



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

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

**LAW**

**VOLUME 1 OF 3**

**BID BOOKLET**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

**PROJECT ID: HWMWTCA7E**

**RECONSTRUCTION OF WORTH STREET**

**FROM HUDSON STREET TO PARK ROW**

**INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK**

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

FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY  
*IN-HOUSE DESIGN*

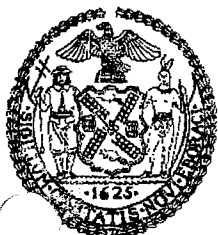
**NOVEMBER 28, 2014**

NYS DOT PIN X759.19.321

Fed. Aid Project No. \_\_\_\_\_

Bid Opening 11:00 A.M. on

Location 1st Floor Bid Room, 30-30 Thomson Ave., Long Island City, N.Y. 11101



**5-086**





"A"&"B" Contract AKA "Time Cost" Contract

Correction

Bid Tab

Description	RECONSTRUCTION OF WORTH STREET FROM HUDSON STREET TO PARK ROW - BOROUGH OF MANHATTAN		
Bid Date	6/12/2015	FMS ID	HWMWTCA7E
Estimated Cost	\$86,848,145.00	Client Agency	DOT
Bid Security	Not less than 5% of Total Bid Price	PLA	No
Time Allowed	1825 CCD	Contract Manager	Victoria Ayo-Vaughan
Addendum	10	Project Manager	Awad, Nagi
PIN	8502015HW0028C	E-PIN	85015B0086
Selective Bidding	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Consultant	In-House

---

Bid Rank	Vendor	Bid Amount	Security Type
1	MF M CONTRACTING CORP.	0.9133	Bond
2	C.A.C. INDUSTRIES, INC.	1.2042	Bond
3	TULLY CONSTRUCTION CO. INC.	1.3222	Bond
4	RESTANI CONSTRUCTION CORP.	1.3390	Bond
5	BEDFORD/CARP CONSTRUCTION JV	1.4523	Bond
6	JUDLAU CONTRACTING, INC.	1.4650	Bond

Recorder: Brenda Barreiro ext. 1041

Approver: 

Final Ranking to be Determined by DDC





**Department of  
Design and  
Construction**

DR. FENIOSKY A. PEÑA-MORA  
Commissioner

JOHN GODDARD  
Agency Chief  
Contracting Officer

December 16, 2015

CERTIFIED MAIL - RETURN RECEIPT REQUEST  
MFM CONTRACTING CORP.  
335 CENTER AVENUE  
MAMARONECK, NY 10543

RE: FMS ID: HWMWTCA7E  
E-PIN: 85015B0086001  
DDC PIN: 8502015HW0028C  
RECONSTRUCTION OF WORTH STREET  
FROM HUDSON STREET TO PARK ROW  
- BOROUGH OF MANHATTAN  
**NOTICE OF AWARD**

Dear Contractor:

You are hereby awarded the above referenced contract based upon your bid in the amount of \$80,013,850.88 submitted at the bid opening on June 12, 2015. 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.



**Department of  
Design and  
Construction**

On or before the contract commencement date, you are required to submit all other certificates of insurance and/or policies in the types and amounts required by Schedule A. Such certificates of Insurance and/or policies must be submitted to the Agency Chief Contracting Office, Attention: Risk Manager, Fourth Floor at the above indicated department address.

Your attention is directed to the section of the Information for Bidders entitled "Failure to Execute Contract". As indicated in this section, in the event you fail to execute the contract and furnish the required bonds within the (10) days of your receipt of this notice of award, your bid security will be retained by the City and you will be liable for the difference between your bid price and the price for which the contract is subsequently awarded, less the amount of the bid security retained.

Sincerely,

A handwritten signature in black ink, appearing to read "John Goddard". The signature is written in a cursive style with a large, looping initial 'J'.

John Goddard

# GET UPFRONT CAPITAL TO COMPETE ON CITY CONTRACTS

## Contract Financing for NYC Small Businesses

NYC Business Solutions helps small businesses, including Minority or Women-owned Business Enterprises (M/WBEs), across all industries secure low-rate loans to compete on City contracts.

Whether your firm has been selected to perform a construction project, provide professional services, or supply the City with goods, businesses across all industries can access up to \$150,000 in capital to cover contract-related labor and equipment costs.

### The ideal business should:

- Currently be in operation
- Have plans to bid on a City contract
- Need early-stage resources (e.g. working capital, inventory, or equipment)

Call 311 and ask for “contract financing” or visit [www.nyc.gov/contractfinancing](http://www.nyc.gov/contractfinancing) for more information

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**CITY OF NEW YORK**

**DEPARTMENT OF  
DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

**BID BOOKLET**

FOR FURNISHING ALL LABOR AND MATERIALS  
NECESSARY AND REQUIRED FOR:

**PROJECT ID: HWMWTCA7E**

**RECONSTRUCTION OF WORTH STREET**

**FROM HUDSON STREET TO PARK ROW**

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TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK**

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BOROUGH OF MANHATTAN  
CITY OF NEW YORK**

(NO TEXT ON THIS PAGE)



**PROJECT ID: HMMWTCA7E**

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

**BID BOOKLET**

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

**SPECIAL NOTICE TO BIDDERS**

**BID SUBMISSION REQUIREMENTS**

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

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

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

4. Safety Questionnaire
5. Construction Employment Report (if bid is \$1,000,000 or more)
6. Contract Certificate (if bid is less than \$1,000,000)
7. Confirmation of Vendex Compliance
8. Bidder's Certification of Compliance with Iran Divestment Act
9. Special Experience Requirements (if applicable)
10. Apprenticeship Program Questionnaire (if applicable)
11. Any addenda issued prior to the receipt of bids

**FAILURE TO SUBMIT ITEMS (4) THROUGH (11)  
MAY RESULT IN THE DISQUALIFICATION OF THE BID.**

**NOTES:**

- (1) All of the above referred to blank forms to be completed and submitted with the bid are included in the BID BOOKLET.
- (2) If the bidder has any questions or requires additional information, please contact the Department of Design and Construction by phone (718-391- 2601) or by fax (718-391-2615).
- (3) VENDEX QUESTIONNAIRES: The Bidder is advised that Vendex Questionnaires and procedures have been changed. Vendex Questionnaires, as well as detailed instructions, may be obtained at [www.nyc.gov/vendex](http://www.nyc.gov/vendex). The bidder may also obtain Vendex forms and instructions by contacting the Agency Chief Contracting Officer or the contact person for this contract.
- (4) SPECIAL EXPERIENCE REQUIREMENTS: The Bidder is advised that Special Experience Requirements may apply to this contract. Such requirements are set forth on pages 3, 3a, 3b, and 4 of this Bid Booklet.
- (5) Apparent low bidder, as determined at the bid opening or subsequently notified that its firm is the low Bidder, will be required to submit within 7 days a complete DBE Pre-Award Utilization Package in compliance with SECTION 102-12H of the NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS using the approved civil rights reporting software called EBO.

## SPECIAL NOTICE TO BIDDERS

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

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

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

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

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

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

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

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

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

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

The Special Experience Requirements set forth below apply to the contractor, subcontractor or sub-subcontractor that will perform the specific area of work. **Compliance with such Special Experience Requirements will be determined solely by the City after an award of contract.** After an award of contract, when requested by the City, the contractor will be required to submit the qualifications of the contractor, subcontractor or sub-subcontractor that will perform the specific area of work. If the bidder intends to perform such work itself, it must demonstrate compliance with the Special Experience Requirements. If the bidder intends to subcontract this work, the proposed subcontractor or sub-subcontractor must demonstrate compliance with the Special Experience Requirements. Once approved, no substitution will be permitted, unless the qualifications of the proposed replacement have been approved in writing in advance by the City.

Special Experience Requirements apply to the contractor, subcontractor or sub-subcontractor (hereinafter referred to as the "entity") that will perform any specific area of work indicated by a blackened box. The entity may have performed the required prior project(s) as a prime contractor, subcontractor or sub-subcontractor.

- Hazmat Work:** Hazmat Work is any item of work in the Bid Schedule that begins with the prefix 8.01. The entity that will perform any Hazmat Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least five (5) projects similar in scope and type to the required work.
- Pile, CFA Pile, and/or Mini-Pile Work:** The entity that will perform the Pile, CFA Pile and/or Mini-Pile Work must, within the last three (3) consecutive years prior to the bid opening, have successfully completed in a timely fashion at least two (2) projects similar in scope and type to the required work.

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

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

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

- OTHER:** \_\_\_\_\_  
\_\_\_\_\_

(C) **SPECIFICATIONS:** In the event of any conflict, omission or inconsistency between (1) the Specifications and/or Contract Drawings, and (2) the Special Experience Requirements in Section (B) of the Special Notice To Bidders, the special experience listed in the Specifications and/or Contract Drawings shall be controlling. The Special Experience Requirements in Section (B) of this Special Notice To Bidders are only for the convenience of the bidders.

(D) **SUBMISSION REQUIREMENTS:** For each project submitted to demonstrate compliance with the Special Experience Requirements, the bidder must complete and submit the Qualification Form included in the Bid Booklet. The City will only evaluate a project if the following criteria are met: (1) the project is described on the Qualification Form, and (2) all information on the Qualification Form is provided. The City will not evaluate any project which does not comply with the criteria set forth herein, including any project which is referred to only on the resume of an individual.

If Special Experience Requirements are indicated for any specific area of work, the submission requirement set forth above shall apply to the entity that will perform the specific area of work.

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

- Any principal or other employee on whose prior experience the bidder is relying to demonstrate compliance with this special experience requirement must have held the following: (a) a significant management role in the prior entity with which he/she was affiliated, and (b) a significant management role in the entity submitting the bid for a period of six (6) months or more from the inception of the bidding entity.
- The bidder may not rely on the experience of its principals or other employees to demonstrate compliance with any other requirements, including without limitation, financial requirements or requirements for a specified minimum amount of annual gross revenues.

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

**Qualification Form**

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

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

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

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

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

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

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

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

\_\_\_\_\_

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

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

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

\*\*\*\*\*

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

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

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

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

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

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

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

\_\_\_\_\_

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

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

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

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**ATTACHMENT 1 - BID INFORMATION**

PROJECT ID: HMMWTCA7E

PIN: 8502015HW0028C

Description and Location of Work:

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL AND PRIVATE UTILITIES WORK

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

Documents Available At:

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

Submission of Bids To:

30-30 Thomson Avenue  
First Floor Bid Procurement Room  
Long Island City, New York 11101  
Before 11:00 A.M. on MAY 22, 2015

Bid Opening:

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

Time and Date: 11:00 A.M. on MAY 22, 2015

Pre-Bid Conference:

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

Bid Security:

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

- (1) Bond in an amount not less than 10% of the TOTAL BID PRICE set forth on the Bid Form, OR
- (2) Certified Check in an amount not less than 5% of the TOTAL BID PRICE set forth on the Bid Form.

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

Agency Contact Person:

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

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BID SCHEDULE

NOTICE TO BIDDERS

Items listed in this Bid Schedule which have one (1) digit followed by a decimal (e.g. 4.02 CB), except for items beginning with the number "8.01", shall comply with the requirements of the corresponding numerical Sections of the NYCDOT Standard Highway Specifications, dated November 1, 2010, as amended by Addendum No. 1, herein Volume 3 of 3.

Items listed in this Bid Schedule which have two (2) digits beginning with the number "5" or "6" or "7" followed by a decimal (e.g. 52.11D12, 60.12D06, 72.11HF) shall comply with the requirements of the New York City Department of Environmental Protection (NYCDEP) Standard Sewer and Water Main Specifications, dated July 1, 2014, as amended by Addendum No. 4, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the number "8.01" followed by a letter (e.g. 8.01 C2) shall comply with the requirements of the corresponding numerical Sections of the DDC Specifications for Handling, Transportation and Disposal of Nonhazardous and Potentially Hazardous Contaminated Materials contained in Addendum No. 5, herein Volume 3 of 3.

Items number "637.9520" and "91698.93" listed in this Bid Schedule shall comply with the requirements of the Sections "637.9520" and "91698.93" contained in Addendum No. 1, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "HW-" and "TV-" (e.g. HW-900H, TV-USHS) shall comply with the requirements of the corresponding alphanumeric Sections contained in Addendum No. 1, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "JB" (e.g. JB 100.1(CE)) are Joint Bid Private Utility items which shall be done in accordance with the Special Provisions, Article "AC. PRIVATE UTILITY FACILITIES WORK", in Addendum No. 1 and the requirements of Addendum No. 6, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "NYCT-" (e.g. NYCT-7A.1) are New York City Transit items which shall comply with the requirements of Section "NYCT-7A" in Addendum No. 1, herein Volume 3 of 3.

Items listed in this Bid Schedule beginning with the prefix "SL-" (e.g. SL-21.09.08) are Street Lighting Items, less the prefix, which shall be done in accordance with the requirements of Sub-Section 1.06.23.(D) and Section 1.06.49 in the Standard Highway Specifications.

Items listed in this Bid Schedule beginning with the prefix "T-" (e.g. T-2.22) are Traffic Items, less the prefix, which shall be done in accordance with the requirements of Sub-Section 1.06.23.(D) and Section 1.06.49 in the Standard Highway Specifications.

Items listed in this Bid Schedule beginning with the prefix "UTL-" (e.g. UTL-6.07) are for Gas Cost Sharing (EP-7) work and shall comply with the requirements of Addendum No. 3, herein Volume 3 of 3.

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

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

**PROJECT ID: HWMWTCA7E**

**RECONSTRUCTION OF WORTH STREET**

**FROM HUDSON STREET TO PARK ROW**

**INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK**

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

Name of Bidder: MFM CONTRACTING CORP

Date of Bid Opening: 6/12/15

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

Place of Business of Bidder: 335 CENTER AVENUE MAMARONECK, NY 10543

Bidder's Telephone Number: 914-777-8292 Fax Number: 914-777-0194

Bidder's E-Mail Address: MVP@PETROMFM.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: MICHAEL V. PETRILLO 10 ORCHARD DRIVE  
PURCHASE NY 10577

Name and Home Address of Secretary: FELIX J. PETRILLO 68 MUCHMORE ROAD  
HARRISON NY 10528

Name and Home Address of Treasurer: Same as Secretary

**BID FORM**

MFM CONTRACTING Corp

The above-named Bidder affirms and declares:

1. The said bidder is of lawful age and the only one interested in this bid; and no person, firm or corporation other than hereinbefore named has any interest in this bid, or in the Contract proposed to be taken.

2. By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief: (1) the prices in this bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; (2) unless otherwise required by law, the prices quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and (3) No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

3. No councilman or other officer or employee or person whose salary is payable in whole or in part from the City Treasury is directly or indirectly interested in this bid, or in the supplies, materials, equipment, work or labor to which it relates, or in any of the profits thereof.

4. The bidder is not in arrears to the City of New York upon debt or contract or taxes, and is not a defaulter, as surety or otherwise, upon any obligation of the City of New York, and has not been declared not responsible, or disqualified, by any agency of the City of New York or State of New York, nor is there any proceeding pending relating to the responsibility or qualification of the bidder to receive public contracts except as set forth on the Affirmation included as page C-6 of this Bid Booklet.

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

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

**AFFIRMATION**

**PROJECT ID. HMMWTCA7E**

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: MFM CONTRACTING CORP.

Address: 335 CENTER AVENUE

City MAMARONECK

State NY

Zip Code 10543

CHECK ONE BOX AND INCLUDE APPROPRIATE NUMBER:

A - Individual or Sole Proprietorship\*  
SOCIAL SECURITY NUMBER

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

-----

C - Corporation  
EMPLOYER IDENTIFICATION NUMBER

13-4130805

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

Signature

Title: PRESIDENT

If a corporation, place seal here

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

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

(NO TEXT ON THIS PAGE)



Qualification Form

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

Name of Contractor: MFM Contracting Corp.

Name of Project: RECONSTRUCTION OF PECK SLIP

Location of Project: PECK SLIP, MANHATTAN

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

Name: SHAHRAM JAROMI

Title: Director of Construction - lower manhattan Phone Number: 212-233-7181

Brief description of the Project completed or the Project in progress: COMPLETE RECONSTRUCTION OF PECK SLIP AND SURROUNDING STREETS, INCLUDING, BUT NOT LIMITED TO, WATER MAIN INSTALLATION, PRIVATE UTILITIES AND RESTORATION.

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

Amount of Contract, Subcontract or Sub-subcontract: \$ 14mm

Start Date and Completion Date: 7/1/11 TO 1/1/14

\*\*\*\*\*

Name of Contractor: MFM CONTRACTING CORP.

Name of Project: BED 790

Location of Project: BROOKLYN, NY

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

Name: JEFF VOLLMUTH - VOLLMUTH & BRUSH

Title: PRINCIPAL - ENGINEER Phone Number: 631-363-2683

Brief description of the Project completed or the Project in progress: INSTALLATION OF 48" X 36" WELDED STEEL WATER MAIN & 20" X 12" DISTRIBUTION DUCTILE IRON WATER MAIN & ASSOCIATED RESTORATION.

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

Amount of Contract, Subcontract or Sub-subcontract: \$ 5M

Start Date and Completion Date: 8/2010 TO 3/2012



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Contract PIN: 8502015HW0028C  
Project ID: HWMWTC7E

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

BID SCHEDULE

- NOTE:
- (1) The Bid multiplier located on Page C-4 of the BID BOOKLET shall be applied to each of the fixed unit prices in the bid schedule, excluding items with "F.S." ("Fixed Sum") as the unit of measurement and that adjusted unit price shall represent the reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.
  - (2) The following fixed unit prices, in this Percentage Bid Contract, adjusted by the Bid multiplier are to be paid for the actual quantities of the several classes of work in the completed work or structure, and those adjusted unit prices cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.
  - (3) PLEASE BE SURE A LIGIBLE BID MULTIPLIER IS ENTERED, IN INK, ON PAGE C-4 OF THE BID BOOKLET. Alterations must be initialed in ink by the Bidder.
  - (4) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Bid Schedule are numbered consecutively, as follows:  
B- 3 [REVISION #1] through B-45 [REVISION #1].



