support and protection system capable of supporting excavation sidewalls and of resisting soil and hydrostatic pressure and superimposed and construction loads.
  - 1. Delegated Design: Design excavation support and protection system, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.
  - 2. Prevent surface water from entering excavations by grading, dikes, or other means.
  - 3. Install excavation support and protection systems without damaging existing buildings, structures, and site improvements adjacent to excavation.
  - 4. Monitor vibrations, settlements, and movements.

#### 1.4 ACTION SUBMITTALS

- A. Shop Drawings: For excavation support and protection system.

- B. **Delegated-Design Submittal:** For excavation support and protection system indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

## 1.5 INFORMATIONAL SUBMITTALS

- A. **Qualification Data:** For qualified professional engineer.
- B. **Other Informational Submittals:**
  - 1. **Photographs or Videotape:** Show existing conditions of adjacent construction and site improvements that might be misconstrued as damage caused by the absence of, the installation of, or the performance of excavation support and protection systems. Submit before Work begins.
  - 2. **Record Drawings:** Identifying and locating capped utilities and other subsurface structural, electrical, or mechanical conditions.

## 1.6 QUALITY ASSURANCE

- A. **Preinstallation Conference:** Conduct conference at Project site.
  - 1. **Review methods and procedures related to excavation support and protection system including, but not limited to, the following:**
    - a. Existing utilities and subsurface conditions.
    - b. Proposed excavations.
    - c. Proposed equipment.
    - d. Monitoring of excavation support and protection system.
    - e. Working area location and stability.
    - f. Coordination with waterproofing.
    - g. Removal of excavation support and protection system.

## 1.7 PROJECT CONDITIONS

- A. **Interruption of Existing Utilities:** Do not interrupt any utility serving facilities occupied by The City of New York or others unless permitted under the following conditions and then only after arranging to provide temporary utility according to requirements indicated:
  - 1. Notify The City of New York no fewer than two days in advance of proposed interruption of utility.
  - 2. Do not proceed with interruption of utility without The City of New York's written permission.
- B. **Project-Site Information:** A geotechnical report has been prepared for this Project and is available for information only. The opinions expressed in this report are those of geotechnical

engineer and represent interpretations of subsoil conditions, tests, and results of analyses conducted by geotechnical engineer. The City of New York will not be responsible for interpretations or conclusions drawn from the data.

1. Make additional test borings and conduct other exploratory operations necessary for excavation support and protection.
- C. Survey Work: Engage a qualified land surveyor or professional engineer to survey adjacent existing buildings, structures, and site improvements; establish exact elevations at fixed points to act as benchmarks. Clearly identify benchmarks and record existing elevations.
1. During installation of excavation support and protection systems, regularly resurvey benchmarks, maintaining an accurate log of surveyed elevations and positions for comparison with original elevations and positions. Promptly notify The Commissioner if changes in elevations or positions occur or if cracks, sags, or other damage is evident in adjacent construction.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. General: Provide materials that are either new or in serviceable condition that meet code and permit requirements.
- B. Structural Steel: ASTM A 36/A 36M, ASTM A 690/A 690M, or ASTM A 992/A 992M.
- C. Steel Sheet Piling: ASTM A 328/A 328M, ASTM A 572/A 572M, or ASTM A 690/A 690M; with continuous interlocks.
  1. Corners: Site-fabricated mechanical interlock or roll-formed corner shape with continuous interlock.
- D. Wood Lagging: Lumber, mixed hardwood, nominal rough thickness of size and strength required for application.
- E. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.
- F. Tiebacks: Steel bars, ASTM A 722/A 722M.
- G. Tiebacks: Steel strand, ASTM A 416/A 416M.

## **PART 3 - EXECUTION**

### **3.1 PREPARATION**

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards that could develop during excavation support and protection system operations.**
  - 1. Shore, support, and protect utilities encountered.**
- B. Install excavation support and protection systems to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.**
  - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from The City of New York and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.**
- C. Locate excavation support and protection systems clear of permanent construction so that forming and finishing of concrete surfaces are not impeded.**
- D. Monitor excavation support and protection systems daily during excavation progress and for as long as excavation remains open. Promptly correct bulges, breakage, or other evidence of movement to ensure that excavation support and protection systems remain stable.**
- E. Promptly repair damages to adjacent facilities caused by installing excavation support and protection systems.**

### **3.2 SHEET PILING**

- A. Before starting excavation, install one-piece sheet piling lengths and tightly interlock to form a continuous barrier. Accurately place the piling, using templates and guide frames unless otherwise recommended in writing by the sheet piling manufacturer. Limit vertical offset of adjacent sheet piling to 60 inches. Accurately align exposed faces of sheet piling to vary not more than 2 inches from a horizontal line and not more than 1:120 out of vertical alignment. Cut tops of sheet piling to uniform elevation at top of excavation.**

### **3.3 TIEBACKS**

- A. Tiebacks: Drill, install, grout, and tension tiebacks. Test load-carrying capacity of each tieback and replace and retest deficient tiebacks.**
  - 1. Test loading shall be observed by a qualified professional engineer responsible for design of excavation support and protection system.**

2. Maintain tiebacks in place until permanent construction is able to withstand lateral soil and hydrostatic pressures.

### 3.4 BRACING

- A. Bracing: Locate bracing to clear columns, floor framing construction, and other permanent work. If necessary to move brace, install new bracing before removing original brace.
  1. Do not place bracing where it will be cast into or included in permanent concrete work unless otherwise approved by The Commissioner.
  2. Install internal bracing, if required, to prevent spreading or distortion of braced frames.
  3. Maintain bracing until structural elements are supported by other bracing or until permanent construction is able to withstand lateral earth and hydrostatic pressures.

### 3.5 REMOVAL AND REPAIRS

- A. Remove excavation support and protection systems when construction has progressed sufficiently to support excavation and bear soil and hydrostatic pressures. Remove in stages to avoid disturbing underlying soils or damaging structures, pavements, facilities, and utilities.
  1. Remove excavation support and protection systems to a minimum depth of 48 inches below overlaying construction and abandon remainder.
  2. Fill voids immediately with approved backfill compacted to density specified in Division 31 Section "Earth Moving."
  3. Repair or replace, as approved by Commissioner, adjacent work damaged or displaced by removing excavation support and protection systems.
- B. Leave excavation support and protection systems permanently in place.

END OF SECTION 315000

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## SECTION 321316 - CONCRETE WALKS AND CURBS

### PART 1 - GENERAL

#### 1.01 GENERAL REQUIREMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.02 WORK INCLUDED

- A. The Work of this Section includes all labor, materials, equipment and services necessary to complete the concrete walks and curbs as shown on the drawings and specified herein, including but is not necessarily limited to the following:
  - 1. Concrete curbs and walks, new replacement and repair.
  - 2. Reinforcement.
  - 3. Joint fillers.

#### 1.03 RELATED WORK

- A. Division 02 Section "Selective Demolition"
- C. Division 03 Section "Cast in Place Concrete"
- D. Division 31 Sections "Earth Moving" and "Excavation Support and Protection"

#### 1.04 SUBMITTALS

- A. Shop Drawings
  - 1. Showing layout of flags, joint profiles, reinforcing, finishes and all associated details and interface with adjacent construction.
- B. Furnish materials certification.

#### 1.05 REFERENCES

- A. Comply with all requirements of New York City Department of Transportation, Bureau of Highways.
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## PART 2 - PRODUCTS

### 2.01 FORMS

- A. Provide steel or wood of size and strength to resist movement during concrete placement and to retain horizontal and vertical alignment until removal. Use straight forms, free of distortion and defects.
- B. Use flexible spring steel forms or laminated boards to form radius bends.

### 2.02 REINFORCEMENT

- A. Provide epoxy-coated welded wire mesh conforming to ASTM A185, 6 x 6, ten (10) gauge.

### 2.03 CONCRETE

#### A. Concrete Materials

1. Comply with the applicable requirements of Section 033000 as noted on Structural Drawings.
2. All concrete work of this Section shall contain 4.5 percent to 7.5 percent entrained air and shall be air entrained with "Air-Mix" air entraining agent made by Euclid Chemical Company or approved equal made by Master Builders or Grace. Agent shall conform to ASTM C260 and shall be mixed with concrete in accordance with manufacturer's instructions.

#### B. Concrete Mix, Design and Testing: Comply with applicable requirements of Section 033000 for concrete mix design, sampling and testing, and quality control, and as herein specified. Design the mix to produce normal-weight concrete consisting of Portland cement, aggregate, air-entraining admixture, water reducing admixture high range water reducing admixture and water to produce the following properties:

1. Compressive Strength: Four-thousand (4000) psi, minimum at twenty-eight (28) days, with a water cement ratio not to exceed 0.45 by weight.
2. Slump Range: Two (2) inches to four (4) inches for conventional concrete. Concrete containing high range water reducing admixture shall have a maximum slump of 9".
3. Air Content: 4.5 percent to 7.5 percent.



#### 2.04 JOINT FILLER

- A. Gasket: For joint fillers in concrete work, provide closed cell extruded neoprene gasket conforming to ASTM C509, Grade 4, black.
- B. Sealant: Where sealant is noted herein to occur above gasket, provide a two (2) part polyurethane sealant complying with Fed. Spec. TT-S-00227, Class B, Type II, self leveling, designed for pedestrian traffic, equal to "HPL" made by Tremco, or approved equal made by Mameco or Pecora.
- C. Back-up rod for sealant shall be "Ethafoam" made by Dow Chemical Co., Sonlastic made by BASF, HBR made by Nomaco, Inc. or approved equal.

#### 2.05 CURING

- A. Cure concrete with clear curing and sealing compound (VOC compliant). The compound shall have 30% solids content minimum, and will not yellow or bluish under ultra violet light after 500 hours of test in accordance with ASTM D4887 and will have test data from an independent testing laboratory indicating a maximum moisture loss of 0.039 grams per sq. cm. when applied at a coverage rate of 300 sq. ft. per gallon. Sodium silicate compounds are not permitted. Compound shall be "Super Diamond Clear VOX" by The Euclid Chemical Co.

#### 2.06 WATER REDUCING MIXTURE

- A. Provide water reducing and densifying admixture. The admixture shall conform to ASTM C494, Type A, and not contain any lignosilicates nor more than one (1) percent chloride ions.
  - 1. "Eucon WR-75" by Euclid Chemical Company
  - 2. "Pozzolith 200N" made by BASF
  - 3. "ADVA" made by W.R. Grace and Co.
  - 4. or approved equal

#### 2.07 HIGH RANGE WATER-REDUCING ADMIXTURE (SUPERPLASTICIZER)

- A. The admixture shall conform to ASTM C494, Type F or G, and not contain more chloride ions than are present in municipal drinking water. The admixture shall be
  - 1. "Eucon 37" by The Euclid Chemical Co.
  - 2. "Sikament" by Sika Chemical Corp.
  - 3. "ADVA" made by W.R. Grace and Co.
  - 4. or approved equal.

**2.08 STEEL CURB EDGING**

- A. If required, steel curb edging shall conform to New York City, Dept. of Transportation, Bureau of Highway Operations, Standard Specifications, Section 4.09.

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**PART 3.00 - EXECUTION**

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**3.01 INSPECTION**

- A. Examine the areas and conditions under which concrete walks and curbs are to be installed and notify the The Commissioner of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of the work.

**3.02 SURFACE PREPARATION**

- A. Remove loose material from the sub-base surface and compact to 95% density per ASTM D-1557 immediately before placing concrete.
- B. Proof roll prepared sub-base surface to check for unstable areas and the need for additional compaction. Do not begin paving work until such conditions have been corrected and are ready to receive paving.
- C. Blend new sidewalk and curb work into existing areas to remain. Protect all areas not to be replaced and to protect from damage.
- D. Replacement of sidewalk and curb of damaged areas will be cut out and replaced to the closest joint.

**3.03 FORM CONSTRUCTION**

- A. Set forms to the required grades and lines, rigidly braced and secured. Install sufficient quantity of forms to allow continuous progress of the work and so that forms can remain in place at least twenty-four (24) hours after concrete pavement.
- B. Check completed formwork for grade and alignment to the following tolerances:
1. Tops of forms not more than 1/8" in ten (10) feet.
  2. Vertical face on longitudinal axis, not more than 1/4" in ten (10) feet.
- C. Clean forms after each use and coat with form release agent as often as required to ensure separation from concrete without damage.

**3.04 REINFORCEMENT**

- A. Locate, place, and support reinforcement in accordance with ACI standards.

### 3.05 CONCRETE PLACEMENT

- A. Comply with the requirements of ACI for mixing and placing concrete.
- B. Do not place concrete until sub-base and forms have been checked for line and grade. Moisten sub-base if required to provide a uniform dampened condition at the time concrete is placed. Do not place concrete around manholes or other structures until they are at required finished elevation and alignment.
- C. Placing Concrete
  - 1. Place concrete using methods which prevent segregation of the mix. Consolidate concrete along the face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square faced shovels for hand spreading and consolidation.
  - 2. Deposit and spread concrete in a continuous operation between transverse joints, as far as possible. If interrupted for more than 1/2 hour, place a construction joint.

### 3.06 JOINTS

- A. Construct expansion, weakened plane (contraction), and construction joints true to line with face perpendicular to surface of the concrete. Construct transverse joints at right angles to the centerline.
- B. Weakened Plane Joints: Provide weakened plane (contraction) joints, sectioning concrete into areas as shown on the Drawings or as specified herein. Construct weakened plane joints for a depth equal to at least 1/4 concrete thickness.
- C. Construction Joints: Place construction joints at the end of all pours and at locations where placement operations are stopped for a period of more than 1/2 hour, except where such pours terminate at expansion joints. Use standard metal keyway section forms.
- D. Expansion Joints
  - 1. Provide premolded joint filler for expansion joints abutting concrete curbs, catch basins, manholes, inlets, structures, walks, and other fixed objects, unless otherwise indicated.
  - 2. Locate expansion joints at thirty (30) feet o.c. for each pavement lane, unless otherwise indicated.
  - 3. Extend joint fillers full width and depth of joint, and not less than 1/2" or more than one (1) inch below finished surface where joint sealer is required. If no joint sealer required, place top of joint filler 1/8" below finished concrete surface.

4. Furnish joint fillers in one piece lengths for the fill width being placed wherever possible. Where more than one length is required, adhere joint filler sections together.
5. Protect the top edge of the joint filler during concrete placement with a metal cap or other temporary material. Remove protection after concrete has been placed on both sides of joint.
6. Fillers and Sealants: Apply sealant over expansion joint where occupied space occurs below the walk. Comply with the requirements of Section 079200 for preparation of joints and installation, including priming of joints and backer rod.