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Contract P/JN 8502015HW0028C  
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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
1	4.02 AF-R	4,900.0 S.Y.	ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	\$ 20.00
2	4.02 CB	3,816.0 TONS	ASPHALTIC CONCRETE MIXTURE	\$ 125.00
3	4.02 I4-3	19,974.0 S.Y.	ASPHALTIC CONCRETE WEARING COURSE, TYPE I-4 MIX, 3" THICK	\$ 20.00
4	4.04 HD	4,682.0 C.Y.	CONCRETE BASE FOR PAVEMENT, 9" THICK (HIGH-EARLY-STRENGTH)	\$ 220.00
5	4.05 AX	240.0 C.Y.	HIGH-EARLY-STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)	\$ 350.00
6	4.07 AB	380.0 L.F.	RESET BLUESTONE CURB	\$ 50.00
7	4.07 CB	630.0 L.F.	NEW GRANITE CURB, STRAIGHT	\$ 70.00
8	4.07 CC	60.0 L.F.	NEW GRANITE CURB, CORNER	\$ 150.00
9	4.07 CD	150.0 L.F.	NEW STRAIGHT GRANITE CURB, DEPRESSED AND TRANSITION	\$ 175.00
10	4.07 DB	30.0 L.F.	NEW GRANITE CURB, STRAIGHT (1'-0" WIDE)	\$ 145.00
11	4.09 ADB	130.0 L.F.	STRAIGHT STEEL FACED CONCRETE CURB (20" DEEP)	\$ 53.00
12	4.09 AF	6,440.0 L.F.	STRAIGHT STEEL FACED CONCRETE CURB (27" DEEP)	\$ 75.00
13	4.09 BF	180.0 L.F.	DEPRESSED STEEL FACED CONCRETE CURB (27" DEEP)	\$ 80.00



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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN. TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
14	4.09 CF	960.0 L.F.	CORNER STEEL FACED CONCRETE CURB (27" DEEP)	\$ 73.00
15	4.11 CA	2,599.0 C.Y.	FILL, PLACE MEASUREMENT	\$ 35.00
16	4.13 ABX	2,970.0 S.F.	4" CONCRETE SIDEWALK WITH SPECIAL SCORING (PIGMENTED)	\$ 7.00
17	4.13 CABS	65,450.0 S.F.	4" CONCRETE SIDEWALK (PIGMENTED) (SAW CUT TYPE JOINTS)	\$ 8.25
18	4.13 CABST	13,890.0 S.F.	4" CONCRETE SIDEWALK ON EXISTING FOUNDATION (PIGMENTED) (SAW CUT TYPE JOINTS)	\$ 6.75
19	4.13 CBBS	10,760.0 S.F.	7" CONCRETE SIDEWALK (PIGMENTED) (SAW CUT TYPE JOINTS)	\$ 11.75
20	4.13 CBBST	600.0 S.F.	7" CONCRETE SIDEWALK ON EXISTING FOUNDATION (PIGMENTED) (SAW CUT TYPE JOINTS)	\$ 10.25
21	4.13 DE	640.0 S.F.	EMBEDDED PREFORMED DETECTABLE WARNING UNITS	\$ 12.50
22	4.14	1,000.0 LBS.	STEEL REINFORCEMENT BARS	\$ 2.00
23	4.14 W	1,000.0 LBS.	WELDED STEEL WIRE FABRIC	\$ 1.75
24	4.16 AA	3.0 EACH	TREES REMOVED (4" TO UNDER 12" CALIPER)	\$ 450.00
25	4.16 BA510	11.0 EACH	TREES PLANTED, 2-1/2" TO 3" CALIPER, ALL TYPES, IN 5' X 10' TREE PITS	\$ 900.00
26	4.16 STUMP	10.0 UNITS	STUMP REMOVAL	\$ 300.00





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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
27	4.18 A	50.0 EACH	MAINTENANCE TREE PRUNING (UNDER 12" CAL.)	\$ 175.00
28	4.18 B	6.0 EACH	MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	\$ 240.00
29	4.18 C	6.0 EACH	MAINTENANCE TREE PRUNING (18" TO UNDER 24" CAL.)	\$ 292.00
30	4.18 D	3.0 EACH	MAINTENANCE TREE PRUNING (24" CAL. AND OVER)	\$ 350.00
31	4.21	650.0 P/HR	TREE CONSULTANT	\$ 65.00
32	50.31CC15	70.0 L.F.	15" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	\$ 450.00
33	50.31CC18	40.0 L.F.	18" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	\$ 600.00
34	50.41C6C24	230.0 L.F.	24" D.I.P. CLASS 56 COMBINED SEWER, ON CONCRETE CRADLE	\$ 800.00
35	50.41C6E24	30.0 L.F.	24" D.I.P. CLASS 56 COMBINED SEWER, ENCASED IN CONCRETE	\$ 900.00
36	51.11P004	7.0 EACH	STANDARD 4'-0" DIAMETER PRECAST MANHOLE	\$ 6,000.00
37	51.11P005	3.0 EACH	STANDARD 5'-0" DIAMETER PRECAST MANHOLE	\$ 7,000.00
38	51.11P006	2.0 EACH	STANDARD 6'-0" DIAMETER PRECAST MANHOLE	\$ 8,000.00
39	51.21S0A1000E	1.0 EACH	STANDARD MANHOLE TYPE A-1 ON EXISTING SEWER	\$ 6,500.00



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40	51.21SA2000	2.0 EACH	STANDARD MANHOLE TYPE A-2	\$ 7,000.00
41	51.23RF	60.0 EACH	REPLACEMENT OF EXISTING MANHOLE FRAME AND COVER	\$ 800.00
42	51.41P000	1.0 EACH	SPECIAL CATCH BASIN	\$ 8,500.00
43	51.41S001	23.0 EACH	STANDARD CATCH BASIN, TYPE 1	\$ 6,000.00
44	51.41S002	1.0 EACH	STANDARD CATCH BASIN, TYPE 2	\$ 6,200.00
45	51.42B1W	4.0 EACH	INCREMENTAL COST OF TYPE 3 CATCH BASIN WITH CURB PIECE IN LIEU OF TYPE 1 CATCH BASIN	\$ 3,500.00
46	51.42B1X	1.0 EACH	INCREMENTAL COST OF TYPE 3 CATCH BASIN WITHOUT CURB PIECE IN LIEU OF TYPE 1 CATCH BASIN	\$ 3,500.00
47	52.11D12	580.0 L.F.	12" DUCTILE IRON PIPE BASIN CONNECTION	\$ 112.50
48	52.41D06R	100.0 L.F.	6" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	\$ 75.00
49	52.41D08R	100.0 L.F.	8" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	\$ 80.00
50	53.11DR	525.0 L.F.	TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	\$ 3.50
51	6.02 AAN	12,570.0 C.Y.	UNCLASSIFIED EXCAVATION	\$ 60.00
52	6.02 XHEC	2,085.0 C.Y.	INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR (WITHIN 3 FEET OF) TRANSIT FACILITIES AND BUILDING VAULTS	\$ 125.00



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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUANTITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
53	6.02 XSCW	6,265.0 C.Y.	INCREMENTAL COST FOR USING SPECIAL CARE WORK METHODS NEAR (FROM 3 FEET TO 50 FEET) TRANSIT FACILITIES	\$ 40.00
54	6.06 AB	170.0 S.Y.	GRANITE BLOCK SIDEWALK (GROUTED JOINTS) (FURNISH BLOCK)	\$ 250.00
55	6.07 AA	300.0 S.F.	EXISTING BLUESTONE FLAGS RELAID	\$ 9.50
56	6.07 AB	300.0 S.F.	NEW BLUESTONE FLAGS, FURNISHED AND LAID	\$ 30.00
57	6.22 F	14,960.0 LBS.	ADDITIONAL HARDWARE	\$ 1.25
58	6.23 AB	1.0 EACH	REMOVE EXISTING FIRE ALARM POST	\$ 470.00
59	6.23 BA	3.0 EACH	FURNISH AND INSTALL FIRE ALARM POST AND SUBBASE IN ACCORDANCE WITH F.D. STD. DWG. #141	\$ 1,900.00
60	6.23 BD	132.0 L.F.	FURNISH AND INSTALL 4-PAIR FIRE ALARM CABLE	\$ 12.00
61	6.23 BFC	2.0 EACH	FURNISH AND INSTALL FIRE DEPARTMENT 12 WIRE TERMINAL BOX AND TERMINATE FIRE ALARM CABLES	\$ 1,900.00
62	6.23 BGSE	112.0 L.F.	FURNISH AND INSTALL 4" P.V.C. CONDUIT, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION)	\$ 50.00
63	6.23 BHE	2.0 EACH	FURNISH AND INSTALL 4" 90-DEGREE P.V.C. WIDE BEND, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION) IN ACCORDANCE WITH F.D. STD. DWG. #141 OR #145AA	\$ 230.00
64	6.23 BP	3.0 SETS	FURNISH AND INSTALL FIRE ALARM PEDESTAL BUMPERS (2 REQUIRED PER SET) IN ACCORDANCE WITH F.D. STD. DWG. #168	\$ 750.00



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65	6.23 CBE	1.0 EACH	FURNISH AND INSTALL 2 - 3" 90-DEGREE P.V.C. WIDE BENDS, SCHEDULE 40, U.L. 651 IN ONE TRENCH (WITH PAVEMENT EXCAVATION) IN ACCORDANCE WITH F.D. STD. DWG. #141	\$ 400.00
66	6.23 CCE	20.0 L.F.	FURNISH AND INSTALL 2 - 3" P.V.C. CONDUITS, SCHEDULE 40, U.L. 651 IN ONE TRENCH (WITH PAVEMENT EXCAVATION, ONE ON TOP OF THE OTHER)	\$ 45.00
67	6.23 DC	50.0 L.F.	FURNISH AND INSTALL 10 PAIR FIRE ALARM CABLE	\$ 16.00
68	6.23 DDB	50.0 L.F.	FURNISH AND INSTALL 20 PAIR FIRE ALARM CABLE	\$ 20.00
69	6.25 RS	2,156.0 S.F.	TEMPORARY SIGNS	\$ 15.00
70	6.26	63,152.0 L.F.	TIMBER CURB	\$ 3.00
71	6.28 AA	1,022.0 L.F.	LIGHTED TIMBER BARRICADES	\$ 8.00
72	6.28 ME	2,814.0 L.F.	LIGHTED TIMBER FENCING FOR USE IN LOWER MANHATTAN PROJECTS	\$ 7.00
73	6.34 ACTP	53,490.0 L.F.	TEMPORARY CHAIN LINK FENCE, 6'-0" HIGH (WITH TOP AND BOTTOM RAILS AND POSTS MOUNTED ON STEEL PLATES)	\$ 60.00
74	6.39 A	1.0 L.S.	MOBILIZATION	\$ 1,862,759.00
75	6.40 DUC	66.0 MONTH	ENGINEER'S FIELD OFFICE WITH CONFERENCE ROOM (JOINT USE)	\$ 13,000.00
76	6.43	4,000.0 SETS	PHOTOGRAPHS	\$ 15.00





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77	6.44	24,090.0 L.F.	THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	\$ 1.00
78	6.49	29,220.0 L.F.	TEMPORARY PAVEMENT MARKINGS (4" WIDE)	\$ 0.75
79	6.50	15.0 EACH	CLEANING OF DRAINAGE STRUCTURES	\$ 375.00
80	6.52 FED	1.0 F.S.	UNIFORMED FLAGPERSON	\$ 4,381,500.00
86	6.53	29,220.0 L.F.	REMOVE EXISTING LANE MARKINGS (4" WIDE)	\$ 0.90
87	6.55	4,616.0 L.F.	SAWCUTTING EXISTING PAVEMENT	\$ 4.00
88	6.59 PF	6,310.0 L.F.	TEMPORARY CONCRETE BARRIER WITH FENCE	\$ 85.00
89	6.60 B	280.0 S.Y.	FURNISH AND INSTALL ASPHALT BLOCK PAVERS	\$ 300.00
90	6.67	3,850.0 C.Y.	SUBBASE COURSE, SELECT GRANULAR MATERIAL	\$ 115.00
91	6.68	21,340.0 S.Y.	PLASTIC FILTER FABRIC	\$ 1.50
92	6.75	885.0 C.Y.	GRINDING EXISTING ASPHALTIC CONCRETE WEARING COURSE	\$ 90.00
93	6.82 A	560.0 S.F.	REMOVING EXISTING TRAFFIC AND STREET NAME SIGNS	\$ 4.00
94	6.82 B	615.0 L.F.	REMOVING EXISTING TRAFFIC AND STREET NAME SIGN POSTS	\$ 3.00



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95	6.83 AA	220.0 S.F.	FURNISHING NEW NON-REFLECTORIZED TRAFFIC SIGNS	\$ 15.00
96	6.83 AB	600.0 L.F.	FURNISHING NEW TRAFFIC SIGN POSTS	\$ 4.00
97	6.83 AR	140.0 S.F.	FURNISHING NEW REFLECTORIZED TRAFFIC SIGNS	\$ 13.00
98	6.83 BA	360.0 S.F.	INSTALLING TRAFFIC SIGNS	\$ 10.00
99	6.83 BB	600.0 L.F.	INSTALLING TRAFFIC SIGN POSTS	\$ 10.00
100	6.84 B	1.0 F.S.	LOLLIPOP TYPE BUS STOP SIGNS	\$ 35,000.00
101	6.85 A	1.0 F.S.	TRAFFIC ENFORCEMENT AGENTS	\$ 8,527,992.39
102	6.86 AA	100.0 S.F.	FURNISHING NEW STREET NAME SIGNS	\$ 20.00
103	6.86 AB	28.0 L.F.	FURNISHING NEW STREET NAME SIGN POSTS	\$ 6.00
104	6.86 BA	100.0 S.F.	INSTALLING STREET NAME SIGNS	\$ 10.00
105	6.86 BB	28.0 L.F.	INSTALLING STREET NAME SIGN POSTS	\$ 7.00
106	6.86 LA	100.0 S.F.	FURNISHING NEW STREET NAME SIGNS (LARGE SIZE)	\$ 35.00
107	6.86 LB	100.0 S.F.	INSTALLING STREET NAME SIGNS (LARGE SIZE)	\$ 25.00



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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
108	6.87	1,945.0 EACH	PLASTIC BARRELS	\$ 12.00
109	6.91	11,435.0 L.F.	REFLECTIVE CRACKING MEMBRANE (18" WIDE)	\$ 2.63
110	6.97 A	200.0 C.Y.	EXTRA-HIGH-EARLY STRENGTH CONCRETE	\$ 275.00
111	6.99	1.0 L.S.	AUDIO AND VIDEO DOCUMENTATION SURVEY	\$ 10,000.00
112	60.11R520	5,270.0 L.F. 3,580.0 L.F.	FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	\$ 125.00
113	60.11R524	305.0 L.F.	FURNISHING AND DELIVERING 24-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	\$ 160.00
114	60.11R530	20.0 L.F.	FURNISHING AND DELIVERING 30-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	\$ 220.00
115	60.11R606	975.0 L.F.	FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	\$ 50.00
116	60.11R612	1,445.0 L.F.	FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	\$ 75.00
117	60.12D06	1,220.0 L.F.	LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 100.00
118	60.12D12	1,760.0 L.F.	LAYING 12-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 150.00
119	60.12D20	5,100.0 L.F. 4,200.0 L.F.	LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 200.00
120	60.12D24	430.0 L.F.	LAYING 24-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 250.00



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121	60.12D30	30.0 L.F.	LAYING 30-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 500.00
122	60.13M0A24	90.0 TONS	FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24-INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS	\$ 6,500.00
123	60.13M5S30	1.0 EACH	FURNISHING AND DELIVERING 30-INCH DUCTILE IRON MECHANICAL JOINT SLEEVES (CLASS 55)	\$ 8,000.00
124	60.18B/C20EL	20.0 EACH	FURNISH, DELIVER AND INSTALL BELL JOINT CLAMPS, COMPLETE FOR 20-INCH PIPE AND LESS	\$ 1,000.00
125	60.21SP3T30	355.0 L.F.	FURNISHING, DELIVERING AND LAYING 30-INCH STRAIGHT STEEL PIPE, 3/8-INCH WALL THICKNESS	\$ 1,500.00
126	60.21SP3T36	<del>4775.0</del> L.F.	FURNISHING, DELIVERING AND LAYING 36-INCH STRAIGHT STEEL PIPE, 3/8-INCH WALL THICKNESS	\$ 1,800.00
127	60.21SP4T48	<del>5200.0</del> L.F.	FURNISHING, DELIVERING AND LAYING 48-INCH STRAIGHT STEEL PIPE, 1/2-INCH WALL THICKNESS	\$ 2,000.00
128	60.22BR3T30	<del>480.0</del> L.F.	FURNISHING, DELIVERING AND LAYING 30-INCH STEEL BENDS AND REDUCERS, 3/8-INCH WALL THICKNESS	\$ 1,500.00
129	60.22BR3T36	300.0 L.F.	FURNISHING, DELIVERING AND LAYING 36-INCH STEEL BENDS AND REDUCERS, 3/8-INCH WALL THICKNESS	\$ 1,800.00
130	60.22BR4T48	100.0 L.F.	FURNISHING, DELIVERING AND LAYING 48-INCH STEEL BENDS AND REDUCERS, 1/2-INCH WALL THICKNESS	\$ 2,400.00
131	60.23ST36T36	3.0 EACH	FURNISHING, DELIVERING AND INSTALLING 36-INCH X 36-INCH STEEL TEE	\$ 50,000.00
132	60.23ST36T48	1.0 EACH	FURNISHING, DELIVERING AND INSTALLING 48-INCH X 36-INCH STEEL TEE	\$ 60,000.00
133	60.24SB36	1.0 EACH	FURNISHING, DELIVERING AND INSTALLING 36-INCH DIAMETER STEEL BULKHEAD	\$ 10,000.00





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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
134	60.25PSO	13,000.0 LBS.	FURNISHING, DELIVERING AND INSTALLING PLATE STEEL OUTLETS ON STEEL PIPE, ACCESS MANHOLE OUTLETS WITH COVERS, AND NUTS AND BOLTS COMPLETE	\$ 25.00
135	60.26M48GA	1.0 EACH	FURNISHING, DELIVERING AND INSTALLING STEEL MANIFOLD WITH 48-INCH STRAIGHT HEADER 3/4-INCH THICKNESS, ONE 36-INCH OUTLET 5/8-INCH THICKNESS, TWO 20-INCH OUTLETS 1/2-INCH THICKNESS AND TWO 48-INCH BULKHEADS 3/4-INCH THICKNESS, ETC, COMPLETE	\$ 80,000.00
136	60.27RSC36	5.0 EACH	FURNISHING, DELIVERING AND INSTALLING 36-INCH DIAMETER BOLTED, SPLIT SLEEVE-TYPE RESTRAINED COUPLING	\$ 25,000.00
137	60.29CP	1.0 L.S.	FURNISHING, INSTALLING AND TESTING CORROSION CONTROL AND/OR CATHODIC PROTECTION SYSTEM	\$ 100,000.00
138	61.11DFM06	7.0 EACH	FURNISHING AND DELIVERING 6-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	\$ 2,200.00
139	61.11DFM20	4.0 EACH	FURNISHING AND DELIVERING 20-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	\$ 20,000.00
140	61.11DMM06	34.0 EACH	FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 950.00
141	61.11DMM12	16.0 EACH	FURNISHING AND DELIVERING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 2,500.00
142	61.11DMM20	14.0 EACH	FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 10,000.00



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143	61.11TWC03	25.0 EACH	FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 600.00
144	61.11TWC04	10.0 EACH	FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 650.00
145	61.11TWC06	8.0 EACH	FURNISHING AND DELIVERING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 750.00
146	61.11TWC08	5.0 EACH	FURNISHING AND DELIVERING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 900.00
147	61.12DFM06	7.0 EACH	SETTING 6-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	\$ 1,000.00
148	61.12DFM20	4.0 EACH	SETTING 20-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	\$ 5,000.00
149	61.12DMM06	34.0 EACH	SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 500.00
150	61.12DMM12	16.0 EACH	SETTING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 1,200.00
151	61.12DMM20	14.0 EACH	SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 5,000.00
152	61.12TWC03	25.0 EACH	SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 300.00
153	61.12TWC04	10.0 EACH	SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 325.00



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154	61.12TWC06	8.0 EACH	SETTING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 375.00
155	61.12TWC08	5.0 EACH	SETTING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 450.00
156	61.21BVB36	5.0 EACH	FURNISHING, DELIVERING AND INSTALLING 36-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	\$ 200,000.00
157	61.21BVO24	2.0 EACH	FURNISHING, DELIVERING AND INSTALLING 24-INCH BUTTERFLY VALVE, COMPLETE	\$ 100,000.00
158	62.11SD	30.0 EACH	FURNISHING AND DELIVERING HYDRANTS	\$ 2,500.00
159	62.11SS	9.0 EACH	FURNISHING AND DELIVERING HYDRANTS - SMITH TYPE (S-2-LP)	\$ 2,600.00
160	62.12SG	39.0 EACH	SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 1,500.00
161	62.13RH	27.0 EACH	REMOVING HYDRANTS	\$ 500.00
162	62.14FD	18.0 EACH	FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS WITH DECORATIVE CAPS (BLACK)	\$ 300.00
163	62.14FS	60.0 EACH	FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	\$ 200.00
164	63.11MH	5.0 TONS	FURNISHING, DELIVERING AND INSTALLING 36-INCH CAST IRON MANHOLE HEADS AND COVERS	\$ 1,500.00
165	63.11MS	160.0 EACH	FURNISHING, DELIVERING AND INSTALLING MANHOLE STEPS TYPE PS2-PF	\$ 20.00
166	63.11VC	43.0 TONS	FURNISHING AND DELIVERING VARIOUS CASTINGS	\$ 1,500.00



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167	637.9520	1.0 F.S.	FIELD INFORMATION MANAGEMENT SYSTEM	\$ 125,000.00
168	64.11EL	42.0 EACH	WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2-INCH OR LARGER SCREW TAPS	\$ 300.00
169	64.11ST	10.0 EACH	WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	\$ 250.00
170	64.12COEG	300.0 L.F.	CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	\$ 200.00
171	64.12COLT	100.0 L.F.	CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	\$ 100.00
172	64.12ESEG	200.0 L.F.	EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	\$ 75.00
173	64.12ESLT	100.0 L.F.	EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	\$ 50.00
174	64.13WC12	15.0 EACH	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 12-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	\$ 1,500.00
175	64.13WC20	32.0 EACH	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	\$ 2,500.00
176	64.13WC24	1.0 EACH	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 24-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	\$ 3,600.00
177	65.11BR	4,500.0 LBS.	FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	\$ 5.00
178	65.21PS	2,968.0 L.F.	FURNISHING AND PLACING POLYETHYLENE SLEEVE	\$ 1.00
179	65.31FF	91,367.0 S.F.	FURNISHING, DELIVERING AND PLACING FILTER FABRIC	\$ 0.20





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180	65.41PS06	6.0 EACH	FURNISHING, DELIVERING AND INSTALLING 6-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 700.00
181	65.41PS20	4.0 EACH	FURNISHING, DELIVERING AND INSTALLING 20-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 1,800.00
182	65.41PS24	4.0 EACH	FURNISHING, DELIVERING AND INSTALLING 24-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 2,000.00
183	65.41PS30	2.0 EACH	FURNISHING, DELIVERING AND INSTALLING 30-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 2,400.00
184	65.41PS36	10.0 EACH	FURNISHING, DELIVERING AND INSTALLING 36-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 2,700.00
185	65.51PC	335.0 C.Y.	FURNISHING AND PLACING CAST-IN-PLACE CONCRETE CLASS 40 AND PRECAST CONCRETE CLASS 50	\$ 960.00
186	65.61SS	35,300.0 LBS.	FURNISHING, DELIVERING AND PLACING STRUCTURAL, REINFORCING AND MISCELLANEOUS STEEL	\$ 3.00
187	65.71SG	1,582.0 C.Y.	FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	\$ 35.00
188	7.01 AB	500.0 S.F.	INSTALLING NEW OR RESET EXISTING SIDEWALK SUBWAY FRAMES AND GRATINGS	\$ 98.00
189	7.01 C	250.0 S.F.	FURNISH NEW SIDEWALK SUBWAY FRAMES AND GRATINGS	\$ 60.00
190	7.02	15.0 C.F.	EPOXY MORTAR REPAIRS	\$ 70.00