### 3.07 CONCRETE FINISHING

- A. After consolidating and striking off concrete, level the surface by darbying or bull floating. After the concrete has stiffened sufficiently to permit the operation and the surface sheen has disappeared, the surface shall be floated. Use hand methods only where mechanical floating is not possible. Adjust the floating to compact the surface and produce a uniform texture.
- B. After floating, test surface for trueness with a ten (10) foot straight edge. Distribute concrete as required to remove surface irregularities, and refloat repaired areas to provide a continuous smooth finish.
- C. Work edges of slabs, gutters, back top edge of curb, and formed joints with an edging tool, and round to 1/2" radius, unless otherwise indicated. Eliminate any tool marks on concrete surface.
- D. After completion of floating and when excess moisture or surface sheen has disappeared, complete surface finishing by drawing a fine hair broom across concrete surface, perpendicular to line of traffic. Repeat operation if required to provide a fine line texture to match existing adjacent sidewalks and as acceptable to the The Commissioner.
  1. Scoring of sidewalks shall conform to the requirements of the New York City Department of Transportation standards.
- E. Do not remove forms for twenty-four (24) hours after concrete has been placed. After form removal, clean ends of joints and point up any minor honeycombed areas. Remove and replace areas or sections with major defects, as directed by the The Commissioner.

### 3.08 CURING

- A. Protect and cure finished concrete paving, use curing compound specified herein applied in accordance with manufacturer's instructions.

### 3.09 REPAIRS AND PROTECTION

- A. Repairs: Where pavement has been cracked or damaged, remove the entire panel wherein the damage occurs and install a new panel of pavement. No patching within a panel is permitted.
- B. Protection
  - 1. Protect concrete from damage until acceptance of work. Exclude traffic from pavement for at least fourteen (14) days after placement. No construction traffic is permitted.
  - 2. Sweep concrete pavement and wash free of stains, discolorations, dirt, and other foreign material just prior to final inspection.

END OF SECTION

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## SECTION 321373 - CONCRETE PAVING JOINT SEALANTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Cold-applied joint sealants.
- B. Related Sections:
  - 1. Division 03 Section "Cast-in-Place Concrete" for Concrete Paving
  - 2. Division 32 Section "Concrete Walks and Curbs" for constructing joints in concrete pavement.

#### 1.3 PRECONSTRUCTION TESTING

- A. Preconstruction Compatibility and Adhesion Testing: Submit to joint-sealant manufacturers, for testing indicated below, Samples of materials that will contact or affect joint sealants.
  - 1. Use ASTM C 1087 and manufacturer's standard test method to determine whether priming and other specific joint-preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.
  - 2. Submit no fewer than four pieces of each type of material, including joint substrates, shims, joint-sealant backings, secondary seals, and miscellaneous materials.
  - 3. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
  - 4. For materials failing tests, obtain joint-sealant manufacturer's written instructions for corrective measures including use of specially formulated primers.

5. Testing will not be required if joint-sealant manufacturers submit joint-preparation data that are based on previous testing, not older than 24 months, of sealant products for compatibility with and adhesion to joint substrates and other materials matching those submitted.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each joint-sealant product indicated.
- B. Samples for Verification: For each kind and color of joint sealant required, provide Samples with joint sealants in 1/2-inch- wide joints formed between two 6-inch- long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
- C. Pavement-Joint-Sealant Schedule: Include the following information:
  1. Joint-sealant application, joint location, and designation.
  2. Joint-sealant manufacturer and product name.
  3. Joint-sealant formulation.
  4. Joint-sealant color.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer.
- B. Product Certificates: For each type of joint sealant and accessory, from manufacturer.
- C. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for joint sealants.
- D. Preconstruction Compatibility and Adhesion Test Reports: From joint-sealant manufacturer, indicating the following:
  1. Materials forming joint substrates and joint-sealant backings have been tested for compatibility with and adhesion to joint sealants.
  2. Interpretation of test results and written recommendations for primers and substrate preparation needed for adhesion.

#### 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Source Limitations: Obtain each type of joint sealant from single source from single manufacturer.



- C. **Product Testing:** Test joint sealants using a qualified testing agency.
  - 1. **Testing Agency Qualifications:** An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.
- D. **Preinstallation Conference:** Conduct conference at Project site.

## 1.7 PROJECT CONDITIONS

- A. **Do not proceed with installation of joint sealants under the following conditions:**
  - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
  - 2. When joint substrates are wet.
  - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
  - 4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. **Compatibility:** Provide joint sealants, backing materials, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer based on testing and field experience.
- B. **Colors of Exposed Joint Sealants:** As selected by Commissioner from manufacturer's full range.

### 2.2 COLD-APPLIED JOINT SEALANTS

- A. **Single-Component, Nonsag, Silicone Joint Sealant for Concrete:** ASTM D 5893, Type NS.
  - 1. **Products:** Subject to compliance with requirements, provide one of the following:
    - a. Crafco Inc., an ERGON company; RoadSaver Silicone.
    - b. Dow Corning Corporation; 888.
    - c. Pecora Corporation; 301 NS.
    - d. Or approved equal
- B. **Single-Component, Self-Leveling, Silicone Joint Sealant for Concrete:** ASTM D 5893, Type SL.

1. Products: Subject to compliance with requirements, provide the following or approved equal:
  - a. Crafcro Inc., an ERGON company; RoadSaver Silicone SL.
  - b. Dow Corning Corporation; 890-SL.
  - c. Pecora Corporation; 300 SL.
  - d. Or approved equal

### 2.3 JOINT-SEALANT BACKER MATERIALS

- A. General: Provide joint-sealant backer materials that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by joint-sealant manufacturer based on field experience and laboratory testing.
- B. Round Backer Rods for Cold-Applied Joint Sealants: ASTM D 5249, Type 1, of diameter and density required to control sealant depth and prevent bottom-side adhesion of sealant.
- C. Round Backer Rods for Cold-Applied Joint Sealants: ASTM D 5249, Type 3, of diameter and density required to control joint-sealant depth and prevent bottom-side adhesion of sealant.
- D. Backer Strips for Cold-Applied Joint Sealants: ASTM D 5249; Type 2; of thickness and width required to control joint-sealant depth, prevent bottom-side adhesion of sealant, and fill remainder of joint opening under sealant.

### 2.4 PRIMERS

- A. Primers: Product recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine joints indicated to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. **Surface Cleaning of Joints:** Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions.
- B. **Joint Priming:** Prime joint substrates where indicated or where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

### 3.3 INSTALLATION OF JOINT SEALANTS

- A. **General:** Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated unless more stringent requirements apply.
- B. **Joint-Sealant Installation Standard:** Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. **Install joint-sealant backings of kind indicated to support joint sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.**
  - 1. Do not leave gaps between ends of joint-sealant backings.
  - 2. Do not stretch, twist, puncture, or tear joint-sealant backings.
  - 3. Remove absorbent joint-sealant backings that have become wet before sealant application and replace them with dry materials.
- D. **Install joint sealants using proven techniques that comply with the following and at the same time backings are installed:**
  - 1. Place joint sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses in each joint configuration.
  - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- E. **Tooling of Nonsag Joint Sealants:** Immediately after joint-sealant application and before skinning or curing begins, tool sealants according to the following requirements to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint:
  - 1. Remove excess joint sealant from surfaces adjacent to joints.
  - 2. Use tooling agents that are approved in writing by joint-sealant manufacturer and that do not discolor sealants or adjacent surfaces.

- F. Provide joint configuration to comply with joint-sealant manufacturer's written instructions unless otherwise indicated.

#### 3.4 CLEANING

- A. Clean off excess joint sealant or sealant smears adjacent to joints as the Work progresses, by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

#### 3.5 PROTECTION

- A. Protect joint sealants, during and after curing period, from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately and replace with joint sealant so installations in repaired areas are indistinguishable from the original work.

END OF SECTION 321373

## SECTION 323119 - METAL FENCES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Galvanized steel post and frame construction
  - 2. Infill panels of coated woven wire mesh
  - 3. Associated trim and attachments as shown on the drawings and otherwise required
- B. Related Sections:
  - 1. Division 04 Section "Concrete Unit Masonry" for wall on which fencing is mounted
  - 2. Division 05 Section "Metal Fabrications" for metal specifications
  - 3. Division 26 Sections for coordination of conduit and lighting.

#### 1.3 PERFORMANCE REQUIREMENTS

- A. STRUCTURAL STABILITY
  - 1. Fencing and associated anchorage must meet the dead and live loads as per code requirements for guardrail construction.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.

- B. **Shop Drawings:** For fencing assembly. Include plans, elevations, sections, details, and attachments to other work.
  - 1. **Wiring Diagrams:** For interface and coordination of conduit or lighting.
- C. **Samples:** For each material and for each color specified.
  - 1. Provide Samples 12 inches in length for linear materials.
  - 2. Provide Samples 12 inches square or typical piece of each typical component, including hardware, accessories, plates and typical folded mesh corner.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. **Welding certificates.**
- B. **Product Test Reports:** Based on evaluation of comprehensive tests performed by a qualified testing agency, for decorative metallic-coated steel tubular picket fences, including finish, indicating compliance with referenced standard and other specified requirements.

#### 1.6 CLOSEOUT SUBMITTALS

- A. **Maintenance Data:** For gate operators to include in maintenance manuals.

#### 1.7 QUALITY ASSURANCE

- A. **Installer Qualifications:** Fabricator of products.
- B. **Welding Qualifications:** Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
- C. **Electrical Components, Devices, and Accessories:** Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- D. **UL Standard:** Provide gate operators that comply with UL 325.
- E. **Emergency Access Requirements:** Comply with requirements of authorities having jurisdiction for automatic gate operators on gates that must provide emergency access.
- F. **Mockups:** Build mockups as indicated on the drawings to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.
  - 1. Include a typical corner bay of fence showing all typical components and attachments complying with requirements.
  - 2. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

- G. Preinstallation Conference: Conduct conference at Project site.

## PART 2 - PRODUCTS

### 2.1 STEEL AND IRON

- A. All components to be galvanized with G90 coating unless otherwise indicated.
- B. Plates, Shapes, and Bars: ASTM A 36/A 36M.
- C. Bars (Pickets): Hot-rolled, carbon steel complying with ASTM A 29/A 29M, Grade 1010.
- D. Tubing: ASTM A 500, cold formed steel tubing.
- E. Bar Grating: NAAMM MBG 531.
  - 1. Bars: Hot-rolled steel strip, ASTM A 1011/A 1011M, Commercial Steel, Type B.
  - 2. Wire Rods: ASTM A 510.
- F. Uncoated Steel Sheet: If indicate, hot-rolled steel sheet, ASTM A 1011/A 1011M, Structural Steel, Grade 45 or cold-rolled steel sheet, ASTM A 1008/A 1008M, Structural Steel, Grade 50.
- G. Galvanized-Steel Sheet: ASTM A 653/A 653M, structural quality, Grade 50, with G90 coating.
- H. Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A 792/A 792M, structural quality, Grade 50, with AZ60 coating.
- I. Castings: Either gray or malleable iron unless otherwise indicated.
  - 1. Gray Iron: ASTM A 48/A 48M, Class 30.
  - 2. Malleable Iron: ASTM A 47/A 47M.

### 2.2 MISCELLANEOUS MATERIALS

- A. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.
- B. Concrete: Normal-weight, air-entrained, ready-mix concrete complying with requirements in structural drawings and Division 03 Section "Cast-in-Place Concrete" with a minimum 28-day compressive strength.
- C. Nonshrink Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107 and specifically recommended by manufacturer for exterior applications.

## 2.3 STEEL FENCES

- A. Steel Fences: Fences made from steel tubing, posts, bars and shapes as shown on the drawings, hot-dip galvanized.
- B. Posts: Square steel tubing.
  - 1. As shown on the drawings
- C. Rails:
  - 1. As shown on the drawings
- D. Frames:
  - 1. As shown on the drawings
- E. Infill: Custom design as indicated on Drawings.
  - 1. Basis of Design: Welded 2" x 2", 8-gauge welded wire mesh to match Commissioner's sample, hot dipped galvanized.
- F. Fasteners: Stainless-steel carriage bolts and tamperproof nuts.
- G. Fabrication: Assemble fences into sections by welding frames to adjacent stiles.
  - 1. Fabricate sections with clips welded to rails for fastening to posts in field.
  - 2. Drill posts and clips for fasteners before finishing to maximum extent possible.
- H. Fabrication: Fabricate welded wire infill into sections of size indicated.
  - 1. Fabricate welded frames for fastening to posts in field.
  - 2. Pre-Drill posts and frames for field erection of fasteners
- I. Finish exposed welds to comply with NOMMA Guideline 1, Finish #2 - completely sanded joint, some undercutting and pinholes okay.
- J. Galvanizing: For all items other than hardware that are indicated to be galvanized, hot-dip galvanize to comply with ASTM A 123/A 123M. For hardware items, hot-dip galvanize to comply with ASTM A 153/A 153M.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, construction layout, and other conditions affecting performance of the Work.



- B. Do not begin installation before final grading is completed unless otherwise permitted by The Commissioner.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.
  - 1. Construction layout and field engineering are specified in Division 01 Section "Execution"

### 3.3 FENCE INSTALLATION

- A. Install fences according to drawings.
- B. Install fences by setting posts as indicated and fastening infill panels to posts.
- C. Post Setting: Set posts as indicated on the drawings with mechanical anchors at indicated spacing attached to new masonry wall below.
  - 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
  - 2. Coordinate post installation with masonry jointing and coping stones.
  - 3. Space posts uniformly as indicated on the drawings.

### 3.4 REPAIRING AND CLEANING

- A. Touch up galvanized surfaces on existing or new components with galvanized paint to maintain continuity of protection. Comply with manufacturer's instructions for preparation and scope of touch-up/repair.
- B. Test all completed work to assure that it is anchored securely, well coordinated with adjacent construction and free of debris.

END OF SECTION 323119

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## SECTION 328400 - PLANTING IRRIGATION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division I specification sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

#### 1.2 SUMMARY

- A. Provide all materials, labor, equipment, service, etc., necessary and incidental to the completion of all site irrigation work for all plant material within the project limits,.
- B. Work to be done includes furnishing all labor, materials, equipment and services required to complete all irrigation work indicated on the Drawings, as specified herein, or both.
- C. Mechanical point of connection for exterior irrigation system shall be new domestic connection (minimum 70 psi dynamic pressure) at various locations (provided by others) as shown on Drawings.
- D. Electrical point of connection for irrigation system shall be to 120-volt, 20-amp building electrical circuit provided and installed by others, within designated mechanical room inside existing building.
- E. Drawings and Specifications must be interpreted and are intended to complement each other. The Contractor shall furnish and install all parts, which may be required by the Drawings and omitted by the Specifications, or vice versa, just as though required by both. Should there appear to be discrepancies or question of intent, the Contractor shall refer the matter to the City of New York for decision, and his interpretation shall be final, conclusive and binding.
- F. All necessary changes to the Drawings to avoid any obstacles shall be made by the Contractor with the approval of the City of New York.
- G. Trench excavation, back filling and bedding materials, together with the testing of the completed installation shall be included in this work.
- H. Work shall be constructed and finished in every respect in a good, workmanlike and substantial manner, to the full intent and meaning of the Drawings and Specifications. All parts necessary for the proper and complete execution of the work, whether the same may have been

specifically mentioned or not, or indicated on the Drawings, shall be done or furnished in a manner corresponding with the rest of the work as if the same were specifically herein described.

I. Record Drawing as well as Operating & Maintenance Manual generation, in accordance to these specifications shall also be included in this work.

J. Related Requirements:

1. Section 015639 "Temporary Tree and Plant Protection" for protecting, trimming, pruning, repairing, and replacing existing trees to remain that interfere with, or are affected by, execution of the Work.
2. Section 329300 "Plants" for existing and new plant materials.

### 1.3 SPECIAL REQUIREMENTS

- A. Irrigation installation shall be coordinated with the Contractor's Certified Arborist, the City of New York's representative and the Museum's representative.
- B. All installation operations, including trenching, shall take place in the presence of the Contractor's arborist.
- C. The irrigation design shall include one quick coupler located in a valve box in a location designated by the City of New York.

### 1.4 QUALITY ASSURANCE

- A. It is the intent of these Specifications and Drawings to provide for a complete installation. Therefore, any items not specifically noted but, reasonably necessary for a complete installation, shall be furnished. The system shall efficiently and uniformly irrigate all areas and perform as required by the Contract Documents. The irrigation system shall be fully automatic with an electric/manual control.
- B. Irrigation zone control shall be automatic operation with controller and automatic control valves.
- C. Obtain and pay for all required inspections, permits, and fees. Provide notices required by governmental authorities.
- D. Qualifications:
  1. The work of this Section shall be designed by a qualified and experienced designer, acceptable to the City of New York. The term "Designer", as used herein, shall mean a firm of established reputation which is regularly engaged in the type of design work specified in this section.
  2. The work of this Section shall be performed by a qualified and experienced installer, acceptable to the City of New York. The term "Installer", as used herein, shall mean a firm of established reputation which is regularly engaged in and which maintains a

regular force of workmen skilled in the installation of the type of work specified in this section.

3. The Installer shall submit to the City of New York, three (3) copies of a list of several comparable projects of similar work that the Installer has completed within the past five years with job locations, names of the owner's representatives, their telephone numbers and dates on which the work on each project was started and completed.
- E. Reference Standards:
1. Materials, equipment, and methods of installation shall comply with the applicable requirements of the authorities having jurisdiction including the following codes and standards:
    - a. City of New York/State of New York Building Codes
    - b. National Fire Protection Association, (NFPA): National Electrical Code.
    - c. American Society for Testing and Materials, (ASTM).
    - d. National Sanitation Foundation, (NSF).
    - e. American Society of Agricultural Engineers, (ASAE).
  2. The following are minimum requirements and shall govern, except that all Federal, Local and/or State Codes and ordinances shall govern when their requirements are in excess hereof.
- F. Excavating, Backfilling, and Compacting Operations: As specified.
- G. Obtain City of New York's acceptance of installed and tested irrigation system.
- H. Hazardous materials
1. Provide materials which do not contain asbestos, PCB or other hazardous materials.
  2. Provide certification in accordance with the Supplementary General Conditions from the Contractor, manufacturers and installers that materials provided for the Work complies with the above requirements.
- I. Failure on part of the Commissioner to reject work in the course of operations or during inspection of work is to not be interpreted as acceptance of work not in conformance with these specifications. Correct improper work or materials whenever discovered.
- J. Comply with requirements of utility supplying water for prevention of backflow and back-siphonage.
- K. Comply with requirements of authority with jurisdiction for irrigation systems.
- L. Installer Qualifications: Engage an experienced Installer who has completed irrigation systems similar in material, design, and extent to that indicated for Project that have resulted in construction with a record of successful in-service performance.
- M. Listing/Approval Stamp, Label, or Other Marking: On equipment, specialties, and accessories made to specified standards.
1. Listing and Labeling: Equipment, specialties, and accessories that are listed and labeled.
  2. The Terms "Listed" and "Labeled": As defined in "National Electrical Code," Article 100.
  3. Listing and Labeling Agency Qualifications: A "Nationally Recognized Testing Laboratory" (NRTL.) as defined in OSHA Regulation 1910.7.

- N. **Product Options:** Irrigation system piping, specialties, and accessories are based on specific types, manufacturers, and models indicated. Components with equal performance characteristics produced by other manufacturers may be considered, provided deviations in dimensions, operation, and other characteristics do not change design concept or Intended performance as judged by the Commissioner. The burden of proof of product equality is on the Contractor.

#### 1.5 SYSTEM PERFORMANCE REQUIREMENTS

- A. **Minimum Water Coverage:** Not less than:
1. **Planting Areas:** 100 percent. This includes areas of traprock beds.
  2. **Sculptures** within the project limits shall not be sprayed with water.
- B. **Components and Installation:** Capable of producing piping systems with the following minimum working pressure ratings except where indicated otherwise.
1. **Pressure Piping:** 200 psig (1035 kPa)
  2. **Lateral Piping:** 100 psig (690 kPa)

#### 1.6 MEETINGS

- A. **Pre-installation Conference:** Upon satisfactory completion and approval of all required submittals the irrigation contractor shall conduct a pre-installation conference at the Project site. Attendees shall include the Contractor's Arborist, the Museum's representative and the City of New York's Representative.

#### 1.7 SUBMITTALS

- A. **General:** Submit the following according to the Conditions of the Contract and Division 1 Specification Section- "Submittal Procedures".
- B. **Shop Drawing:** Show layout and dimensions of overall system, components, details and interface with adjacent construction or landscape elements.
- C. **Product data** including pressure rating, rated capacity, settings, and electrical data of selected models for the following:
1. **Valves,** including general-duty, underground, manual and automatic control, and quick coupler types, and valve boxes.
  2. **Sprinklers,** including emitters, drip tubes, and devices.
  3. **Controls,** including controller wiring diagrams and soil moisture locations.
  4. **Wiring.**
  5. **Irrigation controller.**
- D. **Wiring diagrams** for electrical controllers, valves, and devices.
- E. **Construction Record Drawing:**
1. **Maintain work progress sheets** of the irrigation system during the duration of the installation keeping the same current on a daily basis. Work progress sheets will be legibly marked as irrigation work proceeds indicating the exact field location of all sprinkler heads, piping, valves and miscellaneous equipment for the entire irrigation

- system. Take accurate measurements from two fixed permanent features to gate valves, valve boxes, splice boxes, independent pipe or wire routes, road crossings (with pipe depth) and note on the drawings. The work progress sheets to be kept on-site and be available for review by the Design Consultant and City of New York.
2. Prepare "Construction Record Drawings" for irrigation system using a computer process based upon AutoCad, release 2010 software and drawn at a scale of 1"=10'-0". Legibly mark drawings to record actual construction locations. Indicate horizontal and vertical locations, referenced to permanent surface improvements; Identify field changes of dimension, detail and changes made by Change Order or Field Directives. These "Construction Record Drawings" to be created from work progress sheets.
  3. Submit a CD-ROM disk with digital drawing file(s), one (1) set of blueline prints and one (1) set of Mylar transparencies at three (3) mil thickness, suitable for reproduction of the "Construction Record Drawings" showing actual construction.
  4. Submit "Construction Record Drawings" prior to final review and acceptance.

## 1.8 WARRANTY

- A. Warranty the entire irrigation system and all related equipment and accessories for a period of one (1) year from the date of final acceptance against all defects in workmanship and/or material
- B. The warranty period will commence upon final acceptance by the City of New York for a complete system and/or any portion thereof has been put into operation and acceptable to the Commissioner and City of New York.
- C. Individual components of the irrigation system shall be covered by the manufacturers standard warranty. Any failure of manufacturer covered parts within the first year shall be replaced by the Contractor at no cost to the City of New York.
- D. Defects caused by vandalism, damage by vehicles, acts of God, fire or acts of neglect by others are not included in warranty.

## 1.9 PROJECT CONDITIONS

- A. Locate and identify existing underground and overhead services and utilities within contract limit work areas. Provide adequate means of protection of utilities and services designated to remain. Repair utilities damaged during site work operations at Installer's expense.
- B. When uncharted or incorrectly charted underground piping or other utilities and services are encountered during site work operations, notify the City of New York's Representative and applicable utility company immediately to obtain procedural directions. Cooperate with the applicable utility company in maintaining active services in operation.
- C. Locate, protect, and maintain bench marks, monuments, control points and project engineering reference points. Re-establish disturbed or destroyed items at Installer's expense.
- D. Protect existing and project installed trees, plants and their root systems and other features designated to remain as part of the landscape work.

- E. Examine the areas and conditions under which site work is to be performed. Promptly notify the City of New York's Representative of unexpected sub-surface conditions. Do not proceed with the work until unsatisfactory conditions are corrected.
- F. Perform site work operations and the removal of debris and waste materials to assure minimum interference with walks and other adjacent facilities.
- G. Obtain governing authorities' written permission when required to close or obstruct streets, walks and adjacent facilities. Provide alternate routes around closed or obstructed streets, walks and adjacent facilities. Provide alternate routes around closed or obstructed traffic ways when required by governing authorities.
- H. Protect existing buildings, paving and other services or facilities on site and adjacent to the site from damage caused by site work operations. Repair and restore damaged items to original condition.
  - 1. Cut through concrete and masonry with core drills. Jack hammers not permitted.
  - 2. Materials and finishes for patching shall match existing cut surface materials and finish. Exercise special care to provide patching at openings in exterior walls water tight.
  - 3. If required, methods and materials used for cutting and patching shall be acceptable to the City of New York.
  - 4. Soil excavations in the vicinity of existing root systems shall utilize air-spading.

#### 1.10 SEQUENCING AND SCHEDULING

- A. Maintain uninterrupted water service to building during normal working hours. Arrange for temporary water shutoff with City of New York.
- B. Coordinate irrigation system work with landscape work specified in Division 32 Section "Plants".
- C. Coordinate protection with temporary tree and plant protection.
- D. Coordinate protection, removal and storage of trap rock with landscape work and tree and plant protection.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:
  - 1. Pressure Regulators:
    - a. Honeywell Braukmann.
    - b. Watts Regulator Co.
    - c. Wilkins Regulator Div., Zurn Industries, Inc.
  - 2. Manual Valves for Underground Installation:
    - a. Nibco
    - b. Clow Valve Co, Div-, McWane, Inc.



- c. Conbraco Industries.
- 3. Automatic Control Valves:
  - a. Hunter Industries.
  - b. Rain Bird Sprinkler Mfg, Corp.
  - c. Superior Controls Co. Inc.
  - d. Toro Company.
- 4. Control Valves Boxes:
  - a. Pentek by Plymouth Products Div., AMETEK.
  - b. Applied Engineering Products.
  - c. Carson/Brooks Products, Inc., Polyplastics Div.
- 5. Quick Couplers:
  - a. Hunter Industries.
  - b. Rain Bird Sprinkler Mfg. Corp.
  - c. Toro Company.
- 6. Drip Irrigation:
  - a. Netafim Irrigation Products, Inc.
  - b. Rain Bird Sprinkler Mfg. Corp.
  - c. Toro Company.
- 7. Controllers
  - a. Baseline.
  - b. Tucor
  - c. Rain Bird Sprinkler Mfg, Corp,

## 2.2 PIPES AND TUBES

- A. Refer to Part 3 Article "Piping Applications" for Identification of Systems where pipe and tube materials specified below are used,
- B. Copper Tube: ASTM 88 (ASTM B 88M), Types L and M (Metric designations: Types B and C), water tube, annealed and drawn tempers, with plain ends.
- C. Polyvinyl Chloride, (PVC) Plastic Pipe: ASTM D 1785, PVC 1120, Schedule 40, 160 psig minimum pressure rating for 8-inch (200 mm) and smaller sizes, with plain ends.
- D. Polyvinyl Chloride (PVC) Plastic Pipe: ASTM D 1785, PVC 1120, Schedule 80, 250 psig minimum pressure rating for 8-inch (200mm) and smaller sizes, with plain and threaded ends.
- E. Polyvinyl Chloride (PVC) Plastic Pipe: ASTM D 2241; PVC 1120, SDR 21, 200 psig minimum pressure rating, with plain ends.
- F. Polyethylene (PE) Plastic Pipe: ASTM D 2239; POLY SIDR-15 Non NSF 100 psig minimum pressure rating, with plain ends.

## 2.3 PIPE AND TUBE FITTINGS

- A. Refer to Part 3 Article "Piping Applications" for Identification of systems where pipe and tube fitting materials specified below are used.
- B. Copper Tube Fittings: ASME B16.22, wrought copper or cast brass, solder joint, pressure type.

- C. Copper Unions: ASME B16.18, cast-copper-alloy body, hexagonal stock, with ball-and-socket joint, metal-to-metal seating surfaces, and solder-joint, threaded or solder joint, and threaded ends,
  - 1. Threaded Ends: Threads conforming to ASME B1.20.1.
- D. Cast Bronze Flanges: ASME B16.24, Class 150, raised ground face, bolt holes spot faced.
- E. Polyvinyl Chloride (PVC) Plastic Pipe Fittings: ASTM D 2464, Schedule 80, threaded.
- F. Polyvinyl-Chloride (PVC) Plastic Pipe Fittings: ASTM D 2467, Schedule 80, socket-type.
- G. Polyvinyl Chloride (PVC) Plastic Pipe Fittings: ASTM D 2466, Schedule 40, socket-type.
- H. Polyethylene (PE) Plastic Pipe Fittings: ASTM D 2609, insert-type.
- I. Dielectric Fittings: Assembly or fitting with insulating material isolating joined dissimilar metals to prevent galvanic action and stop corrosion, These devices are a combination of copper alloy and ferrous metal; threaded- and solder end types matching piping system materials.
  - 1. Dielectric Unions: Factory-fabricated. union assembly, designed for 250 psig minimum working pressure at 180 deg F. Include insulating material isolating dissimilar metals and ends with inside threads according to ASME B1.20.1.
  - 2. Dielectric Flanges: Factory-fabricated, companion-flange assembly for 150 psig or 300 psig minimum pressure to suit system pressures.
  - 3. Transition Fittings: Manufactured assembly or fitting, with pressure rating at least equal to that of system and with ends compatible to piping where fitting is to be installed.
- J. Sleeves: ASTM D 1785, Schedule 40, polyvinyl chloride (PVC) plastic pipe; ASTM D 2466, Schedule 40, PVC plastic, socket-type fittings; and solvent-cemented joints.