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191	7.13 B	60.0 MONTH	MAINTENANCE OF SITE	\$ 7,500.00
192	7.16 D	10.0 C.Y.	TEST PITS	\$ 300.00
193	7.20	360.0 L.F.	RESET BASEMENT ACCESS	\$ 45.00
194	7.28 SA	2.0 EACH	PROJECT INFORMATION AND GROUND BREAKING SIGNS, TYPE A (LARGE FORMAT)	\$ 800.00
195	7.28 SB	8.0 EACH	PROJECT INFORMATION AND GROUND BREAKING SIGNS, TYPE B (SMALL FORMAT)	\$ 450.00
196	7.30 A	600.0 C.Y.	REMOVAL OF TRACK	\$ 120.00
197	7.31 A	50.0 C.Y.	DEMOLITION OF ROADWAY VAULTS	\$ 200.00
198	7.31 B	20.0 C.Y.	DEMOLITION OF TROLLEY TRACK TRUSS BLOCKS	\$ 230.00
199	7.36	2,500.0 L.F.	PEDESTRIAN STEEL BARRICADES	\$ 3.00
200	7.88 AA	1.0 L.S.	RODENT INFESTATION SURVEY AND MONITORING	\$ 12,000.00
201	7.88 AB	11,976.0 EACH	RODENT BAIT STATIONS	\$ 62.50
202	7.88 AC	11,976.0 EACH	BAITING OF RODENT BAIT STATIONS	\$ 7.50
203	7.88 AD	600.0 BLOCK	WATERBUG BAIT APPLICATIONS	\$ 50.00



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204	70.21DK	2,000.0 S.Y.	DECKING	\$ 200.00
205	70.31FN	<del>26,730.0</del> L.F.	FENCING	\$ 4.00
206	70.51EO	Ⓟ 17,110.0 LF 215.0 C.Y.	EXCAVATION OF BOULDERS IN OPEN CUT	\$ 150.00
207	70.61RE	100.0 C.Y.	ROCK EXCAVATION	\$ 500.00
208	70.71SB	15.0 C.Y.	STONE BALLAST	\$ 30.00
209	70.81CB	4,650.0 C.Y.	CLEAN BACKFILL	\$ 30.00
210	70.91SW12	2,330.0 S.F.	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS	\$ 1.00
211	70.91SW20	50,220.0 S.F.	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 20-INCH IN DIAMETER	\$ 1.00
212	72.11HF	75.0 C.Y.	HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS	\$ 95.00
213	73.11AB	30.0 C.Y.	ADDITIONAL BRICK MASONRY	\$ 125.00
214	73.21AC	135.0 C.Y.	ADDITIONAL CONCRETE	\$ 125.00
215	73.31AE0	420.0 C.Y.	ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS)	\$ 40.00
216	73.41AG	395.0 C.Y.	ADDITIONAL SELECT GRANULAR BACKFILL	\$ 30.00



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217	73.51AS	300.0 LBS.	ADDITIONAL STEEL REINFORCING BARS	\$ 2.00
218	8.01 C1	6,000.0 TONS	HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	\$ 85.00
219	8.01 C2	10.0 SETS	SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	\$ 1,500.00
220	8.01 H	1.0 TONS	HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	\$ 350.00
221	8.01 S	1.0 L.S.	HEALTH AND SAFETY	\$ 15,000.00
222	8.01 W1	14.0 DAY	REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	\$ 1,200.00
223	8.01 W2	2.0 SETS	SAMPLING AND TESTING OF CONTAMINATED WATER	\$ 800.00
224	8.02 JA	26,944.0 S.F.	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	\$ 5.50
225	8.02 JB	2,301.0 L.F.	SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	\$ 10.75
226	8.07	70.0 EACH	TEMPORARY ALUMINUM PEDESTRIAN BRIDGE	\$ 300.00
227	8.08	6.0 EACH	VARIABLE MESSAGE BOARD	\$ 7,000.00
228	8.22 D	13,800.0 S.F.	THREE PLY MEMBRANE WATERPROOFING	\$ 14.00
229	8.32	500.0 S.Y.	BARK CHIP MULCH	\$ 15.00





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230	9.00 C	600.0 C.F.	EXPLORATORY TEST PITS	\$ 40.00
231	9.04 HW	1.0 F.S.	ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE	\$ 50,000.00
232	9.06 HW	1.0 F.S.	ALLOWANCE FOR DECORATIVE MESH FABRIC	\$ 300,000.00
233	9.99 M	60.0 MONTH	FLASHING ARROW BOARD	\$ 1,650.00
234	91698.93	1.0 F.S.	INCENTIVE PAYMENT FOR "B" PORTION WORK	\$ 1,200,000.00
235	HW-900H	1.0 F.S.	ALLOWANCE FOR CITY WORK ACCELERATION	\$ 900,000.00
236	HW-908	1.0 F.S.	ALLOWANCE FOR EXTRA WORK DUE TO ARCHAEOLOGICAL DISCOVERIES	\$ 100,000.00
237	HW-910A	1.0 F.S.	ASPHALT PRICE ADJUSTMENT	\$ 100,000.00
238	HW-910F	1.0 F.S.	FUEL PRICE ADJUSTMENT	\$ 250,000.00
239	HW-910S	1.0 F.S.	STEEL/IRON PRICE ADJUSTMENT	\$ 1,300,000.00
240	JB 100.1(CE)	30.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .1)	\$ 443.00
241	JB 100.1(ECS)	9.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .1)	\$ 595.00
242	JB 100.1(TW)	4.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .1)	\$ 550.00



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243	JB 100.2(CE)	8.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .2)	\$ 829.00
244	JB 100.2(ECS)	7.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .2)	\$ 808.00
245	JB 100.3(CE)	8.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .3)	\$ 1,229.00
246	JB 100.3(ECS)	10.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .3)	\$ 998.00
247	JB 100.4(CE)	2.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .4)	\$ 1,600.00
248	JB 100.6(AT&T)	1.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .6)	\$ 1,697.00
249	JB 101.1(CE)	10.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	\$ 3,751.00
250	JB 101.1(ECS)	2.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	\$ 2,364.00
251	JB 101.1(TW)	1.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	\$ 2,000.00
252	JB 101.2(CE)	3.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	\$ 4,690.00
253	JB 101.2(ECS)	3.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	\$ 2,394.00
254	JB 101.3(CE)	3.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	\$ 6,174.00
255	JB 101.3(ECS)	1.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	\$ 3,309.00



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256	JB 108.1(AT&T)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	\$ 886.00
257	JB 108.1(CE)	51.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	\$ 609.00
258	JB 108.1(ECS)	15.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	\$ 886.00
259	JB 108.1(TW)	3.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	\$ 600.00
260	JB 108.2(CE)	17.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)	\$ 1,894.00
261	JB 108.2(ECS)	11.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)	\$ 1,097.00
262	JB 108.3(CE)	9.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .3)	\$ 3,077.00
263	JB 108.3(ECS)	23.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .3)	\$ 1,322.00
264	JB 108.4(CE)	3.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .4)	\$ 3,844.00
265	JB 108.4(ECS)	9.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .4)	\$ 1,622.00
266	JB 108.5(CE)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .5)	\$ 4,489.00
267	JB 109.1(AT&T)	3.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	\$ 1,003.00
268	JB 109.1(CE)	83.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	\$ 1,563.00



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269	JB 109.1(ECS)	13.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	\$ 1,003.00
270	JB 109.1(TW)	5.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	\$ 1,000.00
271	JB 109.2(CE)	22.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)	\$ 2,335.00
272	JB 109.2(ECS)	22.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)	\$ 1,345.00
273	JB 109.3(AT&T)	2.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	\$ 1,666.00
274	JB 109.3(CE)	16.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	\$ 3,734.00
275	JB 109.3(ECS)	21.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	\$ 1,666.00
276	JB 109.4(AT&T)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4)	\$ 2,007.00
277	JB 109.4(CE)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4)	\$ 4,854.00
278	JB 109.4(ECS)	7.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4)	\$ 2,007.00
279	JB 109.5(AT&T)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .5)	\$ 2,508.00
280	JB 109.5(CE)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .5)	\$ 5,361.00
281	JB 109.6(AT&T)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .6)	\$ 3,010.00





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282	JB 109.6(CE)	2.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE. 6)	\$ 5,722.00
283	JB 110.1(CE)	70.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 1)	\$ 2,156.00
284	JB 110.1(ECS)	21.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 1)	\$ 1,345.00
285	JB 110.1(TW)	9.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" TO 36" DIAMETER	\$ 1,400.00
286	JB 110.2(CE)	19.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 2)	\$ 2,927.00
287	JB 110.2(ECS)	8.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 2)	\$ 1,505.00
288	JB 110.3(CE)	15.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 3)	\$ 4,177.00
289	JB 110.3(ECS)	21.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 3)	\$ 1,666.00
290	JB 110.4(CE)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 4)	\$ 5,412.00
291	JB 110.4(ECS)	4.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 4)	\$ 2,007.00
292	JB 110.5(CE)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 5)	\$ 6,103.00
293	JB 110.6(CE)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 6)	\$ 6,833.00
294	JB 111.1(CE)	12.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE. 1)	\$ 2,935.00



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295	JB 111.2(CE)	2.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE. 2)	\$ 4,196.00
296	JB 111.2(ECS)	3.0 EACH	SUPPORT OF FACILITIES OVER 0.75 S.F. UP TO & INCLUDING 2.0 S.F. CROSSING WATER MAINS OVER 36" UP TO & INCLUDING 48" IN DIAMETER	\$ 1,666.00
297	JB 111.3(CE)	2.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE. 3)	\$ 5,891.00
298	JB 111.3(ECS)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE. 3)	\$ 2,007.00
299	JB 111.4(CE)	2.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE.4)	\$ 7,561.00
300	JB 200(CE)	120.0 L.F.	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	\$ 149.00
301	JB 226(CE)	16.0 EACH	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	\$ 4,576.00
302	JB 226(ECS)	18.0 EACH	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	\$ 2,925.00
303	JB 227(CE)	3.0 EACH	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	\$ 2,395.00
304	JB 227(ECS)	11.0 EACH	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	\$ 1,463.00
305	JB 300(AT&T)	21.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING	\$ 167.00
306	JB 300(CE)	120.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING	\$ 286.00
307	JB 300(ECS)	176.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING	\$ 167.00



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308	JB 301(CE)	190.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING FOR OIL-O-STATIC PIPE	\$ 351.00
309	JB 303(CE)	1,260.0 C.Y.	FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL	\$ 49.00
310	JB 330E.1(CE)	2,180.0 L.F.	SUPPORT AND PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .1)	\$ 31.00
311	JB 330E.2(CE)	760.0 L.F.	SUPPORT AND PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .2)	\$ 37.00
312	JB 330E.3(CE)	1,060.0 L.F.	SUPPORT AND PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .3)	\$ 43.00
313	JB 330E.4(CE)	200.0 L.F.	SUPPORT AND PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .4)	\$ 60.00
314	JB 330T1(AT&T)	350.0 L.F.	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED TRENCH	\$ 115.00
315	JB 330T1(ECS)	965.0 L.F.	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED TRENCH	\$ 115.00



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316	JB 330T1(TW)	90.0 L.F.	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED TRENCH	\$ 100.00
317	JB 400(ECS)	40.0 C.Y.	TEST PITS FOR UTILITY FACILITIES	\$ 218.00
318	JB 400(CE)	140.0 C.Y.	TEST PITS FOR UTILITY FACILITIES	\$ 244.00
319	JB 401(AT&T)	89.0 C.Y.	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	\$ 228.00
320	JB 401(CE)	560.0 C.Y.	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	\$ 292.00
321	JB 401(ECS)	1,019.0 C.Y.	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	\$ 228.00
322	JB 401A(CE)	200.0 C.Y.	SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES CONNECTED TO THE BASE PAVEMENT	\$ 365.00
323	JB 402.1(CE)	100.0 L.F.	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	\$ 87.00
324	JB 402.1A(CE)	200.0 L.F.	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	\$ 93.00
325	JB 402.2(CE)	400.0 L.F.	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	\$ 55.00
326	JB 402.2A(CE)	100.0 L.F.	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	\$ 61.00
327	JB 402T.1A(AT&T)	14,420.0 L.F.	EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	\$ 53.00





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328	JB 402T.1A(ECS)	58,551.0 L.F.	EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	\$ 53.00
329	JB 402T.2(ECS)	140.0 L.F.	EXISTING NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	\$ 44.00
330	JB 402T.V1A(ECS)	14,689.0 L.F.	EXISTING VACANT CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	\$ 48.00
331	JB 403(AT&T)	700.0 S.F.	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	\$ 4.00
332	JB 403(CE)	4,000.0 S.F.	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	\$ 3.00
333	JB 403(ECS)	2,260.0 S.F.	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	\$ 4.00
334	JB 403(TW)	26.0 S.F.	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	\$ 4.00
335	JB 404(CE)	200.0 S.F.	PIER & PLATE METHOD OF PROTECTION FOR DUCTILE IRON WATER MAINS AND OTHER SHALLOW FACILITIES	\$ 427.00
336	JB 405.1(CE)	3,005.0 C.Y.	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET	\$ 251.00
337	JB 405.1(TW)	6.0 C.Y.	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET	\$ 150.00
338	JB 405.2(CE)	580.0 C.Y.	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET, REQUIRING SHEETING	\$ 363.00



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339	JB 406(CE)	830.0 C.Y.	EXCAVATION FOR UTILITY STRUCTURE	\$ 281.00
340	JB 406(TW)	2.0 C.Y.	EXCAVATION FOR UTILITY STRUCTURE	\$ 150.00
341	JB 410.1(CE)	200.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% (TYPE .1)	\$ 344.00
342	JB 410.2(CE)	2,790.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% (TYPE .2)	\$ 436.00
343	JB 410.3(CE)	200.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 40% AND UP TO AND INCLUDING 60% (TYPE .3)	\$ 527.00
344	JB 410.4(CE)	200.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 60% AND UP TO AND INCLUDING 80% (TYPE .4)	\$ 619.00
345	JB 410.5(AT&T)	1,067.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .5)	\$ 187.00
346	JB 410.5(CE)	200.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .5)	\$ 354.00
347	JB 410.6(CE)	6,920.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .6)	\$ 446.00
348	JB 410.6(ECS)	1,732.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .6)	\$ 187.00
349	JB 410.7(AT&T)	531.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 40% AND UP TO AND INCLUDING 60% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .7)	\$ 246.00



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350	JB 410.7(CE)	1,890.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 40% AND UP TO AND INCLUDING 60% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .7)	\$ 536.00
351	JB 410.7(ECS)	980.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 40% AND UP TO AND INCLUDING 60% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .7)	\$ 246.00
352	JB 410.8(AT&T)	321.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 60% AND UP TO AND INCLUDING 80% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .8)	\$ 445.00
353	JB 410.8(CE)	990.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 60% AND UP TO AND INCLUDING 80% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .8)	\$ 628.00
354	JB 410.8(ECS)	370.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 60% AND UP TO AND INCLUDING 80% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .8)	\$ 445.00
355	JB 450.1(AT&T)	80.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - SURVEY CREW (TYPE .1)	\$ 276.00
356	JB 450.1(CE)	600.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - SURVEY CREW (TYPE .1)	\$ 336.00
357	JB 450.1(ECS)	160.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - SURVEY CREW (TYPE .1)	\$ 276.00
358	JB 450.2(AT&T)	2,335.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)	\$ 463.00
359	JB 450.2(CE)	800.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)	\$ 332.00
360	JB 450.2(ECS)	5,020.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)	\$ 463.00



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361	JB 450.3(AT&T)	1,167.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)	\$ 1,008.00
362	JB 450.3(CE)	1,600.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)	\$ 938.00
363	JB 450.3(ECS)	2,507.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)	\$ 1,008.00
364	JB 500(CE)	59,700.0 L.F.	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	\$ 4.00
365	JB 500(TW)	35.0 L.F.	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	\$ 4.00
366	JB 501(AT&T)	220.0 C.Y.	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	\$ 231.00
367	JB 501(CE)	200.0 C.Y.	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	\$ 368.00
368	JB 501(ECS)	19.0 C.Y.	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	\$ 231.00
369	JB 501.1(TW)	1.0 EACH	REMOVAL OF ABANDONED CABLE TELEVISION SIDEWALK PULL BOXES	\$ 500.00
370	JB 603E.1(CE)	1,620.0 L.F.	INSTALL UTILITY CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	\$ 6.00
371	JB 603E.2(CE)	64,490.0 L.F.	INSTALL UTILITY CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	\$ 10.00
372	JB 603T.2(TW)	52.0 L.F.	INSTALL 2 EACH 2", 4" OR 1-1/4" QUAD CONDUITS (PVC OR STEEL) IN ANY COMBINATION	\$ 8.00
373	JB 620.12(CE)	75.0 L.F.	INSTALL 24" DIAMETER STEAM PIPE	\$ 429.00





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374	JB 620.4(CE)	45.0 L.F.	INSTALL 6" DIAMETER STEAM PIPE	\$ 183.00
375	JB 620.5(CE)	255.0 L.F.	INSTALL 8" DIAMETER STEAM PIPE	\$ 206.00
376	JB 621.12(CE)	4.0 EACH	INSTALL 24" DIAMETER STEAM PIPE FITTING	\$ 4,123.00
377	JB 621.4(CE)	6.0 EACH	INSTALL 6" DIAMETER STEAM PIPE FITTING	\$ 1,214.00
378	JB 621.5(CE)	6.0 EACH	INSTALL 8" DIAMETER STEAM PIPE FITTING	\$ 1,828.00
379	JB 625D(CE)	1.0 EACH	STEAM VALVE ASSEMBLY	\$ 3,500.00
380	JB 636 EB(CE)	5.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (7" TO UNDER 14" WIDTH)	\$ 374.00
381	JB 636 ED(CE)	5.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (30" TO UNDER 34" WIDTH)	\$ 965.00
382	JB 636 EE(CE)	80.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (34" TO UNDER 41" WIDTH)	\$ 1,113.00
383	JB 636 EE(ECS)	48.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (34" TO UNDER 41" WIDTH)	\$ 490.00
384	JB 636 EG(CE)	20.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (41" TO UNDER 75" WIDTH)	\$ 1,272.00
385	JB 636 EG(TW)	3.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (41" TO UNDER 75" WIDTH)	\$ 500.00
386	JB 636 EH(CE)	5.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (75" TO UNDER 125" WIDTH)	\$ 1,452.00



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387	JB 636 E(CE)	2.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (125" TO UNDER 170" WIDTH)	\$ 1,601.00
388	JB 636 R(CE)	50.0 C.Y.	REPAIR TO UTILITY STRUCTURES	\$ 257.00
389	JB 636 SA(CE)	50.0 S.F.	CONCRETE COLLAR AROUND STEAM CASTINGS	\$ 17.00
390	JB 636 SB(CE)	1.0 EACH	ADJUSTMENT TO UTILITY STEAM CASTINGS (UNDER AND INCLUDING 8" WIDTH)	\$ 275.00
391	JB 636 SC(CE)	2.0 EACH	ADJUSTMENT OF UTILITY STEAM CASTINGS (ABOVE 8" TO 34" WIDTH)	\$ 814.00
392	JB 638 N(CE)	430.0 C.Y.	INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE	\$ 1,229.00
393	JB 638 NT(ECS)	68.0 C.Y.	INSTALLATION OF FIELD CONSTRUCTED TELEPHONE UTILITY STRUCTURE	\$ 2,576.00
394	JB 638 R(CE)	405.0 C.Y.	BREAK OUT AND REMOVE UTILITY STRUCTURE	\$ 955.00
395	JB 638 R(ECS)	89.0 C.Y.	BREAK OUT AND REMOVE UTILITY STRUCTURE	\$ 353.00
396	JB 700(AT&T)	90.0 C.Y.	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	\$ 95.00
397	JB 700(CE)	5,505.0 C.Y.	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	\$ 58.00
398	JB 700(ECS)	1,179.0 C.Y.	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	\$ 95.00