## 2.4 JOINING MATERIALS

- A. Solvent Cement: ASTM F 656 primer and ASTM D 2564 solvent cement in color
- B. Solder: ASTM B 32, Alloys Sn95 and E.
- C. Gaskets and Fasteners for Metal and Metal-to-Plastic Flanged Joints: ASME B16.21, nonmetallic, asbestos-free, flat, 1/8-inch thickness gaskets and ASME B18.2.1, carbon steel bolts, nuts, and washers..
- D. Gaskets for Elastic Flanged Joints: Materials recommended by plastic pipe and fittings manufacturer.

## 2.5 PRESSURE REGULATORS

- A. Description: ASSE 1003, single-seated, direct-operated-type water pressure regulators, rated for initial working pressure of 150 psig minimum, with size, flow rate, and inlet and outlet pressures indicated. Include integral factory-installed or separate field-installed Y-pattern strainer that is compatible with unit for size and capacity-
  - 1. 2 inches (50 mm) and Smaller: Bronze body with threaded ends.

2. Interior Components: Corrosion-resistant materials,

- B. Description: ASSE 1003, single-seated, direct-operated, integral-bypass-type, water pressure regulators, rated for initial working pressure of 150 psig minimum, with size, flow rate, and Inlet and outlet pressures indicated, Include integral factory-installed or separate field-installed Y-pattern strainer that is compatible with unit for size and capacity-
1. 2 Inches (50 mm) and Smaller: Bronze body with threaded ends.
  2. Interior Components: Corrosion-resistant materials.

## 2.6 VALVES

- A. General: Valves are for general-duty and underground applications. Refer to "Valve Applications" Article for locations of various valve types specified in this Article, Refer to "Control Valves" Article for control valves and accessories and "Backflow Preventers" Article for backflow preventer valves.
- B. Bronze Non rising Stem Gate Valves, 2 Inches and Smaller: MSS SP-80, Type 1, solid wedge; nonrising, copper-silicon-alloy Stem; Class 125, body and screw bonnet of ASTM B 62 cast bronze, with threaded or solder-joint ends. Include polytetrafluoroethylene (PTFE)-impregnated packing, brass packing gland, and malleable-iron handwheel.
- C. Ball Valves: Bronze, with 150 psig minimum pressure rating, ends compatible to piping where valve is to be installed, and lever handle.

## 2.7 CONTROL VALVES

- A. Description: Manufacturer's standard control valves for circuits, of type and size indicated, and as follows:
1. Provide cast-bronze bodies, unless otherwise indicated.
  2. Manual Control Valves: MSS SP-80, Class 125, globe valves.
  3. Key-Operated, Manual Control Valves: MSS SP-80, Class 125, globe valves, fitted for key operation.
  4. Automatic Control Valves: Plastic diaphragm-type, normally Closed, with manual flow adjustment, and operated by 24-volt-a.c. solenoid. Solenoid to be epoxy impregnated 24 VAC-60 Hz (18 to 30 VAC), 5.8 VA and to be suitable for direct burial.
    - a. Hunter ICV series
    - b. Rainbird PEB series
    - c. Toro 252 series
  5. Master Valves: Diaphragm-type, normally OPEN, with manual flow adjustment, and operated by 24-volt-a.c. solenoid.
  6. Quick-Couplers: Factory-fabricated, 2-piece assembly. Include coupler water-seal valve, removable upper body with spring-loaded or weighted, rubber-covered cap; hose swivel with ASME B1.20.7, 3/-11.5NH threads for garden hose on outlet; and operating key,
    - a. Locking Top Option: Include vandal-resistant, locking feature with 2 matching keys.
- B. Control Valve Boxes: Polyethylene (PE), acrylonitrile-butadiene-styrene (ABS), fiberglass, polymer concrete or precast concrete box and cover. Valve box covers to be "Black" T covers with bolt down feature. Size as required for application.

1. Drainage Backfill: Cleaned gravel or crushed stone, graded from 2 inches maximum to 3/4 inch minimum.
2. Fabric: Soil separation fabric at valve boxes shall be Mirafi 140N, non-woven, spun bound, polyester geotextile fabric or approved equal.
3. Brick: Common, grade SW, per ASTM C42.
4. Valve boxes used with automatic valve assemblies (other than drip irrigation) to be 12" x 17" x 12" deep.
5. Valve boxes used with 1" drip irrigation valve assemblies to be 15" x 21" x 12" deep.
6. Valve boxes for drip irrigation flush valves and quick coupling valves to be 6" round.
7. Valve box extensions, as required, to be of the same size, color and manufacturer as the box on which it is used.

## 2.8 DRIP IRRIGATION

### A. Description: Manufacturers standard units as follows:

1. Application Pressure Regulators: Brass or plastic housing, 3/4-inch size, with corrosion resistant internal parts, and capable of controlling outlet pressure to approximately 20 psig.
2. Strainer/Filter Units: Brass or plastic housing, with corrosion-resistant internal parts, of size and capacity required for emitters, drip tubes, and devices downstream of unit.
3. Emitters: Plastic body with single outlet, to deliver the following flow at approximately 20 psig:
  - a. Flow: 1/2 gallon per hour.
  - b. Flow: 1 gallon per hour.
  - c. Flow: 2 gallons per hour.
  - d. Tubing: Include 120 inches, 1/8-inch Inside diameter polyethylene (PE) tubing.
4. Emitters- Plastic body with 6 outlets, to deliver the following flow at approximately 20 psig (138 kPa):
  - a. Flow Each Outlet: 1/2 gallon per hour.
  - b. Flow Each Outlet: 1 gallon per hour.
  - c. Flow Each Outlet: 2 gallons per hour.
  - d. Tubing: Include 60 feet, 1/8-inch inside diameter polyethylene (PE) tubing.
  - e. Outlet Caps: Include 6 plastic outlet caps.
5. Drip Tubes: Flexible polyvinyl chloride (PVC) plastic tube for emitters or other devices indicated, of length indicated, and with plugged end.
  - a. Size: 1/2-inch NPS.
  - b. Size: 3/4-inch NPS.
  - c. Size: 1-inch NPS.
6. Other Devices: As specified and as indicated.

## 2.9 AUTOMATIC CONTROLLER

- A. All controllers shall be installed per manufacturer's specifications, and as specified herein.
- B. Each controller shall be able to operate:
  1. Up to 200 zones along a two-wire path and/or a conventional wire path
  2. Up to 25 moisture sensors
  3. Up to 6 pause device inputs (3 normally closed along the two-wire path and 3 hard-wired normally closed pause interrupts)

4. Up to 4 normally open or normally closed master valves
  5. Up to 4 flow meters
  6. Up to 110 devices on a two-wire path
- C. Each controller shall be capable of fully automatic, semi-automatic, and manual operation using a 6-button keypad and 16 position rotary dial that is an integrated part of the controller. Each controller shall be capable of storing irrigation schedules, monitoring and managing flow without the Central Computer (i.e. if the Central Computer is turned off, removed, or if communication from/to the Central Computer fails, the field controllers will continue to perform moisture and flow management functions). The controller shall display on-screen instructions making it easier for a user to operate the controller.
- D. The controller shall be able to send alerts to central software at an offsite location utilizing supported devices. Alerts shall be processed at both the field controller location and/or the Central Computer location. Communication options shall be as follows:
1. Cellular modem
  2. Wireless internet modem
  3. Phone modem
  4. Ethernet modem
  5. Direct connection serial interface
- E. The controller's main screen shall be able to display water usage, soil moisture graph, next program run time, temperature of the controller, design flow or actual flow, two-wire current, program reports, pause reports, and a color zone status (watering, soaking, waiting, paused, disabled, and error) without affecting any active programs. The controller shall provide an on-screen color code legend that describe each zones state. The controller shall be able to log data collected from each flow meter and zone (run time, soak time).
- F. The controller shall have the ability to report:
1. The last date a program ran
  2. A progress bar for all currently running programs describing remaining time
  3. The next run date of a program
  4. Water consumption used by program per run estimation
  5. 14 days of moisture readings displayed graphically
  6. Water flow estimation in gallons per minute
  7. Total daily, current month, and previous month's water consumption estimation in gallons
  8. Actual water used and flow rate for each flow meter
  9. A report for every pause condition event
  10. Monthly water budget

## 2.10 DECODERS

- A. Decoders shall be installed between the controller and the electric control valves to provide the 24-volt power supply for individual valves. Each decoder shall be available in 1, 2 or 4-station devices. Decoder shall have a unique serial number and controller-assigned address to identify it in the network.

## 2.11 SOIL MOISTURE SENSORS

- A. Soil moisture sensors shall provide the following:
  - 1. Measures soil moisture using patented modified TDT technology.
  - 2. Sensor is self calibrating for all soil types and conditions.
  - 3. Moisture range measurement from 5% moisture to fully saturated soil (45%).
  - 4. Measures soil temperature.
  - 5. Moisture readings are consistent in salty conditions.
- B. Sensor shall be completely sealed and shall be resistant to power surges, shock, freezing, heat, salts and fertilizers.
- C. Sensor shall have the following accuracy and repeatability:
  - 1. Range: 5% to 45% volumetric (fully saturated)
  - 2. Raw Sensor Resolution: 0.01% volumetric
  - 3. Volumetric Moisture Accuracy: +/- 0.1%
  - 4. Volumetric Calibration: +/- 2% of calibrated sample
  - 5. Soil Temperature: +/- 2C/3.6F
- D. Sensor shall be 24 to 28 VAC.

## 2.12 GROUNDING

- A. Two-wire communication path shall be grounded at 600 foot maximum intervals and at every termination of a part of the wire path to a surge arrestor decoder. Each surge decoder shall be connected to a 5/8-inch diameter x 8-foot long copper clad grounding rod with minimum #6 AWG, solid, bare copper wire as outlined below. Minimum 8-foot separation between rod and other equipment. All connections to rods shall be with Cadweld connectors as specified. Each grounding rod is to be covered by a 4-inch round, grated top, plastic valve cover with metal detection and six inches of 4-inch ADS drainage pipe. Ground rods and plates shall be UL listed.

## 2.13 WIRE

- A. All valve control wire from the decoder to the valve shall be minimum #14-awg, common #14-awg, single strand, solid copper, UL- approved direct burial AWG-U.F. 600V and shall meet all state and local codes for this service. Individual wires must be used for each zone valve. Common wire shall be white in color, control wire for spray and rotor zones shall be red in color, drip zone control wire shall be orange and spare wires, installed where indicated on the drawings shall be blue. White color shall be used for common wire only.
- B. In ground wire connections shall be UL listed, manufactured by 3M, model DBY-6 splice kits. All wire splices shall be made in valve boxes, electrical junction boxes, at the controller or at valves. See Mechanical/Electrical/Plumbing Drawings.
- C. All valve control wire from the controller to the decoder shall be through two-wire. Wiring shall be polyethylene double-jacketed or UF-B UL PVC double-jacketed two-conductor solid copper designed for direct burial systems. Wire connections shall be DBR-6 or equivalent on the wire side of the decoder and shall utilize DBY-6 or equivalent on the valve side. All

connections shall be installed as per their manufacturers' instructions. Wire shall be manufactured by Paige Electric (maxi wire) or approved equal. Wire gauge shall be AWG #14.

- D. Wire type and method of installation shall be in accordance with local codes for NEC Class II circuits of 30-Volt A.C. or less.
- E. All wiring shall be in strict accordance with all national, state and local electrical codes.

#### 2.14 MULTI-OUTLET EMITTER

- A. Emitter for flow regulation to tree drip states shall be pressure compensating with ¼" barbed outlets to affix distribution tubing to
- B. Emitter shall be self-flushing.
- C. Each emitter on the device shall be rated for 2 gallon per hour.
- D. Emitter manifold shall have a minimum of 6-outlets and have a ½" FPT inlet.
- E. Multi-outlet emitter device shall be Rain Bird, model XBT-10-6, Toro T-PR-25, Jain 6 outlet emitter or approved equal.

#### 2.15 DRIP STAKES

- A. Tree root watering devices shall be 24-inches to 36-inches in length and be equipped with barbed connection for piping to ¼-inch distribution tubing to allow for deep watering of existing trees with minimum disturbance to the existing root system. Drip stakes shall also provide soil aeration.
- B. Drip stakes shall be constructed of sturdy ABS and PVC. The reinforced tip and cap shall be made from ABS, while the upper shaft shall be made from Schedule 40 PVC. There shall be multiple holes in the bottom half of the spike, internally covered by a mesh filter that allows water to flow out and keeps dirt from getting in, settling, and clogging the tube.
- C. Diameter of watering stakes shall be no more than 1.5-inches to minimize soil and root disturbance and shall be able to be installed without soil drilling or digging.

#### 2.16 DRIP ZONE FILTER

- A. Filters at each drip zone valve shall be a plastic filter consisting of a two piece threaded housing with o-ring seal. The filter screen shall be 140-mesh size. Filters shall be sized to mid-range flow and not exceed 2.5 psi pressure loss.
- B. Filter shall be as manufactured by Netafim, Model DF-xxx-140, Rain Bird RBY, Toro Y-Filter or approved equal.

2.17 AUTOMATIC FLUSHING VALVE

- A. Flush valves shall produce 1-gallon flush and be constructed of black molded plastic with insert barbed fitting end configuration. The top of the flush valves shall have six openings from which debris or sediment can pass through from the system to the atmosphere or valve box.

2.18 AIR VACUUM RELIEF VALVES

- A. Air vacuum relief valves shall be constructed of black plastic with 1/2-inch male pipe thread capable of mating with a threaded PVC reduction bushing.
- B. Air vacuum relief valves shall be as manufactured by Netafim, Model TLAVRV, Rain Bird A/R Valve, Hunter PLD-AVR or approved equal.

2.19 FLOW SENSOR

- A. The flow sensor shall be an in-line type with a non-magnetic, spinning impeller (paddle wheel) as the only moving part. The sensor shall operate in line pressures up to 200 PSI (Pounds per Square Inch) and liquid temperatures up to 150° F, and operate in flows of 0.5 to 30 feet per second with linearity of  $\pm 0.7\%$  and repeatability of  $\pm 0.7\%$ . The meter body shall be cast 85-5-5 bronze.

2.20 IDENTIFICATION

- A. Valve identification tags: The identification tag shall be stamped with the following designation L1, L2 etc. for lawn areas, P1, P2 etc. for planter areas and T1, T2 etc. for tree pit areas to match number of valves per controller. The identification tags shall be made to withstand ultra-violet degradation and general weathering. Tags shall be manufactured from a polyurethane compound.
- B. Markings shall be hot-stamped.

2.21 SPARE PARTS

- A. Contractor shall supply the following tools and equipment to the City of New York before final observation:
  1. One (1) quick coupler key assembly for every five or fraction thereof of each type of quick coupling valve provided.
  2. One (1) of each type of isolation valve used in the project.
  3. One (1) of each size electric control valve used in the project.
  4. One hundred (100) feet of drip tubing used on the project.
  5. Drip air release valves, assortment of fittings, stakes, flush valves, etc.
  6. Before final observation can occur, written evidence that the Museum has received the tools and equipment must be shown to the City of New York.



## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Investigate and determine available water supply water pressure and flow characteristics.

### 3.2 PREPARATION

- A. Set stakes to identify proposed sprinkler locations. Obtain Commissioner's approval before excavation.
- B. After trench locations are identified remove all traprock within the trench locations. Traprock shall be stored in containers or bags and placed in a secure location, protected from incursion by dust, soil or other contaminants.

### 3.3 EARTHWORK

- A. Excavation and trenching shall be performed using pneumatic excavators under the direction and supervision of the arborist. Other methods shall only be allowed with the permission of the arborist.
- B. Install warning tape directly above pressure piping, 12 inches below finished grades, except 6 inches below subgrade under pavement and slabs.

### 3.4 PAVING WORK

- A. Install piping in sleeves where crossing sidewalks, roadways and parking lots.
  - 1. Install piping sleeves by boring or jacking under existing paving, where possible.

### 3.5 BUILDING PENETRATIONS

- A. Install piping in sleeves where penetrating building walls.
- B. Completely waterproof penetration on interior and exterior sides of walls.
- C. Coordinate building penetrations with Museum Representative.

### 3.6 PIPING APPLICATIONS

- A. Refer to Part 2 of this Section for detailed Specifications for pipe and fittings products listed below. Use pipe, tube, fittings and joining methods according to the following applications. Piping in pits and aboveground may be joined with flanges instead of joints indicated.
- B. Use pipe, tube, fittings, and joining methods according to the following applications.
- C. Main Line Pressure Piping: Use the following:

1. 3 Inches and Smaller: Copper tube, Type L, annealed temper; wrought-copper tube fittings; and soldered joints.
2. 3 Inches and Smaller: ASTM D 1785, Schedule 40, polyvinyl chloride (PVC) plastic pipe; ASTM D 2467, Schedule 80, PVC plastic, socket-type pipe fittings; and solvent-cemented joints.
3. 3 Inches (80 mm) and Smaller: ASTM D 2241 SDR 21, polyvinyl chloride (PVC) plastic pipe; ASTM D 2467, Schedule 40, PVC plastic, socket-type pipe fittings; and solvent-cemented joints.

D. Lateral Piping: Use the following:

1. All Sizes: ASTM D 1785, Schedule 80, polyvinyl chloride (PVC) plastic pipe; ASTM D 2467, Schedule 80, PVC plastic, socket-type pipe fittings; and solvent-cemented joints.
2. All Sizes: ASTM D 1785, Schedule 40, polyvinyl chloride (PVC) plastic pipe; ASTM D 2466, Schedule 40, PVC plastic, socket-type fittings; and solvent-cemented joints.
3. All Sizes: ASTM D 2241, SDR 21, polyvinyl chloride (PVC) plastic pipe; ASTM D 2467, Schedule 80, PVC plastic, socket-type fittings; and solvent-cemented joints.
4. All Sizes: ASTM D 2609, SDR 17, or 21, polyvinyl chloride (PVC) plastic pipe; ASTM D 2466, Schedule 40, PVC plastic, socket-type fittings; and solvent-cemented joints.

E. Valve Assemblies: ASTM D 1785, Schedule 80, polyvinyl chloride (PVC) plastic pipe with threaded ends; ASTM D 2464, Schedule 80, PVC plastic, threaded fittings; and threaded joints.

F. Sleeves: ASTM D 1785, Schedule 40, polyvinyl chloride (PVC) plastic pipe; ASTM D 2466, Schedule 40, PVC plastic, socket-type fittings; and solvent-cemented joints.

### 3.7 JOINT CONSTRUCTION

- A. Flanged Joints: Align flanges and install gaskets. Assemble joints by sequencing bolt tightening. Use lubricant on bolt threads.
- B. Threaded Joints: Thread pipes with tapered pipe threads according to ASME B1.20.1, apply tape or joint compound, and apply wrench to valve ends into which pipes are being threaded.
- C. Copper Tube and Fittings, Soldered Joints: Construct joints according to CDA No. 404/0 Products Handbook "Copper Tube Handbook."
- D. Polyvinyl Chloride (PVC) Piping Gasketed Joints: Construct joints between underground AWWA-type, cast-iron valves and NPS PVC pipe; with elastomeric seals that fit pipe diameter and valve ends; and lubricant, according to ASTM D 3139.
- E. Polyvinyl Chloride (PVC) Piping Solvent-Cemented Joints: Construct joints according to ASTM D 2672 and ASTM D 2855.
  1. Handling of Solvent Cements, Primers and Cleaners, Comply with procedures in ASTM F 402 for safe handling when joining plastic pipe and fittings with solvent cements.
- F. Dissimilar Materials Piping Joints: Construct joints using adapters that are compatible with both piping materials, outside diameters, and system working pressure. Refer to "Piping Systems - Common Requirements" Article for joining dissimilar metal piping.

### 3.8 PIPING SYSTEMS - COMMON REQUIREMENTS

- A. General Locations and Arrangements: Drawings indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, and in other design considerations. Install piping as Indicated, except where deviations to layout are approved on coordination drawings.
- B. Install components having pressure rating equal to or greater than system operating pressure.
- C. Install piping free of sags and bends.
- D. Locate groups of pipes parallel to each other, spaced to permit valve servicing.
- E. Install fittings for changes in direction and branch connections.
- F. Piping Connections: Except as otherwise indicated make piping connections as specified below:
  - 1. Install unions, in piping 2 inches (50 mm) and smaller, adjacent to each valve and at final connection to each piece of equipment having 2-inch (50mm) or smaller threaded pipe connection.
  - 2. Install flanges, in piping 2-1/2 inches (65 mm) and larger, adjacent to flanged valves and at final connection to each piece of equipment having flanged pipe connection.
  - 3. Install dielectric fittings to connect piping of dissimilar metals.

### 3.9 PIPING INSTALLATION

- A. Install copper tube and copper tube fittings, according to CDA No. 404/0 Products Handbook "Copper Tube Handbook."
- B. Install underground polyvinyl chloride (PVC) plastic pipe according to ASTM D 2774.
- C. Lay piping on solid subbase, uniformly sloped without humps or depressions.
  - 1. Install polyvinyl chloride (PVC) plastic pipe in dry weather when temperature is above 40 deg F. Allow joints to cure at least 24 hours at temperature above 40 deg F before testing, unless otherwise recommended by manufacturer.
- D. Minimum Cover: Provide following minimum cover over top of buried piping:
  - 1. Pressure Pipe: Minimum of 18 inches below finished grade.
  - 2. Circuit Piping: Minimum of 12 inches below finished grade.
  - 3. Sleeves: 24 inches.
- E. Tunneling: Install pipe under walks other obstructions that cannot be disturbed, by tunneling, boring, or jacking.
- F. Install all piping and wire under sidewalks and paving in sleeves.

### 3.10 VALVE APPLICATIONS

- A. Drawings indicate valve types to be used. Where specific valve types are not indicated, following requirements apply:

1. Buried Valves 2 inches (80 mm) and Smaller: Bronze-body, curb stop, with tee head, service box and shut off rod.
2. Buried Circuit Valves: Plastic valves, nonrising stem, with stem nut, valve or service box, and tee-handle shutoff rod.

### 3.11 VALVE INSTALLATION

- A. Valves: Install underground valves in valve boxes-
1. Install valves and polyvinyl chloride (PVC) pipe with solvent weld joints.
  2. Tops of valve boxes located in planting beds shall be flush with the surrounding grade
  3. Tops of valve boxes located in traprock beds shall be located three inches below the top surface of the traprock and covered with traprock.
  4. Mount valve box on (4) brick supports.
  5. Place a minimum of six inches of drainage gravel below the bottom of the valve box.
  6. Install filter fabric around valve box and secure to box with duct tape.
  7. Install ball valve in front of automatic valve.
- B. Control Valves: Install in valve control valve boxes, arranged for easy adjustment and removal.

### 3.12 PRESSURE REGULATOR INSTALLATION

- A. Install pressure regulators with shutoff valve and strainer on inlet and pressure gage on outlet- Install shutoff valve on outlet.

### 3.13 DRIP IRRIGATION

- A. Install drip tubing (4") two inches below finish grade (not below mulch) in shrub beds.
- B. Staples shall be spaced a maximum of 5 feet and at every fitting to hold the dripperline in place.
- C. Install drip irrigation in accordance with manufacturer's written recommendations.

### 3.14 AUTOMATIC CONTROL SYSTEM INSTALLATION

- A. Install controllers according to manufacturer's written instructions and as Indicated.
- B. Install control wiring in same trench with piping.

### 3.15 FLOW SENSOR AND MASTER VALVE

- A. Install flow sensor on irrigation mainline and connect to the controller in accordance with the manufacturer's written instructions.
- B. Install Normally Open master valve on irrigation mainline and connect to the controller in accordance with the manufacturer's written instructions.

3.16 MOISTURE SENSOR

- A. Install moisture sensor in the center of the irrigation zone with most sun exposure in locations as indicated on the drawing.
- B. Install moisture sensor at least 5'-0" from any sprinkler, building, or any impervious surface.
- C. Do not install sensor in a high traffic area.
- D. Connect moisture sensor to the irrigation controller and calibrate in accordance with the manufacturer's written instructions.

3.17 CONNECTIONS

- A. Connect piping to sprinklers, devices, valves, control valves, specialties, and accessories.
- B. Connect irrigation system to water supply.
- C. Electrical Connections: Connect to power source, controllers, and automatic control valves.

3.18 FIELD QUALITY CONTROL

- A. Testing: Perform hydrostatic test of piping and valves before backfilling trenches. Piping may be tested in sections to expedite work.
  - 1. Cap and subject the piping system to a static water pressure of 50 psig above the operating pressure without exceeding pressure rating of piping system materials. Isolate test source and allow to stand for 4 hours. Leaks and loss in test pressure constitute defects that must be repaired.
  - 2. Repair leaks and defects with new materials and retest system or portion thereof until satisfactory results are obtained.

3.19 SITE RESTORATION

- A. Reinstall all traprock previously removed. Refer to specification section 311000 for re-installation instructions.
- B. Re-install or replace dead, damaged or missing plants. that were removed.

3.20 CLEANING AND ADJUSTING

- A. Flush dirt and debris from piping before installing sprinklers and other devices.
- B. Adjust automatic control valves to provide flow rate of rated operating pressure required for each sprinkler circuit.
- C. Carefully adjust lawn sprinklers so they will be flush with, finish grade after completion of landscape work,

- D. Adjust settings of controllers and automatic control valves.

### 3.21 COMMISSIONING

- A. Starting Procedures: Follow manufacturer's written procedures. If no procedures are prescribed by manufacturers, proceed as follows:
  1. Verify that specialty valves and their accessories have been installed correctly and operate correctly.
  2. Verify that specified tests of piping are complete.
  3. Check that sprinklers and devices are correct type.
  4. Check that damaged sprinklers and devices have been replaced with new materials.
  5. Check that potable water supplies have correct type backflow preventers.
  6. Energize circuits to electrical equipment and devices.
  7. Check that controller, flow sensor, rain sensor, moisture sensor, master valve, and maintenance radio operate correctly.
  8. Adjust operating controls.
- B. Operational Testing: Perform operational testing after hydrostatic testing is completed, backfill is in place, and sprinklers are adjusted to final position.

### 3.22 DEMONSTRATION

- A. Demonstrate to Commissioner that system meets coverage requirements and that automatic controls function properly-
- B. Demonstrate to City of New York and Museum's maintenance personnel operation of equipment, sprinklers, controller, specialties and accessories. Review operating and maintenance information.
- C. Provide 7 days written notice in advance of demonstration.

END OF SECTION

**SECTION 329300 - PLANTS****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. The contractor is advised that the Sculpture Garden is an historic and precious area and that all care must be taken to protect and preserve areas and items not under construction. A clear and secure separation between the work areas and the Garden and Museum is required to assure the safety and protection of the collection, the Museum staff and visitors. The limits and character of the protection and separation of work areas must be made acceptable to the Museum and reviewed and approved by the Commissioner.

**1.2 SUMMARY**

- A. This Section includes the following:
  - 1. Plants.
  - 2. Planting soils.
- B. Related Sections include the following:
  - 1. Division 01 Section "Temporary Tree and Plant Protection" for protecting, trimming, pruning, repairing, and replacing existing trees to remain that interfere with, or are affected by, execution of the Work.
  - 2. Division 31 Section "Site Clearing" for protection of existing trees and plantings, topsoil stripping and stockpiling, and site clearing.
  - 3. Division 32 Section "Planting Irrigation" for the design and installation of a fully automatic irrigation system.

**1.3 REFERENCES**

- A. "American Standard for Nursery Stock," ANSI Z60.1, latest edition, published by the American Association of Nurserymen (AAN), 1250 I Street, N.W., Suite 500, Washington, D.C. 20005, (202) 789-2900.
- B. "Official Methods of Analysis of AOAC International", latest edition, published by AOAC (formerly Association of Official Agricultural Chemists), 481 Frederick Avenue, suite 500, Gaithersburg, MD 20877.
- C. American Society of Testing and Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, PA 19428 (610) 832-9585:
  - 1. ASTM D4972 Standard Test Method for pH of Soils.

- D. "Tree and Shrubs Transplanting Manual," latest edition, published by the International Society of Arboriculture (ISA), P.O. Box 3129, Champagne, IL 61826.
- E. "Standards for Pruning of Shade Trees," latest edition, National Arborist Association (NAA), P.O. Box 1094, Amherst, NH 03031.
- F. "Recommended Soil Testing Procedures for the Northeastern United States", 2<sup>nd</sup> Edition, Northeastern Regional Publication No. 493 (NRP-493), Agricultural Experiment Stations of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and West Virginia, Revised, October 15, 2009. Document may be obtained on the web at:

<http://ag.udel.edu/extension/agnr/soiltesting.htm>

1. Test for Nitrate-N by Cd reduction.
2. Test for Phosphorous, Potassium, Magnesium, and Calcium by Morgan Extraction.
3. Test for Aluminum, Ammonium, Nitrate, Iron as by ICP Spectrometry of dry-ashed sample in 10% HCL.
4. Test for Zinc, Copper, and Manganese by Mehlich 1.
5. Test for Boron in accordance with Chapter 6.
6. Test for soil Soluble Salts by the 1:2 soil/water ratio (volume/volume basis).