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399	JB 700(TW)	284.0 C.Y.	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	\$ 75.00
400	JB 710.1(AT&T)	7,580.0 L.F.	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/ PLASTIC PIPES, UP TO AND INCLUDING 12" DIAMETER PIPE	\$ 12.00
401	JB 710.1(CE)	14,425.0 L.F.	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/ PLASTIC PIPES, UP TO AND INCLUDING 12" DIAMETER PIPE	\$ 16.00
402	JB 710.1(ECS)	347.0 L.F.	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/ PLASTIC PIPES, UP TO AND INCLUDING 12" DIAMETER PIPE	\$ 12.00
403	JB 710.2(CE)	120.0 L.F.	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/ PLASTIC PIPES, OVER 12" AND UP TO AND INCLUDING 20" DIAMETER PIPE	\$ 18.00
404	JB 711(CE)	400.0 L.F.	USE SHEETING LINE AS FORM	\$ 6.00
405	JB 711(ECS)	50.0 L.F.	USE SHEETING LINE AS FORM	\$ 6.00
406	JB 781(ECS)	4.0 EACH	REMOVABLE SIDEWALK CURB PANEL FOR ACCESS TO UTILITY STRUCTURE OPENINGS	\$ 2,021.00
407	JB 800(CE)	270.0 L.F.	MODIFICATION OF TROLLEY STRUCTURE REMOVAL WHEN CROSSING UTILITY FACILITIES	\$ 197.00
408	JB 801(CE)	850.0 L.F.	MODIFICATION OF TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES	\$ 182.00
409	JB 803.2(CE)	200.0 L.F.	LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS (LINE CUT ANY COMBINATION OF ASPHALT AND CONCRETE ROADWAY)	\$ 10.00



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410	JB 850(CE)	12,400.0 S.F.	PLACING RUBBER SHEETS FOR UTILITY FACILITIES	\$ 3.00
411	JB 900(AT&T)	1.0 F.S.	EXTRA UTILITY WORK COSTS ALLOWANCE	\$ 555,700.00
412	JB 900(CE)	1.0 F.S.	EXTRA UTILITY WORK COSTS ALLOWANCE	\$ 3,525,786.50
413	JB 900(ECS)	1.0 F.S.	EXTRA UTILITY WORK COSTS ALLOWANCE	\$ 1,581,947.00
414	JB 900(TW)	1.0 F.S.	EXTRA UTILITY WORK COSTS ALLOWANCE	\$ 8,664.00
415	NYCT-7A.1	35,000.0 S.F.	MEMBRANE WATERPROOFING	\$ 9.00
416	NYCT-7A.2	35,000.0 S.F.	WATERPROOFING PROTECTION BOARD	\$ 8.00
417	SL-20.02.02	28.0 EACH	FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788	\$ 1,080.00
418	SL-20.02.05	3.0 EACH	REMOVE LAMPPOST. REMOVE FOUNDATION (STANDARD, SPIDER, ETC.). FURNISH AND INSTALL NEW FOUNDATION, ( E-3788 OR J- 5253). RE-INSTALL LAMPPOST OR NEW LAMPPOST WITH ALL ATTACHMENTS.	\$ 2,325.00
419	SL-20.02.10	7.0 EACH	FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION AS PER DWG J-5253 FOR INSTALLING TYPE "BC", "M", LYRE AND "5TH AVENUE", "GCPW", LAMPPOST.	\$ 1,106.00
420	SL-20.07.01	1.0 EACH	FURNISH AND INSTALL ADDITIONAL RIGID CONDUIT BEND, SIZE AS ORDERED. USE THIS ITEM WHEN INSTALLING A NEW FOUNDATION.	\$ 63.00





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421	SL-21.03.02	28.0 EACH	FURNISH AND INSTALL TYPE 2S, 4S, 6S, 8S OR 12S LAMPPOST WITH TRANSFORMER BASE	\$ 1,342.00
422	SL-21.04.02	7.0 EACH	FURNISH AND INSTALL TYPE "BC" LAMPPOST WITH PHOTOELECTRIC CONTROL RECEPTACLE	\$ 5,200.00
423	SL-21.09.05	25.0 EACH	REMOVE STANDARD FABRICATED STEEL, SPUN ALUMINUM NO. 10, ETC. WITH ARM(S), LUMINAIRE(S), CONTROL(S) WITH ALL ATTACHMENTS, IF ANY.	\$ 382.00
424	SL-21.09.06	7.0 EACH	REMOVE ORNAMENTAL LAMPPOST (TYPE "BC", "M", "F", "5TH AVENUE", "LYRE" GRAND CENTRAL) ON FOUNDATION, WITH ALL ATTACHMENTS, IF ANY. REMOVE PORTION OF FOUNDATION.	\$ 498.00
425	SL-21.09.08	2.0 EACH	REMOVE ALL STREET LIGHTING EQUIPMENT FROM TYPE "M-2" TRAFFIC POST (ARM(S), PHOTOELECTRIC CONTROLLER, LUMINAIRE(S), SHAFT EXTENSION, WIRING, ETC.)	\$ 356.00
426	SL-22.03.18	31.0 EACH	FURNISH AND INSTALL TYPE COBRA HEAD LUMINAIRE WITH 150 WATT HPS WITH SOLID STATE BALLAST AND STRAY VOLTAGE INDICATOR FOR 100 VOLT LAMP.	\$ 235.00
427	SL-22.05.09	11.0 EACH	FURNISH AND INSTALL 250 WATT HIGH PRESSURE SODIUM "TEAR DROP" LUMINAIRE, FOR 100 VOLT LAMP, AS PER DRAWINGS H-5271A AND H-5271B.	\$ 660.00
428	SL-24.02.02	3.0 EACH	FURNISH AND INSTALL FABRICATED STEEL 8 FT. ARM ON LAMPPOST OR "M-2" TRAFFIC POLE SHAFT EXTENSION.	\$ 356.00
429	SL-24.02.16	3.0 EACH	FURNISH AND INSTALL FABRICATED STEEL 6 FT. SHAFT EXTENSION (SINGLE ARM) FOR "M-2" TRAFFIC POST AS PER DWGS H-5159 OR H-5255.	\$ 617.00



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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
430	SL-24.04.01	4.0 EACH	FURNISH AND INSTALL TYPE "BC" SHAFT EXTENSION AND ARM ASSEMBLY WITH PHOTOELECTRIC CONTROL RECEPTACLE FOR "M-2" TRAFFIC POST, AS PER DRAWING H-5264. M-2 ORNAMENTAL CASTINGS FURNISHED AND INSTALLED BY OTHERS.	\$ 2,500.00
431	SL-24.04.16	4.0 EACH	REMOVE ORNAMENTAL SHAFT EXTENSION AND ARM(S) ASSEMBLY, LUMINAIRE(S), ETC. FROM "M-2" TRAFFIC LAMIPPOST	\$ 260.00
432	SL-26.01.01	43.0 EACH	FURNISH AND INSTALL, OR FURNISH AND REPLACE A PLUG-IN SOLID STATE PHOTOELECTRIC CONTROL	\$ 71.00
433	SL-26.06.02	3.0 EACH	FURNISH AND INSTALL LED FIRE ALARM LUMINAIRES.	\$ 130.00
434	SL-29.01.01	38.0 EACH	FURNISH, INSTALL, MAINTAIN AND REMOVE EQUIPMENT FOR TEMPORARY LIGHTING (PYLON), AS PER DRAWINGS F-5005 AND F-5005A	\$ 1,100.00
435	SL-31.01.06	28.0 EACH	PAINT A STANDARD STREET LIGHT LAMIPPOST WITH INSULATED "SUPERHTHANE" PAINT APR. 7' HIGH.	\$ 480.00
436	SL-33.02.02	9,800.0 L.F.	FURNISH AND INSTALL NO. 6 AWG XLP COPPER CABLE OR EQUAL FOR OVERHEAD INSTALLATION	\$ 5.25
437	T-1.1	3.0 EACH	INSTALL TYPE "S" OR "T" FOUNDATION	\$ 1,200.00
438	T-1.18	3.0 EACH	REMOVE TYPE "A", "B", "S" OR "T" SERIES FOUNDATION	\$ 650.00
439	T-1.20	11.0 EACH	REMOVE TYPE "M" SERIES FOUNDATION	\$ 1,000.00
440	T-1.3	11.0 EACH	INSTALL TYPE "M2-5S" FOUNDATION	\$ 2,600.00



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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
441	T-1.6	1.0 EACH	INSTALL TYPE "M2-5T" FOUNDATION	\$ 2,500.00
442	T-2.1	3.0 EACH	INSTALL TYPE "S-1" OR "T-1" SERIES POST	\$ 400.00
443	T-2.16	10.0 EACH	FURNISH, INSTALL, MAINTAIN AND REMOVE TEMPORARY POST OR PYLON WITH SIGNALS	\$ 900.00
444	T-2.18	6.0 EACH	FURNISH, INSTALL, MAINTAIN AND REMOVE TEMPORARY POST OR PYLON WITH CONTROLLER AND SIGNALS	\$ 1,000.00
445	T-2.22	3.0 EACH	REMOVE TYPE "S-1" OR "T-1" SERIES POST	\$ 350.00
446	T-2.24	11.0 EACH	REMOVE TYPE "M" SERIES POST	\$ 800.00
447	T-2.28	5.0 EACH	REMOVE MAST ARM FROM ANY POST	\$ 400.00
448	T-2.32	7.0 EACH	INSTALL STREET LIGHT LUMINAIRE SUPPORT ARM ON "M-2" POST	\$ 350.00
449	T-2.4	12.0 EACH	INSTALL TYPE "M-2" POST	\$ 1,000.00
450	T-20000	3.0 EACH	FURNISH TEN FOOT ALUMINUM SIGNAL POST TYPE "S-1"	\$ 600.00
451	T-20020	9.0 EACH	a) FURNISH 3/4" ANCHOR BOLT ASSEMBLIES FOR S-1 (EACH) (3 REQUIRED PER POST)	\$ 20.00
452	T-20160	12.0 EACH	FURNISH 20 FOOT SIGNAL MAST ARM POLE ASSEMBLY TYPE "M-2"	\$ 3,570.00
453	T-20184	8.0 EACH	a) FURNISH 5' EXTENSION ARM ASSEMBLY WITH FITTINGS	\$ 300.00



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454	T-20220	48.0 EACH	c) FURNISH 1-1/4" ANCHOR BOLT ASSEMBLIES FOR M-2 (EACH) (4 REQUIRED PER POST)	\$ 60.00
455	T-3.1	34.0 EACH	INSTALL "ONE-WAY" SIGNAL UNIT ON MAST ARM OR TOP OF TRAFFIC POST	\$ 300.00
456	T-3.18	15.0 EACH	REMOVE SIGNAL HEAD FROM ANY TYPE POST	\$ 250.00
457	T-3.2	1.0 EACH	INSTALL "ONE-WAY" SIGNAL UNIT ON THE SHAFT OF ANY POST	\$ 325.00
458	T-3.21	46.0 EACH	REMOVE PEDESTRIAN SIGNAL OR SIGN UNIT OR OTHER ILLUMINATED SIGNS FROM ANY POST	\$ 200.00
459	T-3.26	4.0 EACH	REMOVE STREET LIGHT LUMINAIRE AND PHOTO ELECTRIC CONTROL FROM STREET LIGHT ARM	\$ 235.00
460	T-3.27	6.0 EACH	INSTALL STREET LIGHT LUMINAIRE AND PHOTO ELECTRIC CONTROL ON STREET LIGHT MAST	\$ 460.00
461	T-3.6	46.0 EACH	INSTALL PEDESTRIAN SIGNAL ON ANY TYPE POST	\$ 250.00
462	T-30013L	35.0 EACH	FURNISH ADJUSTABLE 3 SECTION 1-WAY, DIE CAST ALUMINUM TRAFFIC SIGNALS 8" - W/LED LENS	\$ 550.00
463	T-31200	1.0 EACH	e) "VB" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	\$ 72.00
464	T-31210	25.0 EACH	h) "HUB" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	\$ 25.00
465	T-31215	2.0 EACH	b) "2MS"	\$ 160.00
466	T-31225	8.0 EACH	c) "3MS"	\$ 185.00





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467	T-31340	2.0 EACH	f) "VB-P" ASSEMBLY * ASSEMBLY IS EQUAL TO ONE PAIR	\$ 70.00
468	T-31351	22.0 EACH	g) "VB-2P" ASSEMBLY * ASSEMBLY IS EQUAL TO ONE PAIR	\$ 150.00
469	T-33000L	46.0 EACH	FURNISH POLYCARBONATE INCANDESCENT PED SIGNAL W/LED LENS	\$ 500.00
470	T-4.1	6.0 EACH	INSTALL ONE CONTROL BOX AND CONTROLLER ON ANY POST OR SUPPORT	\$ 1,100.00
471	T-4.23	4.0 EACH	INSTALL BATTERY BACK-UP POWER SUPPLY SYSTEM ON ANY POST	\$ 1,100.00
472	T-4.8	6.0 EACH	REMOVE ONE CONTROL BOX AND CONTROLLER FROM ANY POST OR SUPPORT	\$ 800.00
473	T-4.9	8.0 EACH	REMOVE CONTROL BOX FROM ANY POST OR SUPPORT	\$ 500.00
474	T-5.1	1,550.0 L.F.	FURNISH AND INSTALL 2" RIGID UNDERGROUND CONDUIT IN UNPAVED ROADWAY	\$ 40.00
475	T-5.2	50.0 L.F.	FURNISH AND INSTALL 2" RIGID UNDERGROUND CONDUIT IN PAVED ROADWAY	\$ 75.00
476	T-5.32	100.0 L.F.	RESTORING PERMANENT ROADWAY (INCLUDING SAWCUT)	\$ 45.00
477	T-5.4	50.0 L.F.	FURNISH AND INSTALL 3" RIGID UNDERGROUND CONDUIT IN UNPAVED ROADWAY	\$ 50.00
478	T-5.5	50.0 L.F.	FURNISH AND INSTALL 3" RIGID UNDERGROUND CONDUIT IN PAVED ROADWAY	\$ 100.00
479	T-6.1	1,000.0 L.F.	INSTALL CABLE (INCLUDES OVERHEAD)	\$ 4.00



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480	T-6.10	3,000.0 L.F.	REMOVE CABLE (INCLUDES OVERHEAD)	\$ 5.00
481	T-6.2	3,000.0 L.F.	INSTALL MULTIPLE CABLE (INCLUDES OVERHEAD)	\$ 6.00
482	T-60000B	3,500.0 L.F.	FURNISH 2 c # 10B (BREAKDOWN = 2#10 WITH 3RD WIRE FOR GROUNDING).	\$ 2.60
483	T-60040	2,000.0 L.F.	c) 7 CONDUCTOR, 14 A.W.G.	\$ 1.50
484	T-60190	4,000.0 L.F.	e) 13 CONDUCTOR, 14 A.W.G.	\$ 2.50
485	T-7.50	2.0 EACH	REMOVE (1812) HAND BOX OR PULL BOX IN PAVED SIDEWALK	\$ 450.00
486	T-79999	3.0 EACH	FURNISH ADVANCED SOLID STATE TRF CONTROLLER (6 LOAD SWITCH).	\$ 6,500.00
487	T-8.10	8.0 EACH	RELOCATE CONCRETE PYLON WITH POST	\$ 800.00
488	T-8.8	8.0 EACH	INSTALL CONCRETE PYLON	\$ 800.00
489	T-8.9	8.0 EACH	REMOVE CONCRETE PYLON	\$ 500.00
490	T-81000	8.0 EACH	FURNISH CONCRETE PYLON	\$ 1,100.00
491	T-89999	2.0 EACH	FURNISH ADVANCED SOLID STATE TRF CONTROLLER (12 LOAD SWITCH)	\$ 10,500.00
492	TV-USHS	1.0 F.S.	ALLOWANCE FOR MAINTAINING U.S. DEPARTMENT OF HOMELAND SECURITY CAMERAS	\$ 10,000.00



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493	TV-USMS	1.0 F.S.	ALLOWANCE FOR MAINTAINING U.S. MARSHALS SERVICE CAMERAS	\$ 91,700.00
494	UTL-6.01.1	6.0 EACH	GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (\$6.01)	\$ 1,040.00
495	UTL-6.01.10	2.0 EACH	GAS MAIN CROSSING WATER MAIN 24" THRU 30" IN DIAMETER (\$6.01)	\$ 550.00
496	UTL-6.01.11	11.0 EACH	GAS MAIN CROSSING WATER MAIN 36" THRU 42" IN DIAMETER (\$6.01)	\$ 685.00
497	UTL-6.01.12	5.0 EACH	GAS MAIN CROSSING WATER MAIN 48" THRU 54" IN DIAMETER (\$6.01)	\$ 810.00
498	UTL-6.01.8	8.0 EACH	GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (\$6.01)	\$ 465.00
499	UTL-6.01.9	29.0 EACH	GAS MAIN CROSSING WATER MAIN UP TO 20" IN DIAMETER (\$6.01)	\$ 485.00
500	UTL-6.02	4.0 EACH	EXTRA EXCAVATION FOR THE INSTALLATION OF CATCH BASIN SEWER DRAIN PIPES WITH GAS INTERFERENCES (\$6.02)	\$ 715.00
501	UTL-6.03	1,695.0 L.F.	REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (\$6.03)	\$ 15.00
502	UTL-6.03.1A	1,465.0 L.F.	REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (\$6.03)	\$ 25.00
503	UTL-6.04	5.0 EACH	ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (\$6.04)	\$ 35.00
504	UTL-6.05	34.0 EACH	ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (\$6.05)	\$ 65.00
505	UTL-6.06	500.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING (\$6.06)	\$ 180.00



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506	UTL-6.07	200.0 C.Y.	TEST PITS FOR GAS FACILITIES (\$6.07)	\$ 100.00
507	UTL-6.08A	1.0 EACH	PIER AND/OR PLATE METHOD OF PROTECTION FOR DUCTILE IRON WATER MAIN WITH LESS THAN 24" COVER (\$6.08A)	\$ 5,800.00
508	UTL-6.09	2,170.0 C.Y.	TRENCH EXCAVATION AND BACKFILL FOR GAS MAINS AND SERVICES. GAS INSTALLED BY OTHERS.	\$ 190.00
509	UTL-GCS-2WS	1.0 F.S.	GAS INTERFERENCES AND ACCOMMODATIONS	\$ 100,000.00





BID FORM

MFM CONTRACTING CORP

PROJECT ID. HWMWTC7E

**BID PROPOSAL:** In the spaces provided below, the Bidder shall furnish its cost adjustment Multiplier, to be applied to every unit price item contained in the Bid Schedule and Contingency Item List, excluding items with a Fixed Sum unit of measurement, to cover the cost of furnishing all labor and materials required and complete all work in full compliance with the Contract for the single multiplier of:

BID MULTIPLIER:

0.9133 Multiplier

Used to calculate the "A" PORTION of the Bid to which will be added the "B" PORTION of the Bid, below, to determine the lowest bid for consideration of bids for award.

(Please specify to four (4) decimal places) of the foregoing Engineer's Estimate of Total Cost

In the space provide below, the Bidder shall furnish the number of consecutive calendar days it proposes to establish for the "B" portion of the bid:

"N" NUMBER OF CONSECUTIVE CALENDAR DAYS:

1095

Used to calculate the "B" PORTION of the Bid which is equal to the Daily Cost of \$10,000.00 multiplied by "N" the number of consecutive calendar days established by the Bidder to substantially completed all work.

(Not to exceed 1,825 Consecutive Calendar Days)

Total "B" PORTION = \$10,000.00 x "N" = \$ 10,950,000<sup>00</sup>

MB 6/12/15

**BIDDER'S SIGNATURE AND AFFIDAVIT**

Bidder: MFM CONTRACTING CORP

By: Michael V. R

(Signature of Partner or corporate officer)

Attest: [Signature]  
(Corporate Seal)

[Signature]  
Secretary of Corporate Bidder

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

**BID FORM (TO BE NOTARIZED)**

**AFFIDAVIT WHERE BIDDER IS AN INDIVIDUAL**

STATE OF NEW YORK, COUNTY OF \_\_\_\_\_ ss: \_\_\_\_\_ being duly sworn says:  
I am the person described in and who executed the foregoing bid, and the several matters therein stated are in all respects true.

\_\_\_\_\_  
(Signature of the person who signed the Bid)

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

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

**AFFIDAVIT WHERE BIDDER IS A PARTNERSHIP**

STATE OF NEW YORK, COUNTY OF \_\_\_\_\_ ss: \_\_\_\_\_ being duly sworn says:  
I am a member of \_\_\_\_\_ the firm described in and which executed the foregoing bid. I subscribed the name of the firm thereto on behalf of the firm, and the several matters therein stated are in all respects true.

\_\_\_\_\_  
(Signature of Partner who signed the Bid)

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

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

**AFFIDAVIT WHERE BIDDER IS A CORPORATION**

STATE OF NEW YORK, COUNTY OF WESTCHESTER ss: \_\_\_\_\_ being duly sworn says:  
MICHAEL V. PETRILLO  
I am the PRESIDENT of the above named corporation whose name is subscribed to and which executed the foregoing bid. I reside at 10 ORCHARD DRIVE PURCHASE NY 10577.  
I have knowledge of the several matters therein stated, and they are in all respects true.