#### 1.4 DEFINITIONS

- A. **Balled and Burlapped Stock:** Exterior plants dug with firm, natural balls of earth in which they are grown, with ball size not less than diameter and depth recommended by ANSI Z60.1 for type and size of plant required; wrapped, tied, rigidly supported, and drum-laced as recommended by ANSI Z60.1.
- B. **Container-Grown Stock:** Healthy, vigorous, well-rooted exterior plants grown in a container with well-established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for kind, type, and size of exterior plant required.
- C. **Finish Grade:** Elevation of finished surface of topsoil.
- D. **Plants:** Living trees, plants, ground cover, etc. as described in ANSI Z60 1.
- E. **Subgrade:** Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill, before placing planting soil.
- F. **Planting Soil:** Standardized topsoil; existing, native surface topsoil; existing, in-place surface soil; imported topsoil; or manufactured topsoil that is modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.
- G. **Root Flare:** Also called "trunk flare." The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk.



- H. **Stem Girdling Roots:** Roots that encircle the stems (trunks) of plants below the soil surface.
- I. **Subgrade:** Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.
- J. **Subsoil:** All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.
- K. **Surface Soil:** Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil
- L. **Weeds:** Any plant life not specified or scheduled in planting plans for this Contract work.

## 1.5 SUBMITTALS

### A. Product Data:

#### 1. Plant List and Source Identification:

- a. Submit a complete list of all plant material for Project with nursery source identification for each plant.

- 1) Include in plant list the botanical and common names, size, quantity, form, root ball, limb height (if applicable), other requested data, and source locations for all plant materials.
- 2) Include names, addresses, and phone numbers of each nursery source associated with each plant item.
- 3) Plant lists shall clearly identify deviations from the specified plants and any approved substitutions. Submit substitution requests, if any, as specified in General Conditions. Where deviations or other changes occur in plant list, identify both the original specified plant item and the new plant item.
- 4) Plants listed with submittal shall be available at the nursery for inspection and selection as specified in Part 1 "Plant Sourcing, Selection, and Inspection" herein. Contractor shall evaluate and verify at proposed nursery source that plant material conforms to the requirements of the Contract Documents prior to scheduling Commissioner's inspection and selection/tagging trip.

- b. Maintain and re-submit updated Plant List and Source Identification as deviations or other changes occur until Substantial Completion. Submit as a Record Document at completion of Contract work.

- 2. Submit technical descriptive data for each manufactured or packaged product of this Section including fertilizers, mulch, soil amendments and plant treatment material, as applicable. Include manufacturer's product testing and certified analysis and installation instructions for manufactured or processed items and materials. Include guaranteed analysis and weight of pre-packaged material as specified for certification of material not pre-packaged.

B. Samples for Verification: For each of the following:

1. 5 lb of mulch, in labeled plastic bag.
2. Planting Soil Mix: 1 lb. sample in labeled bag.
3. Compost: 1 lb. sample in labeled bag.
4. One packet of Mycorrhizal Inoculant.

C. Material Test Reports:

1. General: Submit written reports of each sample tested. Each report include the following as a minimum and such other information required specific to material tested:
  - a. Date issued.
  - b. Project Title names of Contractor and supplier.
  - c. Testing laboratory name, address and telephone number, and name(s), as applicable, of each field and laboratory inspector.
  - d. Date, place, and time of sampling or test, with record of temperature and weather conditions.
  - e. Location of material source.
  - f. Type of test.
2. Imported Topsoil Test Reports for Planting Soil
  - a. Results of tests including identification of deviations from specified ranges. Identify any toxic substance(s) harmful to plant growth or life. Recommendations for soil amendments, mix proportions, and methods of preparation, as applicable to specifications herein.

D. Product Certificates: For each type of manufactured product, signed by product manufacturer, and complying with the following:

1. Manufacturer's certified analysis for standard products.
2. Analysis of other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.

E. Qualification Data: Submit qualification data for firms and persons specified in Part 1 Article "Quality Assurance" to demonstrate and confirm their capabilities and experience. Include lists of completed projects with project names and addresses, names and address of Commissioners and City of New Yorks, and other information requested.

1. Landscape Nursery(ies)/Plant Supplier(s).
2. Landscape Installer.
3. Soil Testing Laboratory.

F. Schedule: Upon being awarded the Contract the Contractor shall submit a detailed schedule of landscape activities including but not limited to the following:

1. Date for Landscape Kickoff Meeting – this shall happen at the earliest possible time
2. Dates for Landscape Submittals

3. Dates for Plant Tagging and Procurement
  4. Dates for detailed landscape operations including soil deliveries, soil placement and plant installations itemized by each exterior plant type.
- G. Maintenance Instructions: Recommended procedures to be established by City of New York for maintenance of exterior plants during a calendar year. Submit prior to substantial completion inspection.

## 1.6 QUALITY ASSURANCE

### A. Qualifications:

1. Nursery/Plant Supplier Qualification: Plant Nursery(ies) shall have a nursery facility as an integral part of operation where majority of plants can be grown and reviewed, shall be reputable, and shall have been in continual operation with a minimum of 7 years experience as a plant grower. Nursery shall be capable of the following as a minimum:
    - a. Supplying plant material conforming to the quality standards, visual characteristics, sizes, species cultivars, and quantities indicated by Contract Documents.
    - b. Conformance to cultural practices and maintenance procedures suitable for healthy plant material.
  2. Plant Installer Qualifications: Engage an experienced installer who has completed plant installation work similar in material, design, and extent to that indicated for this project with a record of successful landscape establishment.
    - a. Installer's Field Supervisor(s) for Installation and Maintenance shall be experienced in shrub, groundcover and plant installation and maintenance.
    - b. Provide names of projects, project locations, client contact names and phone numbers for a minimum of three (3) projects of similar size and scope, for review and by Commissioner.
    - c. Supervisor(s) shall be maintained full-time on Project site when installation or maintenance is in progress.
    - d. Perform installation work with personnel totally familiar with preparations and exterior plant installation under supervision of an experienced landscape Foreman.
    - e. Provide adequate numbers and types of accessible personnel to meet the scheduling requirements of the exterior plant installation.
- B. Topsoil Testing and Analysis: Furnish soil analysis by a qualified soil-testing laboratory stating pH, organic content, particle size, textural class, percentages of organic matter; gradation of sand, silt, and clay content; infiltration rate, deleterious material; and salinity.
1. Provide one (1) test for every 200 cubic yards delivered to the site.
- C. Drawings References and Definitions:
1. Refer to Contract Drawings for plant list and planting layouts. Plant list is for guide only. Quantities, sizes, and types of plant material shall be verified by Contractor's review of

planting plans and layouts. Where discrepancies are identified and additionally verified with Commissioner, the planting plans shall take precedence.

2. On planting plan sheet(s) each symbol or hatched area represents a plant or group of plants whether or not each symbol is specifically noted. Contractor shall determine the plant type and size each symbol represents by using the following guidelines:
  - a. See legend and plant schedule.
  - b. Match symbol with a like symbol that is noted.
  - c. If a plant symbol is part of a group of symbol is part of a group of symbols see noting for the group.
3. Ground cover or perennials shall not be planted over rootballs.
4. Botanical names shall take precedence over common names.

**D. Plant Measurement Criteria:**

1. Provide quality, size, genus, species, and variety of exterior plants indicated, complying with applicable requirements in ANSI Z60.1, "American Standard for Nursery Stock."
2. Shrub Measurements: Measure according to ANSI Z60.1 with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Measure main body of shrub for height and spread; do not measure branches or roots tip-to-tip.

**E. Preinstallation Conference:** Conduct conference at Project site to comply with requirements in General Conditions. Prior to commencement of any landscape planting work of this Section, arrange a conference at the site of this Project with the Commissioner and City of New York. At least seven (7) days notice shall be given prior to the conference.

1. Conference attendance will include the Contractor, the supervisor/foreman appointed to oversee the work of this Section; the supervisor/foreman responsible for soil preparation, mixes, the Contractors Arborist, and other persons as deemed appropriate for coordination of work and quality control.
2. At the conference, review planting installation and sequence schedules of both Project and plant installations, specification criteria and installation, material sources procedures, outstanding submittals and approvals, and such other subjects necessary for coordination of Work.
3. Establish follow up meeting(s) as necessary.

**1.7 PLANT SELECTION AND INSPECTION**

**A.** The Contractor shall make all pre-selection arrangements at the source(s) of supply to ensure a ready supply of materials, equipment and man power required for an efficient selection procedure. If Commissioner arrives at nursery at appointed time and determines there is no ready supply, City of New York reserves the right to charge the Contractor for travel costs and hourly rate of Commissioner.

**B.** The Contractor shall locate plant materials and be present for inspection at the source and on-site.

- C. Plants will be inspected at the source and selection made by the Commissioner for conformity to specification requirements. If approved for conformity, such approval shall not affect the right of inspection and rejection during delivery and installation.
- D. Inspection On-Site, At Delivery
1. The Commissioner will inspect all plant material upon delivery to site prior to installation. Allow a time duration on-site, as approved by Commissioner, for inspection and layout adjustment prior to installations.
    - a. Rejected plants shall be removed immediately from site.
- E. Inspection for Substantial Completion
1. Maintain all planting areas until start of Guarantee Period. If irrigation system is not operational, this includes all watering. Maintenance shall be in accordance with requirements specified in Article 1.13 of this Section.
  2. Substantial completion shall only be issued by entire phases. If any part of a phase is not entirely planted it shall not be considered for substantial completion.
  3. The Contractor shall submit a full and complete written program for maintenance of the planting for review by the Commissioner at the time of the request for Substantial Completion.
    - a. Submit a written request for substantial completion inspection at least 14 calendar days prior to the day on which the inspection is requested.
    - b. Contractor shall prepare a list with status of items to be completed or corrected for review by the Commissioner at time of inspection.
    - c. Upon completion of the inspection, the Commissioner will amend Contractor's list of items to be completed or corrected as determined to be necessary, and will indicate the anticipated time period for their completion or correction.
  4. The Guarantee Periods will not begin until all items of planting have been completed or corrected. The Commissioner, after Contractor's completion of outstanding work, will recommend to the City of New York, in writing, the Substantial Completion of planting work of this Section.
    - a. The Guarantee Period shall begin only upon issuance of acceptance by City of New York for Substantial Completion of all Project Contracts of which this work may be a part.

## 1.8 DELIVERY, STORAGE, AND HANDLING

### A. Accessory and Packaged Materials:

1. Deliver packaged materials in unopened standard size bags or containers, each clearly bearing the name, guarantee, and trademark of the producer, material composition, manufacturers' certified analysis, and the weight of the material.
2. Accessory and packaged material shall be stored off the ground and covered in a manner to prevent materials from getting wet or damp and in such manner that material effectiveness will not be impaired.

**B. Plant Material, Conditions of Moving and Delivery:**

1. The use of an antidesiccant shall not be allowed except by written approval and consent of the Commissioner and the City of New York.
  - a. If approved, spray deciduous plants with an antidesiccant, immediately before moving plant material from its source.
  - b. Apply an adequate film over trunks, branches, twigs, and foliage.
  - c. Approval shall be required for any subsequent instance of use.
2. Dig and handle plants with care to prevent injury to trunks, branches and roots.
3. Do not prune prior to delivery. Do not bend or bind-tie shrubs in such manner as to damage bark, break branches or destroy natural shape. Pack and ship to insure arrival at site in good condition. Provide protective covering during transport and/or delivery. No plants will be accepted if ball is cracked or broken, or trunks scarred, or branches broken.
4. Shrubs:
  - a. Deliver after preparations of planting areas have been completed and approved and place plants immediately.
  - b. Heeling in of plants shall not be allowed without approval of Commissioner.
5. Groundcovers: Plant immediately upon delivery.
6. Delayed Planting: If planting is delayed more than 6 hours after delivery, protect balls and roots and container grown plant material in a Contractor erected "shade house" from freezing, sun, drying winds, and/or mechanical damage. Additionally protect rootballs with topsoil, compost, or other acceptable material. Water as necessary until planted.
7. Immediately remove any rejected or damaged plant material from the site and replace with selected material as approved by Commissioner. Prepare, maintain, and submit a list of such items removed to confirm replacement.

- C. Plants, Planting Soils or amendment materials stored on site temporarily in stockpiles or other condition as applicable to material prior to placement shall be protected from intrusion of contaminants and erosion, deterioration of plant material, and from damage.**

**1.9 PROJECT/SITE CONDITIONS**

**A. Existing Conditions:**

1. Existing Trees to Remain: Determine locations of existing trees to remain and protected areas extending to their existing drip lines. Exercise care when planting around existing trees and tree protection areas so as to not damage existing roots.
2. Utilities: Determine location of existing and proposed above grade and underground utilities and perform work in a manner that will avoid damage. Hand excavate, as required at no additional cost to the City of New York.
3. Should the Contractor, in the course of Work, find any discrepancies between Contract Drawings and physical conditions, it will be Contractor's duty to inform the Commissioner immediately in writing for clarification. Work done after such discovery, unless authorized by the Commissioner, shall be done at the Contractor's risk.
4. When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, notify Commissioner before planting.

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## B. Environmental Requirements and Planting Schedule:

1. Weather Limitations: Proceed with planting as specified and only when existing and forecasted weather conditions permit.
2. Do not install plant life when ambient temperatures may drop below 40 deg. F or rising above 80 deg. F. Do not install plant life when wind velocity exceeds 30 mph (48 k/hr). Do not plant when the ground is frozen, excessively wet, or the soil is otherwise in an unsatisfactory condition for planting.
3. Planting Restrictions: Plant during one of the following periods, weather permitting. Coordinate planting periods with maintenance periods to provide required maintenance.

## a. Spring Planting:

- |                      |                    |
|----------------------|--------------------|
| 1) Deciduous shrubs: | March 15 to May 1  |
| 2) Evergreen shrubs: | March 30 to May 15 |
| 3) Groundcovers:     | April 15 to May 30 |

## b. Fall Planting:

- |                       |                           |
|-----------------------|---------------------------|
| 1) Deciduous shrubs:  | October 15 to November 30 |
| 2) Evergreens shrubs: | September 1 to October 15 |
| 3) Groundcovers:      | September 1 to October 15 |

## 1.10 COORDINATION AND SEQUENCING

- A. Adjust, relate, arrange together, and otherwise coordinate work of this Section with work of Project and all other Sections of Contract Specifications. Coordinate work with and between availability of approved soil analysis, soil amendment recommendations for each area, and preparation of planting beds.
- B. Plant installations on site shall not begin until all other site constructions are complete and possibility from damage to planting caused by other site operations does not exist, unless other alternate sequence is specified or approved. In addition, no planting shall commence until all plant, topsoil, amendment, supplement, and accessory materials have been submitted and approved for use.
- C. Comply with seasonal planting schedule specified herein and the following:
  1. Shrubs shall be delivered and planted prior to delivery and planting of perennials unless otherwise approved by Commissioner.
  2. Install plants after coordinating with installation of underground irrigation system piping and watering heads if an irrigation system is part of Work. Contractor is solely responsible for watering all installed plant materials in the event that the irrigation system has not yet been installed and/or is not yet functional.
- D. Sequence planting and soil installation so as to not drive or operate any mechanical equipment over any installed soil material. Soil material that has been driven over shall be removed from the site and legally disposed of at the Contractor's expense.
- E. Watering: The Contractor shall be responsible for the coordination of the planting and site water availability. Water, if not available at the time of planting, shall be furnished by the

Contractor. All water, water tank trucks, spray heads, hoses and other equipment required for watering shall be furnished by the Contractor as needed at no additional cost to City of New York.

- F. If a sufficient amount of water is available from existing water spigots, or other sources the water shall be provided by the City of New York. The Contractor shall be responsible for supplying all hoses, sprinklers, etc to deliver the water to the plant material.

#### 1.11 REGULATORY REQUIREMENTS

- A. Comply with all rules, regulations, laws and ordinances of local, state and federal authorities having jurisdiction. Provide labor, materials, equipment and services necessary to make Work comply with such requirements without additional cost to City of New York.
- B. Procure and pay for permits and licenses required for work of this section, including delivery and installation operations. Process to start work immediately.

#### 1.12 WARRANTY

- A. Special Warranty: Warrant the following exterior plants, for the warranty period indicated against defects including death or that are, in the opinion of the Commissioner, in unhealthy or unsightly condition, or that have lost their natural shape due to dead branches, excessive pruning, excessive defoliation, or inadequate or improper maintenance, except for defects resulting from lack of adequate maintenance, neglect, or abuse by City of New York, or incidents that are beyond Contractor's control:

1. Warranty Period for Plants: Two years from date of Substantial Completion.

- a. Remove dead exterior plants immediately. Replace immediately unless required to plant in the succeeding planting season.
- b. Replace unacceptable plants in accordance with original Specification.
- c. Cost of replacement is considered to be included in the Contract price.
- d. At the end of the Guarantee Period, the Contractor shall replace, without cost as soon as weather conditions permit, and within a specified planting period, all plants determined by the Commissioner to be dead, dying or otherwise unacceptable.

- 1) Plants shall be free of dead or dying branches and shall bear foliage of normal density, size, and color.
- 2) Replacements plants shall match adjacent specimens of the same species. Replacements shall be subject to all requirements stated in this specification. Labor and all materials needed for installation of replacements shall be included in the guarantee.

- e. The Commissioner shall be solely responsible for determining if a plant is dead, dying or otherwise in an unhealthy condition.

2. The guarantee of all replacement plants shall extend for an additional period of one year from the date of their acceptance after replacement.



- B. Contractor shall not be held responsible for deleterious effects caused by maintenance procedures performed by the City of New York without the concurrence of the Contractor.
- C. During the Warranty Period the City of New York shall maintain all plant materials; however, during the Warranty Period it shall be the Contractor's responsibility to inspect the plant materials to ensure that the areas are receiving proper care.
  - 1. The Contractor shall make periodic inspections, at no extra cost, during the guarantee period to determine what changes, if any, should be made in the maintenance program.
  - 2. Contractor shall schedule regular visits to the site to observe the health of plants and observe the maintenance practices being performed by the City of New York. If at any time the Contractor feels that the City of New York is not properly maintaining the plants he shall issue a letter to the City of New York stating the discrepancies in maintenance procedures and recommending corrective action; otherwise no consideration will be given to the Contractor's claim at a later date.
  - 3. Contractor shall visit the site on a regular basis to observe the irrigation system and determine if the plant material is being properly irrigated. If the Contractor feels that the plants are being overwatered or underwatered he shall issue a letter to the City of New York stating the problems and recommend proper corrective action; otherwise no consideration will be given to the Contractor's claim at a later date.

### 1.13 MAINTENANCE

- A. Prior to substantial completion, maintain exterior plants. Maintenance shall begin immediately after each plant is planted and shall continue until written notification of substantial completion.
  - 1. Plants: Maintain by pruning, cultivating, watering, weeding, fertilizing, restoring planting saucers and resetting to proper grades or vertical position, as required to establish healthy, viable plantings. Spray as required to keep shrubs free of insects and disease. Perform general clean up of beds and ensure that plants are being properly irrigated or watered.
  - 2. All plants, plant beds and traprock areas within the Garden area are to be maintained during this period (not just areas of new plants).

## PART 2 - PRODUCTS

### 2.1 PLANT MATERIAL

- A. General: Furnish nursery-grown plants complying with ANSI Z60.1, with healthy root systems developed by transplanting or root pruning. Plants shall be field grown and tagged while in the ground. Provide well-shaped, fully branched, healthy, vigorous stock free of disease, insects, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.
- B. Grade: Provide plants of sizes and grades complying with ANSI Z60.1 for type of plants required. Plants of a larger size may be used if acceptable to the Commissioner, with a proportionate increase in size of roots or balls.

- C. Label each plant with securely attached, waterproof tag bearing legible designation of botanical and common name.
- D. Label at least one plant of each variety with a securely attached, waterproof tag bearing legible designation of botanical and common name.
- E. If formal arrangements or consecutive order plants is shown, select stock for uniform height and spread, and number label to assure symmetry in planting.

## 2.2 DECIDUOUS SHRUBS

- A. Form and Size: Deciduous shrubs with not less than the minimum number of canes required by and measured according to ANSI Z60.1 for type, shape, and height of shrub.
  - 1. Provide balled and burlapped or container-grown shrubs as indicated.

## 2.3 GROUND COVER PLANTS

- A. Ground Cover: Provide ground cover of species indicated, established and well rooted in pots or similar containers, and complying with ANSI Z60.1.

## 2.4 PLANTING SOIL

- A. TOPSOIL: Topsoil shall be imported topsoil or manufactured topsoil from off-site sources. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches (100 mm) deep; do not obtain from agricultural land, bogs or marshes. Material shall be free of stones 1 1/2 inch (37.5 mm) or larger in any dimension and other extraneous materials harmful to plant growth. Comply with the following additional requirements:

- 1. pH: Between 6.0 and 7.0 as determined by ASTM D-4972.
- 2. Organic content: Between 3% and 6% as determined by ASTM F1647-99.
- 3. Particle Size as determined by ASTM C-136:

Sieve Size	Min. % Passing
37.5 mm (1 1/2")	100
19 mm (3/4")	95
4.75 mm (No. 4)	75
2 mm (No. 10)	60

- 4. Textural Class: as determined by combined hydrometer and wet sieving in compliance with:

<u>Textural Class</u>	<u>% Total Weight</u>
Sand (0.05—2.0 mm dia. range)	45-75
Silt (0.002—0.05 mm dia. range)	15-25
Clay (Less than 0.002 mm dia. range)	5-10

5. Internal Rate of Percolation: Between 1" and 2" per hour.
  6. Salinity: less than 4.0 mmhos/cm (dS/m) as determined by NRP-493 method.
- B. Compost: Stable, humus-like material produced from the aerobic decomposition and curing of organic yard waste. The compost shall be a dark brown to black color and be capable of supporting plant growth with appropriate management practices in conjunction with addition of fertilizer and other amendments as applicable, with no visible free water or dust, with no unpleasant odor, and meeting the following criteria as reported by laboratory tests:
1. pH: Between 5.5 and 8.0 as determined from a 1:1 soil-distilled water suspension using a glass electrode pH meter as per ASTM D4972.
  2. Organic Content: min. 40% of dry weight as determined by ASTM F1647-99.
  3. Moisture Content: Between 35 and 55 percent.
  4. Salinity: Electrical conductivity of a one to two soil to water ratio extract shall not exceed 2.0 mmhos/cm (dS/m) as determined by NRP-493 method.
  5. Carbon to Nitrogen Ratio: Between 10:1 to 25:1.
- C. MIX: Planting Soil to be used as planting medium for planting beds. Provide soil amendments in not less than the following quantities:
1. Ratio of loose compost to topsoil by volume: 1:7
  2. Weight of lime per cu. Ft. of backfill: as required per test and analysis.
  3. Weight of bonemeal per cu. Ft. ½ lb. Per cu. Ft.
  4. Weight of superphosphate per cu. Ft. As per test and analysis.
  5. Weight of potash per cu. Ft. As required per test and analysis.
  6. Weight of commercial fertilizer per 1000 sq. ft.: As required per test and analysis.

## 2.5 FERTILIZER

- A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
1. Composition: Nitrogen, phosphorous, and potassium and other supplemental nutrients in amounts recommended in soil testing reports from a qualified soil-testing agency.

## 2.6 MYCORRHIZAL INOCULANT

- A. Mycorrhizal Inoculant: Mycorrhizal fungal inoculant shall be 3-ounce packets of live spores as manufactured by Plant Health Care, Inc. or approved equal.
- B. Each packet of inoculant shall contain the following:

1. Live spores of VA Endomycorrhizal fungi: minimum of 1,000 spores of Vesicular-Arbuscular fungi including: Entrophospora columbiana, Glomus etunicatum, Glomus clarum and Glomus sp.
2. Live spores of Ectomycorrhizal fungi: minimum 60 million spores of Pisolithus tinctorius.
3. Acrylamide copolymer gel as a water absorbent gel.
4. Wetting Agent: Yucca schidigera, a dry soluble yucca plant extract.
5. Bio-Stimulant: Soluble sea kelp extract, Ascophylum nodosum.
6. Humic acids, leonardite humates derived from natural humates.

## 2.7 MULCH

- A. Mulch: Free from deleterious materials and suitable as a top dressing of plants, consisting of one of the following:
  1. Type: Double shredded hardwood bark for planting beds. Color: Black or Dark Brown
- B. Hardwood Mulch: Mulch shall be derived from tree material, not from wood waste or by-products like sawdust, shredded palettes, or other debris. Mulch shall be natural in color and not dyed. It shall be of a uniform grade with no additives or any other treatment. Mulch with leaves, twigs, and/or debris shall not be acceptable. a maximum 10% wood fiber, shall be fibrous in nature and processed in accordance with the National Bark Producers Association. The pH factor should range from 5.8 to 6.2.

## 2.8 MISCELLANEOUS PRODUCTS

- A. Water: Potable, clean, fresh, and free from harmful materials deleterious to plant growth, water shall be furnished and applied by Contractor as necessary for planting installation and maintenance.
- B. Antidesiccant: Water-insoluble emulsion, permeable moisture retarder, film forming, for trees and shrubs. Deliver in original, sealed, and fully labeled containers and mix according to manufacturer's written instructions.
  1. Acceptable Product And Manufacturers:
    - "Wiltproof" as manufactured by Wiltproof Products, P.O. Box 4240, Greenwich, CT. 06830, (203) 531-4740;
    - "Moisturin" as manufactured by GSI Horticultural, 325 NW Vermont Place, Suite 108, Bend, OR. 97701 (541) 383-0222;
    - "Overcoat" as manufactured by Enviro Science Technologies, P.O. Box 11232, Shawnee Mission, KS 66207, (913) 677-4901;
    - Or approved equal
- C. Fungicides and Pesticides: EPA registered and approved before use for type and rate of application by Commissioner, City of New York, and agencies with jurisdiction of type recommended by manufacturer for application.
- D. Pre-emergent Herbicide: EPA registered and approved before use for type and rate of application by Commissioner, City of New York, and agencies with jurisdiction, of type recommended by manufacturer for application.

**PART 3 - EXECUTION****3.1 EXAMINATION**

- A. Examine areas to receive exterior plants for compliance with requirements and conditions affecting installation and performance. Proceed with installation only after unsatisfactory conditions have been corrected.
- B. Prior to excavation for plants, ascertain the location of surface and subsurface utilities.
  - 1. Take proper precautions so as not to disturb or damage sub-surface elements, Contractor failing to take these precautions shall be responsible for making requisite repairs to damaged utilities or subsurface element at Contractor's own expense and no modification to schedule.
  - 2. If subsurface elements are uncovered at a specific location for a plant item, notify the Commissioner immediately for approved relocation of item(s).

**3.2 PREPARATION**

- A. Protect structures, utilities, sidewalks, pavements, and other facilities, and lawns and existing exterior plants from damage caused by planting operations.
- B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- C. Lay out individual plant locations and areas for multiple exterior plantings. Stake locations, outline areas, adjust locations when requested, and obtain Commissioner's acceptance of layout before planting. Make minor adjustments as required.
- D. Apply antidesiccant to trees and shrubs only as approved by Commissioner.
  - 1. If deciduous shrubs are moved in full leaf, spray with antidesiccant at nursery before moving and again two weeks after planting.
  - 2. Antidesiccant shall be applied using power spray to provide an adequate film over trunks, branches, stems, twigs, and foliage to protect during digging, handling, and transportation.

**3.3 PLANTING BED ESTABLISHMENT**

- A. Finish Grading: Grade planting beds to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.
- B. Restore planting beds if eroded or otherwise disturbed after finish grading and before planting.

**3.4 PLANT EXCAVATION**

- A. Pits and Trenches: Excavate circular pits with sides sloped inward at a 1:1 slope. Trim base leaving center area raised slightly to support root ball and assist in drainage. Do not further disturb base. Scarify sides of plant pit smeared or smoothed during excavation.
1. Excavate approximately three times as wide as ball diameter for balled and burlapped or container-grown stock.
  2. Coordinate planting with placement and formwork which may be in place for structural soils.
- B. Subsoil removed from excavations may not be used as backfill.
- C. Obstructions: Notify Commissioner if unexpected rock or obstructions detrimental to plants are encountered in excavations.
- D. Shrub Planting Bed Drainage Testing: Notify Commissioner if subsoil conditions evidence unexpected water seepage or retention in planting beds.
1. Plant Bed Drainage testing must take place with the presence of a City of New York representative.
  2. Upon completion of planting pit or trench excavation and prior to planting, fill excavations with 12" minimum depth water and allow water to naturally drain out. When water has drained out, fill excavation again with 12" minimum depth water and measure rate of drainage. Drainage rate should be a minimum of 1" per hour (1 in drop in water elevation per hour within pit or excavation).
    - a. Rate of Drainage Testing:
      - 1) Planting Bed Areas: one drainage test for every 500 sq. ft. of planting bed
  3. If planting beds do not drain freely, notify Commissioner for direction prior to installation of plants.

### 3.5 PLANTING

- A. Set balled and burlapped stock plumb and in center of pit or trench with top of root flare 1 inch above adjacent finish grades. The flare must be located and placed at the correct level before continuing procedures.
1. Remove burlap from tops of root balls and 12" down the sides of the rootball from the top, but do not remove from under root balls. Remove pallets, if any, before setting. Fully remove any non-biodegradable material.
  2. Do not use planting stock if root ball is cracked or broken before or during planting operation.
  3. Place topsoil around root ball in layers, tamping to settle mix and eliminate voids and air pockets. When pit is approximately one-half backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Water again after placing and tamping final layer of topsoil.