Michael V. Petrillo  
(Signature of Corporate Officer who signed the Bid)

Subscribed and sworn to before me this 11<sup>th</sup> day of June, 2015

Anthony Mastrangelo  
Notary Public  
Notary Public, State of New York  
Registration #01MA6038438  
Qualified in Westchester County  
My Commission Expires March 13, 2016

**BID BOND 1  
FORM OF BID BOND**

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

MFM Contracting Corporation  
335 Center Avenue, Mamaroneck, NY 10543

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

Arch Insurance Company  
Three Parkway, Suite 1500, Philadelphia, PA 19102

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 Proposal Price

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

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

Project ID: HMMWTCA7E - Reconstruction of Worth Street From Hudson Street to Park Row Including Sewer,  
Water Main, Street Lighting, Traffic Signal and Private Utility Work

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 12th day of May, 2015.

(Seal)

MFM Contracting Corporation (L.S.)

Principal

By: Michael V. R

(Seal)

Arch Insurance Company

Surety

By: Susan Lupski

Susan Lupski, Attorney-In-Fact

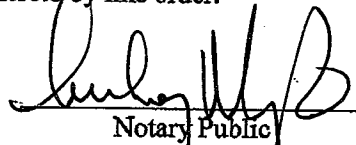


BID BOND 3

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Westchester ss:  
On this 11<sup>th</sup> day of June, 2015, before me personally came  
Michael V. Petriello to me known, who, being by me duly sworn, did depose and say  
that he resides at Purchase N.Y. 10577  
that he is the President of MFM Contracting Corp.  
the corporation described in and which executed the foregoing instrument; that he knows the seal of said  
corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of  
the directors of said corporation, and that he signed his name thereto by like order.

Anthony Mastrangelo  
Notary Public, State of New York  
Registration #01MA6038438  
Qualified in Westchester County  
My Commission Expires March 13, 2016

  
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





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

*This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated. Not valid for Mortgage, Note, Loan, Letter of Credit, Bank Deposit, Currency Rate, Interest Rate or Residential Value Guarantees.*

**POWER OF ATTORNEY**

Know All Persons By These Presents:

That the Arch Insurance Company, a corporation organized and existing under the laws of the State of Missouri, having its principal administrative office in Jersey City, New Jersey (hereinafter referred to as the "Company") does hereby appoint:

Camille Mallard, Colette R. Chisholm, Desiree Cardin, George O. Brewster, Gerard S. Macholz, Lee Ferrucci, Nelly Renciwich, Rita Sagistano, Robert T. Pearson, Susan Lupski, Thomas Bean and Vincent A. Walsh of Uniondale, NY (EACH)

its true and lawful Attorney(s) in Fact, to make, execute, seal, and deliver from the date of issuance of this power for and on its behalf as surety, and as its act and deed:

Any and all bonds, undertakings, recognizances and other surety obligations, in the penal sum not exceeding Ninety Million Dollars (\$90,000,000.00)

This authority does not permit the same obligation to be split into two or more bonds in order to bring each such bond within the dollar limit of authority as set forth herein.

The execution of such bonds, undertakings, recognizances and other surety obligations in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal administrative office in Jersey City, New Jersey.

This Power of Attorney is executed by authority of resolutions adopted by unanimous consent of the Board of Directors of the Company on September 15, 2011, true and accurate copies of which are hereinafter set forth and are hereby certified to by the undersigned Secretary as being in full force and effect:

"VOTED, That the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, or the Secretary shall have the power and authority to appoint agents and attorneys-in-fact, and to authorize them subject to the limitations set forth in their respective powers of attorney, to execute on behalf of the Company, and attach the seal of the Company thereto, bonds, undertakings, recognizances and other surety obligations obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."

This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the unanimous consent of the Board of Directors of the Company on September 15, 2011:

VOTED, That the signature of the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to the resolution adopted by the Board of Directors on September 15, 2011, and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company.



In Testimony Whereof, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this 9<sup>th</sup> day of March, 2015.

Attested and Certified

Arch Insurance Company

Patrick K. Nails  
Patrick K. Nails, Secretary

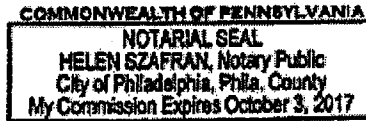


David M. Finkelstein  
David M. Finkelstein, Executive Vice President

STATE OF PENNSYLVANIA SS

COUNTY OF PHILADELPHIA SS

I, Helen Szafran, a Notary Public, do hereby certify that Patrick K. Nails and David M. Finkelstein personally known to me to be the same persons whose names are respectively as Secretary and Executive Vice President of the Arch Insurance Company, a Corporation organized and existing under the laws of the State of Missouri, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.



Helen Szafran  
Helen Szafran, Notary Public  
My commission expires 10/03/2017

CERTIFICATION

I, Patrick K. Nails, Secretary of the Arch Insurance Company, do hereby certify that the attached Power of Attorney dated March 9, 2015 on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said David M. Finkelstein, who executed the Power of Attorney as Executive Vice President, was on the date of execution of the attached Power of Attorney the duly elected Executive Vice President of the Arch Insurance Company.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Insurance Company on this \_\_\_\_\_ day of MAY 12 2015, 20\_\_\_\_\_.

Patrick K. Nails  
Patrick K. Nails, Secretary

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

PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:

Arch Insurance – Surety Division  
3 Parkway, Suite 1500  
Philadelphia, PA 19102

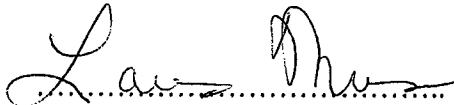




ACKNOWLEDGMENT OF SURETY COMPANY

STATE OF NEW YORK }  
COUNTY OF NASSAU } SS

On this May 12, 2015, before me personally came Susan Lupski  
to me know, who, being by me duly sworn, did depose and say; that he/she resides in  
Nassau County, State of NEW YORK, that he/she is the Attorney-In-Fact of the  
Arch Insurance Company the corporation described in which  
executed the above instrument; that he/she knows the seal of said corporation; that the  
seal affixed to said instrument is such corporate seal; that is was so affixed by order of  
the Board of Directors of said corporation; and that he/she signed his/her name thereto by  
like order; and the affiant did further depose and say that the Superintendent of Insurance  
of the State of New York, has, pursuant to Section 1111 of the Insurance Law of the State  
of New York, issued to Arch Insurance Company (Surety) his/her  
certificate of qualification evidencing the qualification of said Company and its  
sufficiency under any law of the State of New York as surety and guarantor, and the  
propriety of accepting and approving it as such; and that such certificate has not been  
revoked.

  
Notary Public

NY acknowledgment

**LAURAJEAN MURTAGH**  
Notary Public, State of New York  
No. 01MU6319758  
Qualified in Nassau County  
Commission Expires 02/23/2019



ARCH INSURANCE COMPANY  
STATEMENT OF FINANCIAL CONDITION  
DECEMBER 31, 2014

Assets


Cash in Banks	\$ 127,486,649
Bonds owned	2,003,424,640
Stocks	441,536,973
Premiums in course of collection	318,366,265
Accrued interest and other assets	<u>310,044,748</u>
 Total Assets	 <u><u>\$ 3,200,859,275</u></u>

Liabilities

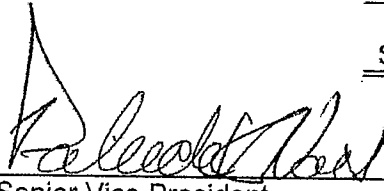
Reserve for losses and adjustment expenses	\$ 1,356,487,805
Reserve for unearned premiums	347,898,150
Ceded reinsurance premiums payable	168,613,930
Amounts withheld or retained by company for account of others	199,971,426
Reserve for taxes, expenses and other liabilities	<u>349,520,028</u>
 Total Liabilities	 2,422,491,339

Surplus as regards policyholders	<u>778,367,936</u>
 Total Surplus and Liabilities	 <u><u>\$ 3,200,859,275</u></u>

By:

  
\_\_\_\_\_  
Senior Vice President, Chief  
Financial Officer and Treasurer

Attest:

  
\_\_\_\_\_  
Senior Vice President,  
General Counsel and Secretary

State of New Jersey )

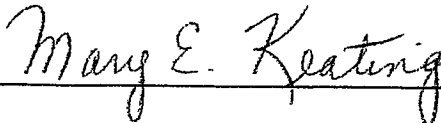
) SS

County of Hudson )

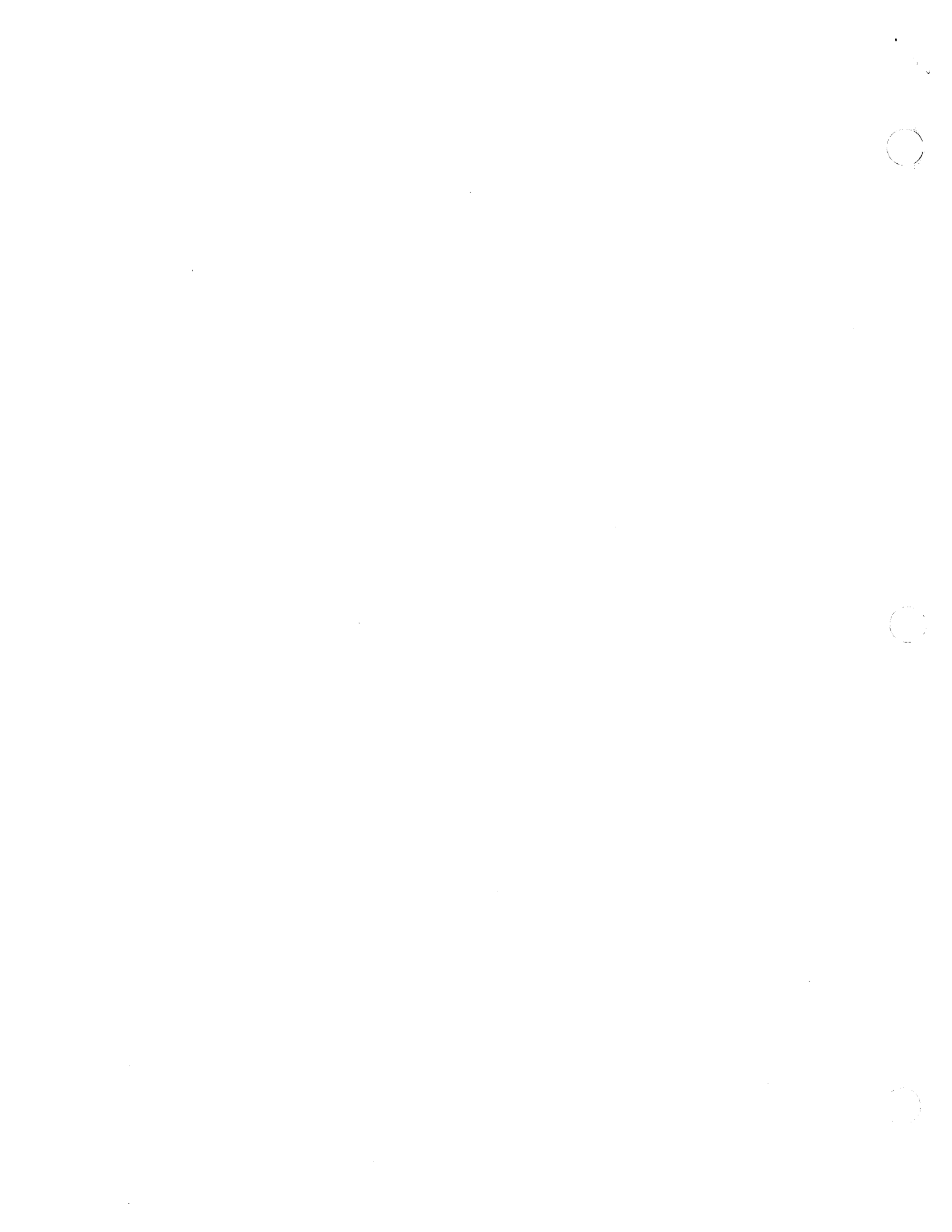
Thomas James Ahern, Senior Vice President, Chief Financial Officer and Treasurer and Patrick Kenneth Nails, Senior Vice President, General Counsel and Secretary being duly sworn, of ARCH INSURANCE COMPANY, Missouri; and that the foregoing is a true and correct statement of financial condition of said company, as of December 31, 2014.

Subscribed and sworn to before me, this 10<sup>th</sup> day of March, 2015

Notary Public

  
\_\_\_\_\_

MARY E. KEATING  
NOTARY PUBLIC OF NEW JERSEY  
ID # 2449626  
My Commission Expires 8/28/2016





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

CONTINGENCY ITEM LIST

- NOTE:
- (1) The Bid multiplier located on Page C-4 of the BID BOOKLET shall be applied to each of the fixed unit prices in the contingency item list, excluding items with "F.S." ("Fixed Sum") as the unit of measurement and that adjusted unit price shall represent the reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.
  - (2) The following fixed unit prices, in this Percentage Bid Contract, adjusted by the Bid multiplier are to be paid for the actual quantities of the several classes of work in the completed work or structure, and those adjusted unit prices cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.
  - (3) Prospective bidders must examine the Contingency Item List carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Contingency Item List are numbered consecutively, as follows: D-2 (R) through D-4 (R).



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

CONTINGENCY ITEM LIST

- NOTE:
- (1) The Bid multiplier located on Page C-4 of the BID BOOKLET shall be applied to each of the fixed unit prices in the contingency item list, excluding items with "F.S." ("Fixed Sum") as the unit of measurement and that adjusted unit price shall represent the reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.
  - (2) The following fixed unit prices, in this Percentage Bid Contract, adjusted by the Bid multiplier are to be paid for the actual quantities of the several classes of work in the completed work or structure, and those adjusted unit prices cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.
  - (3) Prospective bidders must examine the Contingency Item List carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Contingency Item List are numbered consecutively, as follows: D-2 through D-4.

COL. 1 ITEM NUMBER	COL. 2 CLASSIFICATION	COL. 3 UNIT	COL. 4 UNIT PRICE
<b>For work to be done under the following items beginning with the prefix "JB-", see applicable sections in the JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN booklet issued August 1, 2005</b>			
<b>TIME WARNER CONTINGENCY ITEMS</b>			
JB 102.1(TW)	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER	EA	\$ 3,000.00
JB 103.1(TW)	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER	EA	\$ 3,500.00
JB 104.1(TW)	UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER	EA	\$ 4,000.00
JB 105.1(TW)	UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER	EA	\$ 4,200.00
JB 106.1(TW)	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER	EA	\$ 4,400.00
JB 107.1(TW)	UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER	EA	\$ 4,500.00
JB 111.1(TW)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" TO 48" DIAMETER	EA	\$ 1,500.00
JB 112.1(TW)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" TO 54" DIAMETER	EA	\$ 1,600.00
JB 113.1(TW)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" TO 60" DIAMETER	EA	\$ 1,800.00
JB 114.1(TW)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" TO 72" DIAMETER	EA	\$ 2,000.00
JB 115.1(TW)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" TO 84" DIAMETER	EA	\$ 2,200.00
JB 200(TW)	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	L.F.	\$ 150.00
JB 225(TW)	REMOVAL AND INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	\$ 2,800.00
JB 226(TW)	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	\$ 1,400.00
JB 227(TW)	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	\$ 1,400.00
JB 300(TW)	SPECIAL CARE EXCAVATION & BACKFILLING	C.Y.	\$ 150.00
JB 400(TW)	TEST PITS FOR UTILITY FACILITIES	C.Y.	\$ 175.00
JB 401(TW)	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	C.Y.	\$ 200.00
JB 401AC(TW)	SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF CABLE TV FACILITIES CONNECTED TO THE BASE PAVEMENT	C.Y.	\$ 75.00
JB 402.1(TW)	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH OUT CONCRETE ENCASEMENT	L.F.	\$ 35.00
JB 402.1A(TW)	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 45.00
JB 402.2(TW)	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT	L.F.	\$ 25.00
JB 402.2A(TW)	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 35.00
JB 405.2(TW)	TRENCH EXCAVATIONS FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET, REQUIRED SHEETING	C.Y.	\$ 200.00
JB 501(TW)	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	C.Y.	\$ 200.00

COL. 1 ITEM NUMBER	COL. 2 CLASSIFICATION	COL. 3 UNIT	COL. 4 UNIT PRICE
JB 603T.1(TW)	INSTALL 1 ea. 2", 4" or 1 1/4" QUAD (PVC or STEEL) IN ANY COMBINATION	L.F.	\$ 5.00
JB 603T.3(TW)	INSTALL 4 ea. 2", 4" or 1 1/4" QUAD (PVC or STEEL) IN ANY COMBINATION	L.F.	\$ 12.00
JB 638N(TW)	INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE	C.Y.	\$ 1,054.00
JB 638R(TW)	BREAKOUT & REMOVE UTILITY STRUCTURE	C.Y.	\$ 350.00
JB 800(TW)	MODIFICATION OF TROLLEY STRUCTURE REMOVAL WHEN CROSSING UTILITY FACILITIES	L.F.	\$ 190.00
JB 801(TW)	MODIFICATION OF TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES	L.F.	\$ 80.00
<b>EMPIRE CITY SUBWAY CONTINGENCY ITEMS</b>			
JB 100.4(ECS)	UTILITIES CROSSING TRENCH FOR CB CHUTE CONNECTION &/OR TEST PITS (TYPE 4)	EA	\$ 1,413.00
JB 100.5(ECS)	UTILITIES CROSSING TRENCH FOR CB CHUTE CONNECTION &/OR TEST PITS (TYPE 5)	EA	\$ 1,697.00
JB 100.6(ECS)	UTILITIES CROSSING TRENCH FOR CB CHUTE CONNECTION &/OR TEST PITS (TYPE 6)	EA	\$ 1,707.00
JB 101.4(ECS)	UTILITIES CROSSING TRENCH FOR SEWER 12" TO 24" DIAMETER (TYPE 4)	EA	\$ 3,630.00
JB 101.5(ECS)	UTILITIES CROSSING TRENCH FOR SEWER 12" TO 24" DIAMETER (TYPE 5)	EA	\$ 4,302.00
JB 101.6(ECS)	UTILITIES CROSSING TRENCH FOR SEWER 12" TO 24" DIAMETER (TYPE 6)	EA	\$ 4,784.00
JB 108.5(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO & INCL. 12" DIAMETER (TYPE 5)	EA	\$ 1,983.00
JB 108.6(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO & INCL. 12" DIAMETER (TYPE 6)	EA	\$ 2,313.00
JB 109.5(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" TO 24" DIAMETER (TYPE 5)	EA	\$ 2,508.00
JB 109.6(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" TO 24" DIAMETER (TYPE 6)	EA	\$ 3,010.00
JB 110.5(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" TO 36" DIAMETER (TYPE 5)	EA	\$ 2,508.00
JB 110.6(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" TO 36" DIAMETER (TYPE 6)	EA	\$ 3,010.00
JB 111.1(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" TO 48" DIAMETER (TYPE 1)	EA	\$ 1,505.00
JB 111.4(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" TO 48" DIAMETER (TYPE 4)	EA	\$ 2,508.00
JB 111.5(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" TO 48" DIAMETER (TYPE 5)	EA	\$ 3,010.00
JB 111.6(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" TO 48" DIAMETER (TYPE 6)	EA	\$ 3,512.00
JB 200(ECS)	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	L.F.	\$ 170.00
JB 225(ECS)	INSTALLATION & REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	\$ 2,925.00
JB 330T2.1(ECS)	COMMUNICATION FACILITY OPERATOR(S) REQUESTS TRENCH TO BE WIDENED	L.F.	\$ 232.00
JB 330T2.2(ECS)	COMMUNICATION FACILITY OPERATOR(S) REQUESTS TRENCH OR SHEETING BE MOD.	L.F.	\$ 326.00
JB 401AT(ECS)	SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF TELECOMMUNICATIONS FACILITEIS CONNCTED TO OR NEAR THE BASE PAVEMENT	C.Y.	\$ 76.00

COL. 1 ITEM NUMBER	COL. 2 CLASSIFICATION	COL. 3 UNIT	COL. 4 UNIT PRICE
JB 402T.2A(ECS)	EXIST. NON-CONC. ENC. TELECOMMUNICATION CONDUITS PLACED IN FINAL POS. W/CONC.	L.F.	\$ 44.00
JB 410.5(ECS)	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME UP TO AND INCLUDING 20% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, EQUAL TO OR GREATER THAN 5 FEET	C.Y.	\$ 163.00
JB 500(ECS)	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	L.F.	\$ 4.00
JB 636EG(ECS)	ADJUSTMENT OF UTILITY HARDWARE (41" TO UNDER 75")	EA	\$ 540.00
JB 800(ECS)	MODIFICATIONS OF TROLLEY STRUCTURE REMOVAL WHEN CROSSING UTILITY FACILITIES	L.F.	\$ 241.00
JB 801(ECS)	MODIFICATIONS OF TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES	L.F.	\$ 76.00

## M/WBE PROGRAM

### M/WBE UTILIZATION PLAN

**M/WBE Program Requirements:** The requirements for the M/WBE Program are set forth on the following pages of this Bid Booklet, in the section entitled “Notice to All Prospective Contractors”.

**Schedule B: M/WBE Utilization Plan:** Schedule B: M/WBE Utilization Plan for this Contract is set forth in this Bid Booklet on the pages following the section entitled “Notice to All Prospective Contractors”. The M/WBE Utilization Plan (Part I) indicates whether Participation Goals have been established for this Contract. If Participation Goals have been established for this Contract, the bidder must submit an M/WBE Utilization Plan (Part II) with its bid.

**Waiver:** The bidder may seek a full or partial pre-award waiver of the Participation Goals in accordance with the “Notice to All Prospective Contractors” (See Part A, Section 10). The bidder’s request for a waiver must be submitted at least seven (7) calendar days prior to the bid date. Waiver requests submitted after the deadline will not be considered. The form for requesting a waiver of the Participation Goals is set forth in the M/WBE Utilization Plan (Part III).

**Rejection of the Bid:** The bidder must complete Schedule B: M/WBE Utilization Plan (Part II) set forth in this Bid Booklet on the pages following the section entitled “Notice to All Prospective Contractors”. A Schedule B submitted by the bidder which does not include the Vendor Certification and Required Affirmations (See Section V of Part II) will be deemed to be non-responsive, unless a full waiver of the Participation Goals is granted (Schedule B, Part III). In the event that the City determines that the bidder has submitted a Schedule B where the Vendor Certification and Required Affirmations are completed but other aspects of the Schedule B are not complete, or contain a copy or computation error that is at odds with the Vendor Certification and Required Affirmations, the bidder will be notified by the Agency and will be given four (4) calendar days from receipt of notification to cure the specified deficiencies and return a completed Schedule B to the Agency. Failure to do so will result in a determination that the Bid is non-responsive. Receipt of notification is defined as the date notice is emailed or faxed (if the bidder has provided an email address or fax number), or no later than five (5) calendar days from the date of mailing or upon delivery, if delivered.

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

**NOTICE TO ALL PROSPECTIVE CONTRACTORS**

**PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS  
ENTERPRISES IN CITY PROCUREMENT**

**ARTICLE I. M/WBE PROGRAM**

Local Law No. 129 of 2005 added and Local Law 1 of 2013 amended Section 6-129 of the Administrative Code of the City of New York (hereinafter "Section 6-129"). Section 6-129 establishes the program for participation in City procurement ("M/WBE Program") by minority-owned business enterprises ("MBEs") and women-owned business enterprises ("WBEs"), certified in accordance with Section 1304 of the New York City Charter. As stated in Section 6-129, the intent of the program is to address the impact of discrimination on the City's procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are pursuant to Section 6-129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

**If this Contract is subject to the M/WBE Program established by Section 6-129, the specific requirements of MBE and/or WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "M/WBE Utilization Plan"), and are detailed below. The Contractor must comply with all applicable MBE and WBE requirements for this Contract.**

All provisions of Section 6-129 are hereby incorporated in the Contract by reference and all terms used herein that are not defined herein shall have the meanings given such terms in Section 6-129. Article I, Part A, below, sets forth provisions related to the participation goals for construction, standard and professional services contracts. Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE Program.

**PART A**

**PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD  
AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS**

1. The **MBE and/or WBE Participation Goals** established for this Contract or Task Orders issued pursuant to this Contract, ("**Participation Goals**"), as applicable, are set forth on Schedule B, Part I to this Contract (see Page 1, line 1 Total Participation Goals) or will be set forth on Schedule B, Part I to Task Orders issued pursuant to this Contract, as applicable.

The **Participation Goals** represent a percentage of the total dollar value of the Contract or Task Order, as applicable, that may be achieved by awarding subcontracts to firms certified with New York City Department of Small Business Services as MBEs and/or WBEs, and/or by crediting the participation of prime contractors and/or qualified joint ventures as provided in Section 3 below, unless the goals have been waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

2. If **Participation Goals** have been established for this Contract or Task Orders issued pursuant to this Contract, Contractor agrees or shall agree as a material term of the Contract that Contractor shall be subject to the **Participation Goals**, unless the goals are waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

3. If **Participation Goals** have been established for this Contract or Task Order issued pursuant to this Contract, a Contractor that is an MBE and/or WBE shall be permitted to count its own participation toward fulfillment of the relevant **Participation Goal**, provided that in accordance with Section 6-129 the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that the Contractor pays to direct subcontractors (as defined in Section 6-129(c)(13)), and provided further that a Contractor that is certified as both an MBE and a WBE may count its own participation either toward the goal for MBEs or the goal for WBEs, but not both.



A Contractor that is a qualified joint venture (as defined in Section 6-129(c)(30)) shall be permitted to count a percentage of its own participation toward fulfillment of the relevant **Participation Goal**. In accordance with Section 6-129, the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that Contractor pays to direct subcontractors, and then multiplying the remainder by the percentage to be applied to total profit to determine the amount to which an MBE or WBE is entitled pursuant to the joint venture agreement, provided that where a participant in a joint venture is certified as both an MBE and a WBE, such amount shall be counted either toward the goal for MBEs or the goal for WBEs, but not both.

4. A. If **Participation Goals** have been established for this Contract, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Utilization Plan, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. In the event that this M/WBE Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals**, the bid or proposal, as applicable, shall be deemed non-responsive, unless Agency has granted the bidder or proposer, as applicable, a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

B. (i) If this Contract is for a master services agreement or other requirements type contract that will result in the issuance of Task Orders that will be individually registered ("Master Services Agreement") and is subject to M/WBE **Participation Goals**, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Participation Requirements for Master Services Agreements That Will Require Individually Registered Task Orders, Part II (page 2) indicating the prospective contractor's certification and required affirmations to make all reasonable good faith efforts to meet participation goals established on each individual Task Order issued pursuant to this Contract, or if a partial waiver is obtained or such goals are modified by the Agency, to meet the modified **Participation Goals** by soliciting and obtaining the participation of certified MBE and/or WBE firms. In the event that the Schedule B indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals** that may be established on Task Orders issued pursuant to this Contract, the bid or proposal, as applicable, shall be deemed nonresponsive.

(ii) **Participation Goals** on a Master Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. If **Participation Goals** have been established on a Task Order, a contractor shall be required to submit a Schedule B – M/WBE Utilization Plan For Independently Registered Task Orders That Are Issued Pursuant to Master Services Agreements, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. The contractor must engage in good faith efforts to meet the **Participation Goals** as established for the Task Order unless Agency has granted the contractor a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

C. **THE BIDDER/PROPOSER MUST COMPLETE THE SCHEDULE B INCLUDED HEREIN (SCHEDULE B, PART II). A SCHEDULE B SUBMITTED BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS (SEE SECTION V OF PART II) WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART III). IN THE EVENT THAT THE CITY DETERMINES THAT THE BIDDER/PROPOSER HAS SUBMITTED A SCHEDULE B WHERE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE SCHEDULE B ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE VENDOR CERTIFICATION AND AFFIRMATIONS, THE BIDDER/PROPOSER WILL BE NOTIFIED BY THE AGENCY AND WILL BE GIVEN FOUR (4) CALENDAR DAYS FROM RECEIPT OF NOTIFICATION TO CURE THE SPECIFIED DEFICIENCIES AND RETURN A COMPLETED SCHEDULE B TO THE AGENCY. FAILURE TO DO \_**

**SO WILL RESULT IN A DETERMINATION THAT THE BID/PROPOSAL IS NON-RESPONSIVE. RECEIPT OF NOTIFICATION IS DEFINED AS THE DATE NOTICE IS E-MAILED OR FAXED (IF THE BIDDER/PROPOSER HAS PROVIDED AN E-MAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) CALENDAR DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.**

5. Where an **M/WBE** Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multiyear contracts, such list shall also be submitted every year thereafter. The Agency may also require the Contractor to report periodically about the contracts awarded by its direct subcontractors to indirect subcontractors (as defined in Section 6-129(c)(22)). **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work.** In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.

6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the **Participation Goals**. Such certification must occur prior to the firms' commencement of work. A list of MBE and WBE firms may be obtained from the DSBS website at [www.nyc.gov/buycertified](http://www.nyc.gov/buycertified), by emailing DSBS at [buyer@sbs.nyc.gov](mailto:buyer@sbs.nyc.gov), by calling (212) 513-6356, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7th floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting [www.nyc.gov/getcertified](http://www.nyc.gov/getcertified), emailing [MWBE@sbs.nyc.gov](mailto:MWBE@sbs.nyc.gov), or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

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

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

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

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

(b) To apply for a full or partial waiver of the **Participation Goals**, a bidder, proposer, or contractor, as applicable, must complete Part III (Page 5) of Schedule B and submit such request no later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due, in writing to the Agency by email at [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.

**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 # 85015B0086 FMS Project ID#: HWMWTCA7E  
 Project Title/ Agency PIN # RECONSTRUCTION OF WORTH STREET / 8502015HW0028C  
 Bid/Proposal Response Date \_\_\_\_\_  
 Contracting Agency Department of Design and Construction  
 Agency Address 30-30 Thomson Ave. City Long Island City State NY Zip Code 11101  
 Contact Person Ramon Rodriguez Title Deputy ACCO  
 Telephone # (718) 391-1505 Email RODRIGUR@ddc.nyc.gov

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

**RECONSTRUCTION OF WORTH STREET  
 FROM HUDSON STREET TO PARK ROW  
 INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
 TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK  
 Together With All Work Incidental Thereto  
 BOROUGH OF MANHATTAN  
 CITY OF NEW YORK**

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

Prime Contract Industry: Construction

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

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

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

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

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

Part II to be completed by the bidder/proposer.

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

**Section I: Prime Contractor Contact Information**

Tax ID # _____	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 13)	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? % \_\_\_\_\_

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

✓ Scopes of Subcontract Work

1. \_\_\_\_\_
2. \_\_\_\_\_
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15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_

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

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

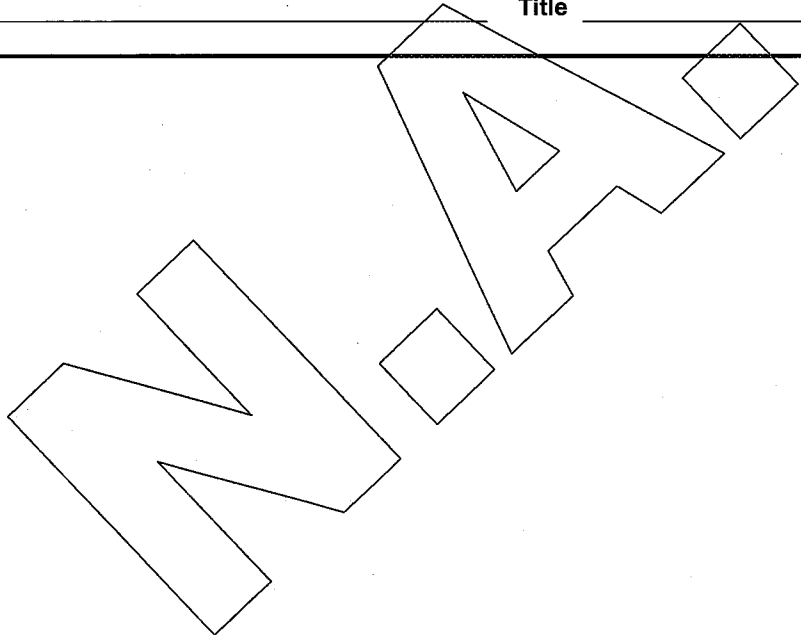
**Section V: Vendor Certification and Required Affirmations**

I hereby:

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

Signature \_\_\_\_\_ Date \_\_\_\_\_

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 Bid/Response Due Date \_\_\_\_\_  
 APT E-PIN # (for this procurement): \_\_\_\_\_ Contracting Agency: \_\_\_\_\_

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

\_\_\_\_\_ % Agency M/WBE Participation Goal

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

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

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

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

**References**

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

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

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

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

<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: \_\_\_\_\_

**Shaded area below is for agency completion only**

**AGENCY CHIEF CONTRACTING OFFICER APPROVAL**  
 Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**CITY CHIEF PROCUREMENT OFFICER APPROVAL**  
 Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Waiver Determination**  
 Full Waiver Approved:   
 Waiver Denied:   
 Partial Waiver Approved:   
 Revised Participation Goal: \_\_\_\_\_ %

## APPRENTICESHIP PROGRAM REQUIREMENTS

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

YES  NO

### (1) Apprenticeship Program Requirements

Notice to Bidders: Please be advised that, pursuant to the authority granted to the City under Labor Law Section 816-b, the Department of Design and Construction hereby requires that the contractor awarded a contract as a result of this Invitation for Bids, and any of its subcontractors with subcontracts worth one million dollars or over, have, prior to entering into such contract or subcontract, apprenticeship agreements appropriate for the type and scope of work to be performed that have been registered with, and approved by, the New York State Commissioner of Labor. In addition, the contractor and its subcontractors will be required to show that such apprenticeship programs have three years of current, successful experience in providing career opportunities.

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

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

### (2) Apprenticeship Program Questionnaire

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

**APPRENTICESHIP PROGRAM QUESTIONNAIRE**

**PROJECT ID: HWMWTCA7E**

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

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

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

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

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

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

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

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

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

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

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

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

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

## SAFETY QUESTIONNAIRE

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

**1. Bidder Information:**

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

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

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

Company has previously worked for DDC            \_\_\_\_\_ YES                            \_\_\_\_\_ NO

**2. Type(s) of Construction Work**

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

**3. Experience Modification Rate:**

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

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

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

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

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

**4. OSHA Information:**

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

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

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

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

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

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

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

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



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

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

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

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

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

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

YES  NO Accident on previous DDC Project(s).

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

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

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

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

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

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

(NO TEXT ON THIS PAGE)

## Pre-Award Process

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

\*\*\*\*\*

- (A) **Project Reference Form:** If required, the bidder must complete and submit the Project Reference Form set forth on pages 26 through 28 of this Bid Booklet. The Project Reference Form consists of 3 parts: (1) Similar Contracts Completed by the Bidder, (2) Contracts Currently Under Construction by the Bidder, and (3) Pending Contracts Not Yet Started by the Bidder.
- (B) **Copy of License:** If required, the bidder must submit a copy of the license under which the bidder will be performing the work. Such license must clearly show the following: (1) Name of the Licensee, (2) License Number, and (3) Expiration date of the License. A copy of the license will be required from bidders for the following contracts: Plumbing Work, Electrical Work and Asbestos Abatement.
- (C) **Financial Information:** If required, the bidder must submit the financial information described below:
- (1) **Audited Financial Statements:** Financial statements (Balance Sheet and Income Statement) of the entity submitting the bid, as audited by an independent auditor licensed to practice as a certified public accountant (CPA). Audited financial statements for the three most recent fiscal years must be submitted. Each such financial statement must include the auditor's standard report.

If the bidder does not have audited financial statements, it must submit an affidavit attesting to the fact that the bidder does not have such statements. In addition, the bidder must submit the following documentation covering the three most recent fiscal years: signed federal tax returns, unaudited financial statements, and a "certified review letter" from a certified public accountant (CPA) verifying the unaudited financial statements.

Unless the most recent audited or unaudited financial statement was issued within ninety (90) days, the bidder must submit interim financial information that includes data on financial position and results of operation (income data) for the current fiscal year. Such information may be summarized on a monthly or quarterly basis or at other intervals.

- (2) **Schedule of Aged Accounts Receivable,** including portion due within ninety (90) days.

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

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

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

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

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

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

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

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

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

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

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

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

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

(NO TEXT ON THIS PAGE)



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

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

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

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

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

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

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

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

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

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

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

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

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

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

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

(NO TEXT ON THIS PAGE)

**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**

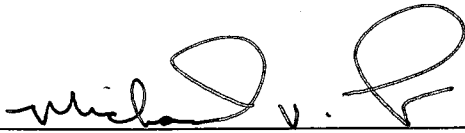
Pursuant to General Municipal Law §103-g, which generally prohibits the City from entering into contracts with persons engaged in investment activities in the energy sector of Iran, the bidder/proposer submits the following certification:

[Please Check One]

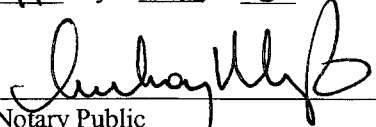
**BIDDER'S CERTIFICATION**

- 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: Mamaroneck, New York  
6/11, 2015

  
\_\_\_\_\_  
SIGNATURE  
  
MICHAEL V. PETRILLO  
\_\_\_\_\_  
PRINTED NAME  
  
PRESIDENT  
\_\_\_\_\_  
TITLE

Sworn to before me this  
11<sup>th</sup> day of JUNE 2015

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

**Anthony Mastrangelo**  
Notary Public, State of New York  
Registration #01MA6038438  
Qualified in Westchester County  
My Commission Expires March 13, 2016

Dated: 6/11/2015

# Certificate of No Change Form



- Please fill in all the fields and DO NOT leave any field blank.  
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, Michael V. Petrillo, 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: MFM Contracting Corp.

Vendor's Address: 335 Center Avenue, Mamaroneck, N.Y. 10543

Vendor's EIN or TIN: 13-4130805 Requesting Agency: NYC DDC

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

Signature date on the last full vendor questionnaire signed by the submitting vendor: 2/24/15

Signature date on changed submission, if applicable, for the submitting vendor: N/A



# 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 Changed Submission (if applicable)
1 Michael V. Petrillo	2/24/15	N/A
2 Felix J. Petrillo	2/24/15	N/A
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:

Michael V. Petrillo  
Name (Print)

President  
Title

MFM Contracting Corp.  
Name of Submitting Entity

Michael V. Petrillo  
Signature

11/23/15  
Date

### Notarized By:

Donna D'Alesandro  
Notary Public

Westchester  
County License Issued

01DA5029895  
License Number

Sworn to before me on: November 23, 2015  
Date







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

## **CONSTRUCTION**

## **EMPLOYMENT**

## **REPORT**

**(NO TEXT ON THIS PAGE)**

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

**CONSTRUCTION EMPLOYMENT REPORT  
 INSTRUCTIONS**

**WHO MUST FILE A CONSTRUCTION EMPLOYMENT REPORT**

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

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

Prime Contractor:

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

Subcontractor:

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

**WHERE TO FILE**

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

**DLS REVIEW PROCESS**

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

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

**Certificate of Approval**

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

**Continued Approval Certificate**

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

**Conditional Certificate of Compliance**

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

**Determination of Nonperformance**

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

## HOW TO COMPLETE THE EMPLOYMENT REPORT

### Contents

**General Information**

**Part I: Contractor/Subcontractor Information**

**Part II: Employment Policies and Practices**

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

**Signature Page**

### **PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION**

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

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

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

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

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

**PART II: EMPLOYMENT POLICIES AND PRACTICES**

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

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

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

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

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

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

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

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

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

1. Number of complaint(s)	2. Nature of the complaint(s)	3. Position(s) of the complainant(s)	4. Was an investigation conducted? Y/N	5. Current status of the disposition
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Question 28: Indicate whether in the past three (3) years complaints have been filed with a court of law or administrative agency, naming your company as a defendant (or respondent) in a complaint alleging violation of any anti-discrimination or affirmative action laws. If yes, develop and submit a log to show, for each administrative/and or judicial action filed, the following information:

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

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

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

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

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

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

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

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

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

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

**SIGNATURE PAGE**

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

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

**CONSTRUCTION EMPLOYMENT REPORT**

**GENERAL INFORMATION**

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

**PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION**

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

13. Number of employees in your company: \_\_\_\_\_

14. Contract information:

(a) \_\_\_\_\_ (b) \_\_\_\_\_  
Contracting Agency (City Agency) Contract Amount

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

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

(g) Description and location of proposed contract:

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

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

If yes, attach a copy of certificate.

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

If yes, attach a copy of certificate.

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

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

Yes\_\_\_ No\_\_\_ If yes,

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

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

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

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

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

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

If yes,



(a) Name and address of OFCCP office.

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

Yes\_\_\_ No\_\_\_

If yes, attach a copy of such certificate.

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

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

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

If yes, attach a copy of such findings.

19. Is your company or its affiliates a member or members of an employers' trade association which is responsible for negotiating collective bargaining agreements (CBA) which affect construction site hiring? Yes\_\_\_ No\_\_\_

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

## PART II: DOCUMENTS REQUIRED

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

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

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

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

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

\_\_\_\_\_

\_\_\_\_\_

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

If yes, is the medical examination given:

- |                                   |                |
|-----------------------------------|----------------|
| (a) Prior to a job offer          | Yes ___ No ___ |
| (b) After a conditional job offer | Yes ___ No ___ |
| (c) After a job offer             | Yes ___ No ___ |
| (d) To all applicants             | Yes ___ No ___ |
| (e) Only to some applicants       | Yes ___ No ___ |

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

\_\_\_\_\_

\_\_\_\_\_

24. Do you have a written equal employment opportunity (EEO) policy? Yes \_\_\_ No \_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

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

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

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

If yes, please attach a copy of this policy.