- B. Set container-grown stock plumb and in center of pit or trench with top of root ball flush with adjacent finish grades.
  - 1. Carefully remove root ball from container without damaging root ball or plant.
  - 2. Remove plants from containers by cutting or inverting the container. Scarify rootballs and comb out roots prior to planting.
  - 3. Place topsoil around root ball in layers, tamping to settle mix and eliminate voids and air pockets. When pit is approximately one-half backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Water again after placing and tamping final layer of topsoil.
- C. During topsoil backfilling, apply Mycorrhizal Inoculant at the following rates:
  - 1) 3 ounces (85 g) each 12 inch (305 mm) of rootball diameter for shrubs.
- D. Mulching: Apply 2-inch average thickness of organic mulch throughout surface of each planting bed Do not place mulch within 3 inches of trunks or stems.
- E. Do not wrap tree trunks with material of any kind.

### 3.6 SHRUB PRUNING

- A. Do not prune, thin, and shape trees and shrubs unless directed by Commissioner.
- B. If pruning is approved, comply with NAA standards.
  - 1. Do not cut leaders.
  - 2. Remove only injured or dead branches.
  - 3. Prune shrubs to retain natural character.
  - 4. Shrub sizes indicated are sizes after pruning.

### 3.7 GROUND COVER PLANTING

- A. Set out and space ground cover and plants as indicated.
- B. Dig holes large enough to allow spreading of roots, and backfill with topsoil.
- C. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.
- D. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.
- E. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.

### 3.8 MULCHING

- A. Prior to mulch installation, apply pre-emergent herbicide to soil areas in accordance with the manufacturer's instructions. Do not apply herbicide in planting bed areas to receive ornamental grasses or other plants that may be damaged by herbicide.
- B. Mulch plantings within two (2) days of plant installation.
- C. Mulch backfilled surfaces of planting beds and other areas indicated.
  - 1. Mulch: Apply 2-inch average thickness of organic mulch, and finish level with adjacent finish grades. Do not place mulch against plant stems.

### 3.9 CLEANUP AND PROTECTION

- A. During exterior planting, keep adjacent pavings and construction clean and work area in an orderly condition.
- B. Protect exterior plants from damage due to landscape operations, operations by other contractors and trades, and others. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged exterior planting.

### 3.10 DISPOSAL

- A. Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off City of New York's property.

### 3.11 END OF WARRANTY PERIOD

- A. At the end of each warranty periods the planting shall be re-inspected for final acceptance.
- B. The inspections shall take place with the City of New York, the Consultant Design Team and the Landscape Contractor.
- C. The primary goal of this inspection is to make sure all plants are alive and healthy.

END OF SECTION 329300



## SECTION 329600 - TRANSPLANTING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes the digging and removal of on-site shrubs, balling and burlapping the shrubs and delivering to the City of New York.

#### 1.3 DEFINITIONS

- A. General: See definitions in ANSI A300 (Part 6) and in ANSI Z60.1 pertaining to field-grown trees, except as otherwise defined in this Section.
- B. Caliper: Diameter of a trunk as measured by a diameter tape at a height 6 inches above the root flare for trees up to, and including, 4-inch size at this height; and as measured at a height of 12 inches above the root flare for trees larger than 4-inch size.
- C. Caliper (DBH): Diameter breast height; diameter of a trunk as measured by a diameter tape at a height 54 inches above the ground line.
- D. Root-Ball Depth: Measured from bottom of trunk flare to the bottom of root ball.
- E. Root-Ball Width: Measured horizontally across the root ball with an approximately circular form or the least dimension for non-round root balls, not necessarily centered on the tree trunk, but within tolerance according to ANSI Z60.1.
- F. Root Flare: Also called "trunk flare." The area at the base of the tree's stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk.

#### 1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
  - 1. Review methods and procedures related to transplanting work include, but are not limited to, the following:
    - a. Construction schedule. Verify availability of materials, personnel, equipment, and unimpeded access needed to make progress and avoid delays.
    - b. Tree and plant protection.

- c. Plant maintenance.
- d. Arborist's responsibilities.

### 1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples for Verification: For each of the following:
  - 1. Proprietary Root-Ball-Stabilization Device: One unit.
  - 2. Slow-Release Watering Device: One unit of each size required.
- C. Pruning Schedule: Written schedule prepared by arborist detailing scope and extent of pruning each plant in preparation for and subsequent to transplanting.
  - 1. Species and size of plant.
  - 2. Location on site plan. Include unique identifier for each.
  - 3. Reason for pruning.
  - 4. Seasonal limitations on pruning.
  - 5. Preparatory Pruning: Time schedule and description of preparatory pruning to be performed.
    - a. Indicate time in months preceding the extraction of the tree.
    - b. Indicate diameter of root ball and depth of root pruning for each tree.
  - 6. Description of root and crown pruning during and subsequent to transplanting.
  - 7. Description of maintenance following pruning.

### 1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified tree-service firm and arborist.
- B. Certification: From arborist, certifying that transplanted plants have been protected during construction and that plants were promptly and properly treated and repaired when damaged.
- C. Maintenance Recommendations: From arborist, recommended procedures to be established by City of New York for care and protection of trees after completing the Work.
  - 1. Submit before completing the Work.
- D. Existing Conditions: Documentation of existing plants indicated to be transplanted and to remain, which establishes preconstruction conditions that might be misconstrued as damage caused by construction activities.
  - 1. Use sufficiently detailed color photographs or video recordings. Color shall accurately depict hue condition of foliage and bark.
  - 2. Include drawings and notations to indicate specific wounds and damage conditions of each tree designated to be transplanted.

- E. Plant-Transplanting Program: Submit before work begins.
- F. Plant-maintenance reports.

#### 1.7 QUALITY ASSURANCE

- A. Plant Service Firm Qualifications: An experienced landscaping contractor or tree-moving firm that has successfully completed transplanting work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site during execution of the Work.
  - 1. Arborist Qualifications: Certified Arborist as certified by ISA.
- B. Plant-Transplanting Program: Prepare a written plan by arborist for removing plants for the whole Project, including each phase or process, tree maintenance, and protection of surrounding materials during operations. Describe in detail the materials, methods, and equipment to be used for each phase of the transplanting work.
  - 1. Include transplanting times appropriate for each species at the Project location.
  - 2. Include a transplanting schedule for each species to be transplanted, coordinated with the Project schedule.
  - 3. Show details of temporary protective barriers where needed.
  - 4. Include care and maintenance provisions.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws if applicable.
- B. Bulk Materials:
  - 1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or trees.
  - 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
  - 3. Accompany each delivery with appropriate certificates.
- C. Protect bark, branches, and root systems from sun scald, drying, wind burn, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie plants in such a manner as to destroy their natural shape.
- D. Completely cover foliage when transporting plants while they are in foliage.
- E. Handle plants by root ball. Do not drop plants.
- F. Notify the City of New York seven days prior to the plants being dug and balled and burlapped. Immediately upon balling and burlapping the plants, set the plants in their appropriate aspect

(sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.

## 1.9 WARRANTY

A. **Plant Removers Special Warranty:** Plant-service firm agrees to replace plants and related materials that fail within specified warranty period.

1. Failures include, but are not limited to, the following:

- a. Death and unsatisfactory growth except for defects resulting from abuse, lack of adequate maintenance, or neglect by City of New York, or incidents that are beyond Contractor's control.
- b. Death and unsatisfactory growth is defined as more than 25 percent dead or in an unhealthy condition or failure to meet general performance requirements at end of warranty period.
- c. Structural failures including trees falling or blowing over.
- d. Faulty performance of materials and devices related to plants including watering devices.

2. **Warranty Periods from Date of Removal:**

- a. **Plants:** Until the City of New York takes possession of plants or 60 days, whichever comes first.

3. Include the following remedial actions as a minimum:

- a. Remove dead plants with unsatisfactory growth at end of warranty period; replace when directed.
- b. A limit of one replacement of each plant will be required except for losses or replacements due to failure to comply with requirements.

## 1.10 MAINTENANCE SERVICE

A. **Initial Maintenance Service:** Provide plant maintenance by skilled employees of plant-service firm and as required in Part 3. Begin maintenance immediately after plants are removed and continue until the City of New York takes possession of the plants.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

A. **General Performance:** Removed plants shall be healthy and not display serious signs of distress.

## 2.2 ROOT BALL MATERIALS

- A. Burlap: Non-synthetic, biodegradable.
- B. Twine: Non-synthetic, biodegradable
- C. Nails: Steel nails specifically made for fastening burlap to root balls.

## 2.3 MISCELLANEOUS PRODUCTS

- A. Organic Mulch: Shredded hardwood.
- B. Antidesiccant: Water-insoluble emulsion, permeable moisture retarder, film forming, for trees. Deliver in original, sealed, and fully labeled containers and mix according to manufacturer's written instructions.
- C. Pesticides: Pesticide registered and approved by EPA, acceptable to authorities having jurisdiction, and of type recommended in writing by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Erosion and Sedimentation Control: Examine the site to verify that temporary erosion- and sedimentation-control measures are in place. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross transplanting areas.
- B. For the record, prepare written report, endorsed by arborist, listing conditions detrimental to transplanting work and tree protection and health.
- C. Proceed with removing plants only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, other facilities, turf areas, and other plants and planting areas from damage caused by plant removal transplanting operations.
- B. Utility Locator Service: Notify utility locator service for area where Project is located before beginning excavation.
- C. Locate and clearly identify plants for transplanting. Tie a 1-inch red-vinyl tape around each plant.
- D. Apply antidesiccant to plants uniformly, using power spray to provide an adequate film over trunks (before wrapping), branches, stems, twigs, and foliage to protect during extracting, handling, and transportation.

1. If deciduous plants are removed in full leaf, spray with antidesiccant before extracting and again in two weeks.
- E. Wrap plants with burlap fabric over trunks, branches, stems, twigs, and foliage to protect from wind and other damage during extracting, handling, and transporting.

### 3.3 PREPARATORY ROOT PRUNING

- A. Root Pruning: Perform preparatory root pruning under direction of arborist as far in advance of extracting each plant as the Project Schedule allows.
1. Dig trench by air spade around perimeter of plant tree at indicated root-ball width to the depth of the root system. Do not use a backhoe or other equipment that rips, tears, or pulls roots.
  2. Root-Ball Sizes: Diameter and depth of rootball shall be as required in "American Standard for Nursery Stock - ANSI Z60.1-2004. Oversized balls are allowable. Undersized balls are not allowable.
  3. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and redirect them without breaking.
  4. If at the opinion of the arborist a plant cannot be removed without harming an adjacent tree to remain then the plant shall be sacrificed. The plant and root mass shall be removed as directed by the arborist taking care not to damage the roots of an existing tree to remain.
  5. Use narrow-tine spading forks to comb soil to expose roots with minimal damage to root system.
  6. Cut exposed roots of plants to be removed manually with sharp pruning instruments; do not break, tear, chop, or slant the cuts. Do not use a backhoe or other equipment that rips, tears, or pulls roots.
  7. Do not paint or apply sealants on cut root ends.
  8. Backfill trench with excavated soil.

### 3.4 EXTRACTING PLANTS

- A. General: Extract plants under supervision of the arborist. Digging and burlapping plants shall only be performed by skilled and experienced workers.
- B. Orientation Marking: Mark the north side of each tree with non-permanent paint before extracting.
- C. Root-Ball Sizes: Diameter and depth of rootball shall be as required in "American Standard for Nursery Stock - ANSI Z60.1-2004.
- D. Digging:
1. Prior to digging clear the entire surface around the perimeter of the plant of all mulch, stones and deleterious materials.
  2. Dig and clear a pit by hand spade to the required diameter and depth of the root ball. Oversized balls are allowable. Undersized balls are not allowable. Do not use a backhoe or other equipment that rips, tears, or pulls roots.

3. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and redirect them without breaking.
4. Cut exposed roots manually with sharp pruning instruments; do not break, tear, chop, or slant the cuts. Do not paint or apply sealants on cut root ends.
5. When the root ball is free from the earth lay a piece of burlap next to the plant that will be large enough to cover the entire ball. Pull up opposite corners of the burlap and tie them together as tightly as possible. Repeat with the two remaining corners.
6. Use nails to secure the burlap to the root ball.
7. Wrap burlapped ball with a sufficient amount of twine to add extra support to the ball. Do not secure twine to trunk.

### 3.5 STORAGE AND MAINTENANCE

- A. Until the City of New York takes possession of the plants the Contractor shall store the plants at a location designated by the City of New York.
- B. If the plants are to be stored for more than one week (before the City of New York takes possession) the plants shall be heeled in with shredded hardwood mulch to sufficiently cover the root balls.
- C. Plants shall be watered on a daily basis or more often if necessary.
- D. Apply treatments as required to keep tree materials, planted areas, and soils free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards. Treatments include physical controls such as hosing off foliage, mechanical controls such as traps, and biological control agents.
- E. Pesticide Application: Apply pesticides and other chemical products and biological control agents in accordance with authorities having jurisdiction and manufacturer's written instructions. Coordinate applications with City of New York's operations and others in proximity to the Work. Notify City of New York before each application is performed.
- F. Reports: Have arborist prepare weekly inspection reports.

### 3.6 REPLACEMENT

- A. General: Replace plants and other plants indicated to remain or be relocated that are damaged by construction operations, in a manner recommended by the arborist and approved by Commissioner.
  1. Submit details of proposed pruning and repairs.
  2. Perform repairs of damaged trunks, branches, and roots within 24 hours according to arborist's written instructions.
  3. Replace trees and other plants that cannot be repaired and restored to full-growth status, as determined by Commissioner.

**3.7 CLEANUP AND PROTECTION**

- A. During plant removal operations, keep adjacent paving and construction clean and work area in an orderly condition.
- B. Protect plants from damage due to transplanting operations and operations of other contractors and trades. Maintain protection during transplanting and maintenance periods. Treat, repair, or replace damaged plantings.

**3.8 DISPOSAL OF SURPLUS AND WASTE MATERIALS**

- A. Except for materials indicated to be recycled, remove surplus soil, excess excavated material, waste materials, displaced plants, trash, and debris, and legally dispose of them off City of New York's property.

**END OF SECTION 329600**



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

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

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**Contract for Furnishing all Labor and Material Necessary and Required for:**

**CONTRACT NO. 1      GENERAL CONSTRUCTION**

# **Noguchi Masterplan Phase IC.2 Renovation**

**LOCATION:                      32-37 Vernon Blvd  
BOROUGH:                    Long Island City, 11101  
CITY OF NEW YORK**

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Contractor \_\_\_\_\_

Dated \_\_\_\_\_, 20\_\_\_\_

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Entered in the Comptroller's Office

First Assistant Bookkeeper \_\_\_\_\_

Dated \_\_\_\_\_, 20\_\_\_\_