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

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

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

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

If yes, attach a log. See instructions.

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

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

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

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

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**SIGNATURE PAGE**

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

\_\_\_\_\_  
Contractor's Name

\_\_\_\_\_  
Name of person who prepared this Employment Report Title

\_\_\_\_\_  
Name of official authorized to sign on behalf of the contractor Title

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

\_\_\_\_\_  
Signature of authorized official Date

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

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

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

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

**Only original signatures accepted.**

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

\_\_\_\_\_  
Notary Public Authorized Signature Date

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

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

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

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

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

**OWNERSHIP CODES**

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

**FORM B: PROJECTED WORKFORCE**

**TRADE CLASSIFICATION CODES**

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

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

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

Union Affiliation, if applicable \_\_\_\_\_

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

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

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

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

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

**FORM B: PROJECTED WORKFORCE**

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

Union Affiliation, if applicable \_\_\_\_\_

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

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

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

**MALES**

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

**FEMALES**

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

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

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**FORM C: CURRENT WORKFORCE**

**TRADE CLASSIFICATION CODES**

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

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

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

Total (Col. #1-10):

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

Total Female  
(Col. #6 - 10):

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



**FORM C: CURRENT WORKFORCE**

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

Union Affiliation, if applicable \_\_\_\_\_

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

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

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

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

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

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(NO TEXT ON THIS PAGE)

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

**CONSTRUCTION EMPLOYMENT REPORT**

**GENERAL INFORMATION**

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

**PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION**

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

13. Number of employees in your company: \_\_\_\_\_

14. Contract information:

(a) \_\_\_\_\_ (b) \_\_\_\_\_  
Contracting Agency (City Agency) Contract Amount

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

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

(g) Description and location of proposed contract:

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

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

If yes, attach a copy of certificate.

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

If yes, attach a copy of certificate.

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

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

Yes\_\_\_ No\_\_\_ If yes,

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

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

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

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

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

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

If yes,

(a) Name and address of OFCCP office.

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

Yes\_\_\_ No\_\_\_

If yes, attach a copy of such certificate.

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

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

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

If yes, attach a copy of such findings.

19. Is your company or its affiliates a member or members of an employers' trade association which is responsible for negotiating collective bargaining agreements (CBA) which affect construction site hiring? Yes\_\_\_ No\_\_\_

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

## **PART II: DOCUMENTS REQUIRED**

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

\_\_\_ (a) Health benefit coverage/description(s) for all management, nonunion and union employees (whether company or union administered)

\_\_\_ (b) Disability, life, other insurance coverage/description

\_\_\_ (c) Employee Policy/Handbook

\_\_\_ (d) Personnel Policy/Manual

\_\_\_ (e) Supervisor's Policy/Manual

\_\_\_ (f) Pension plan or 401k coverage/description for all management, nonunion and union employees, whether company or union administered

\_\_\_ (g) Collective bargaining agreement(s).

\_\_\_ (h) Employment Application(s)

\_\_\_ (i) Employee evaluation policy/form(s).

\_\_\_ (j) Does your firm have medical and/or non-medical (i.e. education, military, personal, pregnancy, child care) leave policy?

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

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

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

\_\_\_\_\_

\_\_\_\_\_

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

If yes, is the medical examination given:

- |                                   |              |
|-----------------------------------|--------------|
| (a) Prior to a job offer          | Yes___ No___ |
| (b) After a conditional job offer | Yes___ No___ |
| (c) After a job offer             | Yes___ No___ |
| (d) To all applicants             | Yes___ No___ |
| (e) Only to some applicants       | Yes___ No___ |

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

\_\_\_\_\_

\_\_\_\_\_

24. Do you have a written equal employment opportunity (EEO) policy? Yes\_\_\_ No\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

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

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

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

If yes, please attach a copy of this policy.

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

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

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

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

If yes, attach a log. See instructions.

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

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

---

---

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

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

---

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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



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

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

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

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

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

**OWNERSHIP CODES**

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

**FORM B: PROJECTED WORKFORCE**

**TRADE CLASSIFICATION CODES**

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

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

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

Total (Col. #1-10):

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

Total Female (Col. #6 - 10):

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

---



---

**FORM B: PROJECTED WORKFORCE**

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

Union Affiliation, if applicable \_\_\_\_\_

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

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

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

**MALES**

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

**FEMALES**

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

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

---



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**FORM C: CURRENT WORKFORCE**

**TRADE CLASSIFICATION CODES**

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

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

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

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

---



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**FORM C: CURRENT WORKFORCE**

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

Union Affiliation, if applicable \_\_\_\_\_

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

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

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

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

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

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(NO TEXT ON THIS PAGE)

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

Date \_\_\_\_\_

File Number \_\_\_\_\_

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

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

MBE Yes \_\_\_ No \_\_\_      WBE Yes \_\_\_ No \_\_\_      LBE Yes \_\_\_ No \_\_\_

DBE Yes \_\_\_ No \_\_\_      EBE Yes \_\_\_ No \_\_\_

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

\_\_\_\_\_

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

\_\_\_ Minority Owned Business Enterprise

\_\_\_ Locally based Business Enterprise

\_\_\_ Women Owned Business Enterprise

\_\_\_ Emerging Business Enterprise

\_\_\_ Disadvantaged Business Enterprise

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Employer Identification Number or Federal Tax I.D

\_\_\_\_\_  
Company Address and Zip Code

\_\_\_\_\_  
Contact Person (First Name, Last Name)

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

\_\_\_\_\_  
Fax Number

\_\_\_\_\_  
E-mail Address

Description and location of proposed subcontract: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

Are you a Veteran owned company? Yes \_\_\_ No \_\_\_

\_\_\_\_\_  
Procurement Identification Number (PIN)  
(City contracts only)

\_\_\_\_\_  
Contract Registration Number (CT#)  
(City contracts only)

Block and Lot Number  
(ICIP projects only)

Contract Amount

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

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

Signature of authorized official

Date

**Only original signatures accepted.**

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

Notary Public	Authorized Signature	Date
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NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION

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**INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

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**VOLUME 1 OF 3**

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

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

---

*Contractor.*

---

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

---



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

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

**VOLUME 2 OF 3**

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

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

**PROJECT ID: HWMWTCA7E**

**RECONSTRUCTION OF WORTH STREET**

**FROM HUDSON STREET TO PARK ROW**

**INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK**

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

FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY  
*IN-HOUSE DESIGN*

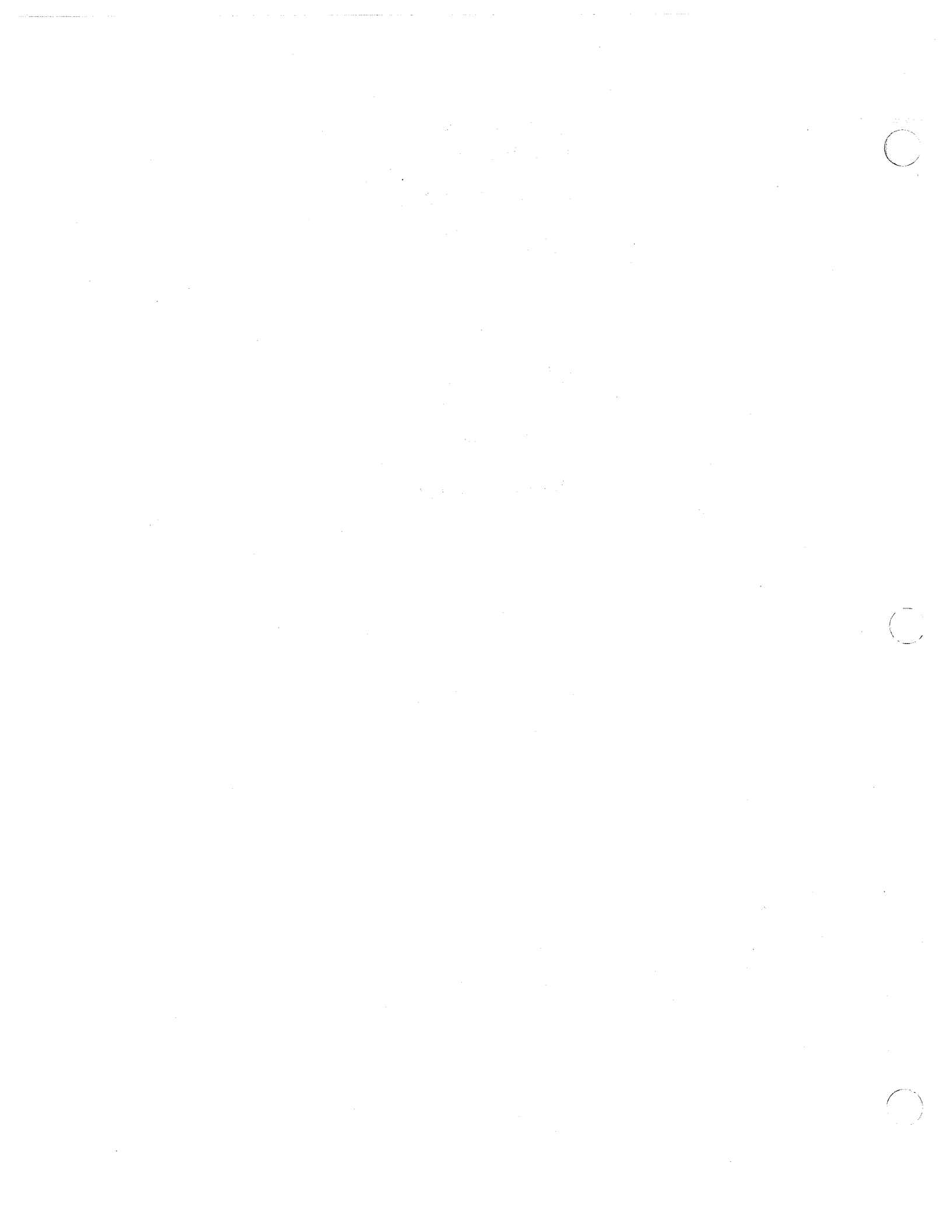
**NOVEMBER 28, 2014**

NYS DOT PIN X759.19.321  
Fed. Aid Project No. \_\_\_\_\_

Bid Opening 11:00 A.M. on  
Location 1st Floor Bid Room, 30-30 Thomson Ave., Long Island City, N.Y. 11101



**15-086**





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

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

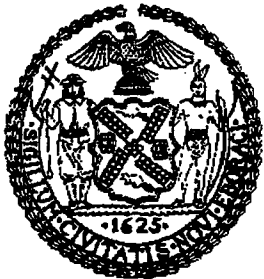
**VOLUME 2 OF 3**

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

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED  
FOR:

FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY  
*IN-HOUSE DESIGN*

**DECEMBER 24, 2013**





# NOTICE TO BIDDERS

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

**Significant changes include the following:**

## **ARTICLE 11      DAMAGES CAUSED BY DELAYS**

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

## **ARTICLE 22      INSURANCE**

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

**ARTICLE 26            EXTRA WORK**

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

**ARTICLE 37            LABOR LAW REQUIREMENTS**  
**ARTICLE 38            PAYROLL REPORTS**

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

**ARTICLE 70            ELECTRONIC FILING**

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

**Other significant changes include the following:**

**ARTICLE 7            INDEMNIFICATION**

Changes have been made to the indemnification provisions.

**ARTICLE 14            FINAL ACCEPTANCE OF WORK**  
**ARTICLE 44            SUBSTANTIAL COMPLETION PAYMENT**

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

**ARTICLE 15            LIQUIDATED DAMAGES**

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



**ARTICLE 17            SUBCONTRACTS**

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

**ARTICLE 19            SECURITY DEPOSIT**

The provisions governing the return of bid deposits are clarified.

**ARTICLE 20            PAYMENT GUARANTEE**

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

**ARTICLE 28            RECORDKEEPING FOR EXTRA OR DISPUTED WORK**

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

**ARTICLE 35            EMPLOYEES**

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

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

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

**ARTICLE 42            PARTIAL PAYMENTS**

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

**ARTICLE 62            TAX EXEMPTION**

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

(NO TEXT ON THIS PAGE)

**CITY OF NEW YORK**

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

**INFORMATION FOR BIDDERS**

**SEPTEMBER 2008**

(NO TEXT ON THIS PAGE)

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

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## INFORMATION FOR BIDDERS

### 1. Description and Location of Work

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

### 2. Time and Place for Receipt of Bids

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

### 3. Definitions

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

### 4. Invitation For Bids and Contract Documents

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

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

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

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

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

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

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

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

5. Pre-Bid Conference

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

6. Agency Contact

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

7. Bidder's Oath

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

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

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

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

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



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

9. Examination of Proposed Contract

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

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

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

10. Form of Bid

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

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

11. Irrevocability of Bid

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

12. Acknowledgment of Amendments

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

13. Bid Samples and Descriptive Literature

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

14. Proprietary Information/Trade Secrets

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

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

15. Pre-Opening Modification or Withdrawal of Bids

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

16. Bid Evaluation and Award

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

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

17. Late Bids, Late Withdrawals and Late Modifications

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

18. Withdrawal of Bids.

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

19. Mistake in Bids

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

(B) Mistakes Discovered Before Award

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

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

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

therein is strictly prohibited.

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

20. Low Tie Bids

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

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

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

21. Rejection of Bids

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

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

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

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

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

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

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

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

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

23. Affirmative Action and Equal Employment Opportunity

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

24. VENDEX Questionnaires

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

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

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

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

25. Complaints About the Bid Process

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

26. Bid, Performance and Payment Security

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

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

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

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

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

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

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

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

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

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

27. Failure to Execute Contract

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

28. Bidder Responsibilities and Qualifications

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

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

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

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

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

29. Employment Report

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

30. Labor Law Requirements

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

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

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

31. Insurance

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

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



32. Lump Sum Contracts

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

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

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

33. Unit Price Contracts

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

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

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

34. Excise Tax

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

35. Licenses and Permits

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

36. Multiple Prime Contractors

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

37. Locally Based Enterprise Requirements (LBE)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### 38. Bid Submission Requirements

The 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.....**

## I. POLICY ON SITE SAFETY

The City of New York Department of Design and Construction (DDC) is committed to a policy of injury and illness prevention and risk management for construction work that will ensure the safety and health of the workers engaged in the projects and the protection of the general public. Therefore, it is DDC's policy that work carried out by Contractors on DDC jobsites must, at a minimum, comply with applicable federal, state and city laws, rules and regulations, including without limitation:

- ❑ U. S. Department of Labor 29 Code of Federal Regulations (CFR) Part 1926 and applicable Sub-parts of Part 1910 – U.S. Occupational Safety and Health Administration (OSHA) including, but not limited to “Respiratory Protection” (29 CFR 1910.134), “Permit-Required Confined Spaces” (29 CFR 1910.146), and “Hazard Communication” (29 CFR 1910.1200);
- ❑ New York State Department of Labor Industrial Code Rule 23 – Protection in Construction, Demolition and Excavation;
- ❑ New York City Construction Codes, Title 28
- ❑ NYC Department of Transportation Title 34 Chapter 2 – Highway Rules
- ❑ New York State Department of Labor Industrial Code Rule 753
- ❑ NYC Local Law No. 113 (2005) Noise Control Code

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

## II. PURPOSE

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

## III. DEFINITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### **IV. RESPONSIBILITIES**

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

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

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

##### **B. Contractors**

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



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- Conduct and document site-specific safety orientation for Contractor personnel to review the hazards associated with the project as identified in the Site Safety Plan and the specific safety procedures and controls that will be used to protect workers, the general public and property. The Job Site Safety Coordinator will conduct this training prior to mobilization and provide documentation to the RE/CPM/CM.
- Provide, replace and adequately maintain at or around the project site, suitable and sufficient signage, lights, barricades and enclosures (fences, sidewalk sheds, netting, bracing, etc.).
- Report unsafe conditions or hazards to the DDC RE/CPM/CM as soon as practical, but no more than 24 hours after discovery, and take action to remove or abate such conditions.
- Report any accident involving injuries to workers or the general public, as well as property damage, to the DDC RE/CPM/CM within two (2) hours.
- Notify the DDC RE/CPM/CM within two (2) hours of the start of an inspection by any regulatory agency personnel, including OSHA.
- Maintain all records pertaining to all required compliance documents and accident and injury reports.
- Respond to DDC recommendations on safety, which shall in no way relieve the Contractor of its responsibilities for safety on the project. The Contractor has sole responsibility for safety.

#### V. SAFETY QUESTIONNAIRE

DDC requires that all Contractors provide information regarding their current and past safety and environmental performance and programs. This will be accomplished by the use of the DDC Safety Questionnaire. As a part of the bid submittal package, the contractor must submit a completed DDC Safety Questionnaire listing their workers' compensation experience modification rating and OSHA Incidence Rates for the three (3) years prior to the date of the bid opening. DDC may request a Contractor to update its Questionnaire at any time or to provide more detailed information. The Contractor must provide the requested update within 30 days.

The following criteria will be used by DDC in reviewing the Contractor's responsibility, which will be based on the information provided on the questionnaire:

- Criteria 1: OSHA Injury and Illness Rates (I&IR) are no greater than the average for the industry (based on the most current Bureau of Labor Statistics data for the Contractors SIC code); and
- Criteria 2: Insurance workers compensation Experience Modification Rate (EMR) equal to or less than 1.0; and
- Criteria 3: Any willful violations issued by OSHA or NYC DOB within the last three years; and
- Criteria 4: A fatality (worker or member of public) experienced on or near Contractor's worksite within the last three (3) years; and
- Criteria 5: An unacceptable rating by QACS based on past performance on DDC projects; and
- Criteria 6: Contractor has in place an acceptable corporate safety program and its employees shall have completed all documented relative safety training; and
- Criteria 7: Contractor shall provide OSHA Injury Records (currently OSHA 300 Log) for the last three (3) years.

If the Contractor fails to meet the basic criteria listed above, the Construction Safety Unit may request, through the ACCO, more detail concerning the Contractor's safety experience. DDC may request the Contractor to provide copies of, among other things, OSHA records, OSHA and DOB citations, EPA citations and written Safety Programs.

## VI. SAFETY PROGRAM AND SITE SAFETY PLAN

Within fifteen (15) days of issuance of the Notice to Proceed, or as otherwise directed, the Contractor shall submit the following: (1) Safety Program, and (2) Site Safety Plan. The Safety Program shall set forth the Contractor's overall safety policy, regulatory compliance plan and minimum safety standard, and the Site Safety Plan shall identify hazards associated with the project, and include specific safety precautions and training appropriate and necessary to complete the work. The Safety Program and the Site Safety Plan are subject to review and acceptance by the Construction Safety Unit prior to the commencement of work at the site. Failure by the contractor to submit an acceptable Site Safety Plan and Safety Program shall be grounds for default.

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

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

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

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

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

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

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

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

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

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

As part of the construction kick-off meeting, a Site Safety Plan review will be part of the agenda. A QACS representative will participate in this meeting with the contractor prior to the start of the project for the purpose of:

- A. Reviewing the safety issues detailed in the contract.
- B. Reviewing the Site Safety Plan.
- C. Reviewing any new issues or information that was not previously addressed.
- D. Discussing planned inspections and audits of the site by DDC personnel.

#### **VIII. EVALUATION DURING WORK IN PROGRESS**

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

- A. Use of a safety checklist by a representative of the Construction Safety Unit or other designated DDC representative or Consultant during regular, unannounced inspections of the job site. Field Exit Conferences will be held with the RE/CPM, Contractor Superintendents or Safety Representatives.
- B. The RE/CPM will continually monitor the safety and environmental performance of the contractor's employees and work methods. Deficiencies shall be brought to the attention of the contractor's representative on site for immediate correction. The DDC representative will maintain a written record of these deficiencies and forward them to the Construction Safety Unit on a weekly basis. Any critical deficiencies shall be immediately reported to QACS phone# (718) 391-1624 or (718) 391-1911.
- C. If the Contractor's safety performance during the project is not up to DDC standards (safety performance measure, accident/incident rate, etc.) the Director- QACS, or designee will meet with the Contractor's safety representative, the DDC project manager, the RE/CPM, or the DDC Environmental Specialist (if environmental issues are involved ). The purpose of this meeting is to 1) determine the level of non-compliance; 2) explain and clarify the safety/environmental provisions; 3) agree on a future course of action to correct the deficiencies.

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- 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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<b>PERFORMANCE BOND #1</b>		<b>92</b>
<b>PERFORMANCE BOND #2</b>		<b>96</b>
<b>PAYMENT BOND</b>		<b>100</b>

**WITNESSETH:**

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

**CHAPTER I  
THE CONTRACT AND DEFINITIONS**

**ARTICLE 1. THE CONTRACT**

1.1 Except for titles, subtitles, headings, running headlines, tables of contents and indices (all of which are printed herein merely for convenience), the following, except for such portions thereof as may be specifically excluded, shall be deemed to be part of this Contract:

1.1.1 All provisions required by law to be inserted in this Contract, whether actually inserted or not;

1.1.2 The Contract Drawings and Specifications;

1.1.3 The General Conditions and Special Conditions, if any;

1.1.4 The Contract;

1.1.5 The Information for Bidders; Request for Proposals; Notice of Solicitation and Proposal For Bids; Bid or Proposal, and, if used, the Bid Booklet;

1.1.6 All Addenda issued prior to the receipt of the bids; the Notice of Award; Performance and Payment Bonds, if required; and the Notice to Proceed or the Order to Work.

1.2 Should any conflict occur in or between the Drawings and Specifications, the Contractor shall be deemed to have estimated the most expensive way of doing the Work, unless the Contractor shall have asked for and obtained a decision in writing from the Commissioner of the Agency that is entering into this Contract, before the submission of its bid, as to what shall govern.

**ARTICLE 2. DEFINITIONS**

2.1 The following words and expressions, or pronouns used in their stead, shall, wherever they appear in this Contract, be construed as follows, unless a different meaning is clear from the context:

2.1.1 "**Addendum**" or "**Addenda**" shall mean the additional Contract provisions and/or technical clarifications issued in writing by the Commissioner prior to the receipt of bids.

2.1.2 "**Agency**" shall mean a city, county, borough or other office, position, department, division, bureau, board or commission, or a corporation, institution or agency of government, the expenses of which are paid in whole or in part from the City treasury.

2.1.3 "**Agency Chief Contracting Officer**" (**ACCO**) shall mean a person delegated authority by the Commissioner to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the CCPO, or his/her duly authorized representative.

2.1.4 **"Allowance"** shall mean a sum of money which the Agency may include in the total amount of the Contract for such specific contingencies as the Agency believes may be necessary to complete the Work, e.g., lead or asbestos remediation, and for which the Contractor will be paid on the basis of stipulated unit prices or a formula set forth in the Contract or negotiated between the parties provided, however, that if the Contractor is not directed to use the Allowance, the Contractor shall have no right to such money and it shall be deducted from the total amount of the Contract.

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

2.1.6 **"City Chief Procurement Officer" (CCPO)** shall mean a person delegated authority by the Mayor to coordinate and oversee the procurement activity of Mayoral agency staff, including the ACCO and any offices which have oversight responsibility for the procurement of construction, or his/her duly authorized representative.

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

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

2.1.9 **"Contract"** or **"Contract Documents"** shall mean each of the various parts of the contract referred to in Article 1 hereof, both as a whole and severally.

2.1.10 **"Contract Drawings"** shall mean only those drawings specifically entitled as such and listed in the Specifications or in any Addendum, or any drawings furnished by the Commissioner, pertaining or supplemental thereto.

2.1.11 **"Contract Work"** shall mean everything required to be furnished and done by the Contractor by any one or more of the parts of the Contract referred to in Article 1, except Extra Work as hereinafter defined.

2.1.12 **"Contractor"** shall mean the entity which executed this Contract, whether a corporation, firm, partnership, joint venture, individual, or any combination thereof, and its, their, his/her successors, personal representatives, executors, administrators, and assigns, and any person, firm, partnership, joint venture, individual, or corporation which shall at any time be substituted in the place of the Contractor under this Contract.

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

2.1.14 **"Engineer"** or **"Architect"** or **"Project Manager"** shall mean the person so designated in writing by the Commissioner in the Notice to Proceed or the Order to Work to act as such in relation to this Contract, including a private Architect or Engineer or Project Manager, as the case may be. Subject to written approval by the Commissioner, the Engineer, Architect or Project Manager may designate an authorized representative.

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

2.1.16 **"Extra Work"** shall mean Work other than that required by the Contract at the time of award which is authorized by the Commissioner pursuant to Chapter VI of this Contract.

2.1.17 **"Federal-Aid Contract"** shall mean a contract in which the United States (federal) Government provides financial funding as so designated in the Information for Bidders.

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

2.1.19 **"Final Approved Punch List"** shall mean a list, approved pursuant to Article 14.2.2, specifying those items of Work to be completed by the Contractor after Substantial Completion and dates for the completion of each item of Work.

2.1.20 **"Law"** or **"Laws"** shall mean the Constitution of the State of New York, the New York City Charter, the New York City Administrative Code, a statute of the United States or of the State of New York, a local law of the City of New York, any ordinance, rule or regulation having the force of law, or common law.

2.1.21 **"Materialman"** shall mean any corporation, firm, partnership, joint venture, or individual, other than employees of the Contractor, who or which contracts with the Contractor or any Subcontractor, to fabricate or deliver, or who actually fabricates or delivers, plant, materials or equipment to be incorporated in the Work.

2.1.22 **"Means and Methods of Construction"** shall mean the labor, materials, temporary structures, tools, plant, and construction equipment, and the manner and time of their use, necessary to accomplish the result intended by this Contract.

2.1.23 **"Notice to Proceed"** or **"Order to Work"** shall mean the written notice issued by the Commissioner specifying the time for commencement of the Work and the Engineer, Architect or Project Manager.

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

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

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

2.1.27 **"Procurement Policy Board" (PPB)** shall mean the Agency of the City of New York whose function is to establish comprehensive and consistent procurement policies and rules which shall have broad application throughout the City.

2.1.28 **"Required Quantity"** in a unit price Contract shall mean the actual quantity of any item of Work or materials which is required to be performed or furnished in order to comply with the Contract.

2.1.29 **"Resident Engineer"** shall mean the representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the Work.

2.1.30 **"Site"** shall mean the area upon or in which the Contractor's operations are carried on, and such other areas adjacent thereto as may be designated as such by the Engineer.

2.1.31 **"Small Tools"** shall mean items that are ordinarily required for a worker's job function, including but not limited to, equipment that ordinarily has no licensing, insurance

or substantive storage costs associated with it; such as circular and chain saws, impact drills, threaders, benders, wrenches, socket tools, etc.

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

2.1.33 "**Subcontractor**" shall mean any person, firm or corporation, other than employees of the Contractor, who or which contracts with the Contractor or with its subcontractors to furnish, or actually furnishes labor, or labor and materials, or labor and equipment, or superintendence, supervision and/or management at the Site. Wherever the word Subcontractor appears, it shall also mean sub-Subcontractor.

2.1.34 "**Substantial Completion**" shall mean the written determination by the Engineer that the Work required under this Contract is substantially, but not entirely, complete and the approval of the **Final Approved Punch List**.

2.1.35 "**Work**" shall mean all services required to complete the Project in accordance with the Contract Documents, including without limitation, labor, material, superintendence, management, administration, equipment, and incidentals, and obtaining any and all permits, certifications and licenses as may be necessary and required to complete the Work, and shall include both Contract Work and Extra Work.

## CHAPTER II THE WORK AND ITS PERFORMANCE

### ARTICLE 3. CHARACTER OF THE WORK

3.1 Unless otherwise expressly provided in the **Contract Drawings, Specifications, and Addenda**, the **Work** shall be performed in accordance with the best modern practice, utilizing, unless otherwise specified in writing, new and unused materials of standard first grade quality and workmanship and design of the highest quality, to the satisfaction of the **Commissioner**.

### ARTICLE 4. MEANS AND METHODS OF CONSTRUCTION

4.1 Unless otherwise expressly provided in the **Contract Drawings, Specifications, and Addenda**, the **Means and Methods of Construction** shall be such as the **Contractor** may choose; subject, however, to the **Engineer's** right to reject the **Means and Methods of Construction** proposed by the **Contractor** which in the opinion of the **Engineer**:

4.1.1 Will constitute or create a hazard to the **Work**, or to persons or property; or

4.1.2 Will not produce finished **Work** in accordance with the terms of the **Contract**; or

4.1.3 Will be detrimental to the overall progress of the **Project**.

4.2 The **Engineer's** approval of the **Contractor's Means and Methods of Construction**, or his/her failure to exercise his/her right to reject such means or methods, shall not relieve the **Contractor** of its obligation to complete the **Work** as provided in this **Contract**; nor shall the exercise of such right to reject create a cause of action for damages.



## ARTICLE 5. COMPLIANCE WITH LAWS

5.1 The **Contractor** shall comply with all **Laws** applicable to this **Contract** and to the **Work** to be done hereunder.

5.2 Procurement Policy Board Rules: This **Contract** is subject to the Rules of the **PPB** ("**PPB Rules**") in effect at the time of the bid opening for this **Contract**. In the event of a conflict between the **PPB Rules** and a provision of this **Contract**, the **PPB Rules** shall take precedence.

5.3 Noise Control Code provisions.

5.3.1 In accordance with the provisions of Section 24-216(b) of the Administrative Code of the **City** ("**Administrative Code**"), Noise Abatement Contract Compliance, devices and activities which will be operated, conducted, constructed or manufactured pursuant to this **Contract** and which are subject to the provisions of the **City** Noise Control Code shall be operated, conducted, constructed, or manufactured without causing a violation of the Administrative Code. Such devices and activities shall incorporate advances in the art of noise control development for the kind and level of noise emitted or produced by such devices and activities, in accordance with regulations issued by the **Commissioner** of the **City** Department of Environmental Protection.

5.3.2 The **Contractor** agrees to comply with Section 24-219 of the Administrative Code and implementing rules codified at 15 Rules of the City of New York ("**RCNY**") Section 28-100 *et seq.* In accordance with such provisions, the **Contractor**, if the **Contractor** is the responsible party under such regulations, shall prepare and post a Construction Noise Mitigation Plan at each **Site**, in which the **Contractor** shall certify that all construction tools and equipment have been maintained so that they operate at normal manufacturers operating specifications. If the **Contractor** cannot make this certification, it must have in place an Alternative Noise Mitigation Plan approved by the **City** Department of Environmental Protection. In addition, the **Contractor's** certified Construction Noise Mitigation Plan is subject inspection by the **City** Department of Environmental Protection in accordance with Section 28-101 of Title 15 of RCNY. No **Contract Work** may take place at a **Site** unless there is a Construction Noise Mitigation Plan or approved Alternative Noise Mitigation Plan in place. In addition, the **Contractor** shall create and implement a noise mitigation training program. Failure to comply with these requirements may result in fines and other penalties pursuant to the applicable provisions of the Administrative Code and RCNY.

5.4 Ultra Low Sulfur Diesel Fuel: In accordance with the provisions of Section 24-163.3 of the Administrative Code, the **Contractor** specifically agrees as follows:

5.4.1 Definitions. For purposes of this Article 5.4, the following definitions apply:

5.4.1(a) "**Contractor**" means any person or entity that enters into a Public Works Contract with a **City Agency**, or any person or entity that enters into an agreement with such person or entity, to perform work or provide labor or services related to such Public Works Contract.

5.4.1(b) "**Motor Vehicle**" means any self-propelled vehicle designed for transporting persons or property on a street or highway.

5.4.1(c) "**Nonroad Engine**" means an internal combustion engine (including the fuel system) that is not used in a **Motor Vehicle** or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 or Section 7521 of

Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.

5.4.1(d) "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower and greater, and that is not a Motor Vehicle or a vehicle used solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except that this term shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) horsepower or less and that are not used in any construction program or project.

5.4.1(e) "Public Works Contract" means a contract with a **City Agency** for a construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; a contract with a **City Agency** for the preparation for any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; or a contract with a **City Agency** for any final work involved in the completion of any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge.

5.4.1(f) "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million (15 ppm).

#### 5.4.2 Ultra Low Sulfur Diesel Fuel

5.4.2(a) All **Contractors** shall use Ultra Low Sulfur Diesel Fuel in diesel-powered Nonroad Vehicles in the performance of this **Contract**.

5.4.2(b) Notwithstanding the requirements of Article 5.4.2(a), **Contractors** may use diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) to fulfill the requirements of this Article 5.4.2, where the Commissioner of the **City** Department of Environmental Protection ("DEP Commissioner") has issued a determination that a sufficient quantity of Ultra Low Sulfur Diesel Fuel is not available to meet the needs of **Agencies** and **Contractors**. Any such determination shall expire after six (6) months unless renewed.

5.4.2(c) **Contractors** shall not be required to comply with this Article 5.4.2 where the **City Agency** letting this **Contract** makes a written finding, which is approved, in writing, by the DEP Commissioner, that a sufficient quantity of Ultra Low Sulfur Diesel Fuel, or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) is not available to meet the requirements of Section 24-163.3 of the Administrative Code, provided that such **Contractor** in its fulfillment of the requirements of this **Contract**, to the extent practicable, shall use whatever quantity of Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) is available. Any finding made pursuant to this Article 5.4.2(c) shall expire after sixty (60) **Days**, at which time the requirements of this Article 5.4.2 shall be in full force and effect unless the **City Agency** renews the finding in writing and such renewal is approved by the DEP Commissioner.

5.4.2(d) **Contractors** may check on determinations and approvals issued by the DEP Commissioner pursuant to Section 24-163.3 of the Administrative Code, if any, at [www.dep.nyc.gov](http://www.dep.nyc.gov) or by contacting the **City Agency** letting this **Contract**.

5.4.2(e) The requirements of this Article 5.4.2 do not apply where they are precluded by federal or State funding requirements or where the **Contract** is an emergency procurement.

#### 5.4.3 Best Available Technology

5.4.3(a) All **Contractors** shall utilize the best available technology for reducing the emission of pollutants for diesel-powered Nonroad Vehicles in the performance of this **Contract**. For determinations of best available technology for each type of diesel-powered Nonroad Vehicle, **Contractors** shall comply with the regulations of the **City Department of Environmental Protection**, as and when adopted, Chapter 14 of Title 15 of the Rules of the City of New York (RCNY). The **Contractor** shall fully document all steps in the best available technology selection process and shall furnish such documentation to the **City Agency** or the DEP Commissioner upon request. The **Contractor** shall retain all documentation generated in the best available technology selection process for as long as the selected best available technology is in use.

5.4.3(b) No **Contractor** shall be required to replace best available technology for reducing the emission of pollutants or other authorized technology utilized for a diesel-powered Nonroad Vehicle in accordance with the provisions of this Article 5.4.3 within three (3) years of having first utilized such technology for such vehicle.

5.4.3(c) This Article 5.4.3 shall not apply to any vehicle used to satisfy the requirements of a specific Public Works Contract for fewer than twenty (20) **Days**.

5.4.3(d) The **Contractor** shall not be required to comply with this Article 5.4.3 with respect to a diesel-powered Nonroad Vehicle under the following circumstances:

5.4.3(d)(i) Where the **City Agency** makes a written finding, which is approved, in writing, by the DEP Commissioner, that the best available technology for reducing the emission of pollutants as required by this Article 5.4.3 is unavailable for such vehicle, the **Contractor** shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle.

5.4.3(d)(ii) Where the DEP Commissioner has issued a written waiver based upon the **Contractor** having demonstrated to the DEP Commissioner that the use of the best available technology for reducing the emission of pollutants might endanger the operator of such vehicle or those working near such vehicle, due to engine malfunction, the **Contractor** shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle, which would not endanger the operator of such vehicle or those working near such vehicle.

5.4.3(d)(iii) In determining which technology to use for the purposes of Articles 5.4.3(d)(i) and 5.4.3(d)(ii) above, the **Contractor** shall primarily consider the reduction in emissions of particulate matter and secondarily consider the reduction in emissions of nitrogen oxides associated with the use of such

technology, which shall in no event result in an increase in the emissions of either such pollutant.

5.4.3(d)(iv) The **Contractor** shall submit requests for a finding or a waiver pursuant to this Article 5.4.3(d) in writing to the DEP Commissioner, with a copy to the **ACCO** of the **City Agency** letting this **Contract**. Any finding or waiver made or issued pursuant to Articles 5.4.3(d)(i) and 5.4.3(d)(ii) above shall expire after one hundred eighty (180) **Days**, at which time the requirements of Article 5.4.3(a) shall be in full force and effect unless the **City Agency** renews the finding, in writing, and the DEP Commissioner approves such finding, in writing, or the DEP Commissioner renews the waiver, in writing.

5.4.3(e) The requirements of this Article 5.4.3 do not apply where they are precluded by federal or State funding requirements or where the **Contract** is an emergency procurement.

5.4.4 Section 24-163 of the Administrative Code. The **Contractor** shall comply with Section 24-163 of the Administrative Code related to the idling of the engines of motor vehicles while parking.

#### 5.4.5 Compliance

5.4.5(a) The **Contractor's** compliance with Article 5.4 may be independently monitored. If it is determined that the **Contractor** has failed to comply with any provision of Article 5.4, any costs associated with any independent monitoring incurred by the **City** shall be reimbursed by the **Contractor**.

5.4.5(b) Any **Contractor** who violates any provision of Article 5.4, except as provided in Article 5.4.5(c) below, shall be liable for a civil penalty between the amounts of one thousand (\$1,000) and ten thousand (\$10,000) dollars, in addition to twice the amount of money saved by such **Contractor** for failure to comply with Article 5.4.

5.4.5(c) No **Contractor** shall make a false claim with respect to the provisions of Article 5.4 to a **City Agency**. Where a **Contractor** has been found to have done so, such **Contractor** shall be liable for a civil penalty of twenty thousand (\$20,000) dollars, in addition to twice the amount of money saved by such **Contractor** in association with having made such false claim.

#### 5.4.6 Reporting

5.4.6(a) For all Public Works Contracts covered by this Article 5.4, the **Contractor** shall report to the **City Agency** the following information:

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

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

5.4.6(a)(iii) The number of such Nonroad Vehicles that utilized the best available technology for reducing the emission of pollutants, including a breakdown by vehicle model and the type of technology;

5.4.6(a)(iv) The number of such Nonroad Vehicles that utilized such other authorized technology in accordance with Article 5.4.3, including a breakdown by vehicle model and the type of technology used for each such vehicle;

5.4.6(a)(v) The locations where such Nonroad Vehicles were used; and

5.4.6(a)(vi) Where a determination is in effect pursuant to Article 5.4.2(b) or 5.4.2(c), detailed information concerning the **Contractor's** efforts to obtain Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm).

5.4.6(b) The **Contractor** shall submit the information required by Article 5.4.6(a) at the completion of **Work** under the Public Works Contract and on a yearly basis no later than August 1 throughout the term of the Public Works Contract. The yearly report shall cover **Work** performed during the preceding fiscal year (July 1 - June 30).

5.5 Ultra Low Sulfur Diesel Fuel. In accordance with the Coordinated Construction Act for Lower Manhattan, as amended:

5.5.1 Definitions. For purposes of this Article 5.5, the following definitions apply:

5.5.1(a) "Lower Manhattan" means the area to the south of and within the following lines: a line beginning at a point where the United States pierhead line in the Hudson River as it exists now or may be extended would intersect with the southerly line of West Houston Street in the Borough of Manhattan extended, thence easterly along the southerly side of West Houston Street to the southerly side of Houston Street, thence easterly along the southerly side of Houston Street to the southerly side of East Houston Street, thence northeasterly along the southerly side of East Houston Street to the point where it would intersect with the United States pierhead line in the East River as it exists now or may be extended, including tax lots within or immediately adjacent thereto.

5.5.1(b) "Lower Manhattan Redevelopment Project" means any project in Lower Manhattan that is funded in whole or in part with federal or State funding, or any project intended to improve transportation between Lower Manhattan and the two air terminals in the **City** known as LaGuardia Airport and John F. Kennedy International Airport, or between Lower Manhattan and the air terminal in Newark known as Newark Liberty International Airport, and that is funded in whole or in part with federal funding.

5.5.1(c) "Nonroad Engine" means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.

5.5.1(d) "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower (HP) and greater, and that is not a Motor Vehicle or a vehicle used solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except

that this terms shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) HP or less and that are not used in any construction program or project.

5.5.1(e) "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million (15 ppm).

5.5.2 Requirements. **Contractors** and **Subcontractors** are required to use only Ultra Low Sulfur Diesel Fuel to power the diesel-powered Nonroad Vehicles with engine HP rating of fifty (50) HP and above used on a Lower Manhattan Redevelopment Project and, where practicable, to reduce the emission of pollutants by retrofitting such Nonroad Vehicles with oxidation catalysts, particulate filters, or technology that achieves lowest particulate matter emissions.

5.6 Pesticides. In accordance with Section 17-1209 of the Administrative Code, to the extent that the **Contractor** or any **Subcontractor** applies pesticides to any property owned or leased by the **City**, the **Contractor**, and any **Subcontractor** shall comply with Chapter 12 of the Administrative Code.

5.7 Waste Treatment, Storage, and Disposal Facilities and Transporters. In connection with the **Work**, the **Contractor** and any **Subcontractor** shall use only those waste treatment, storage, and disposal facilities and waste transporters that possess the requisite license, permit or other governmental approval necessary to treat, store, dispose, or transport the waste, materials or hazardous substances.

5.8 Environmentally Preferable Purchasing. The **Contractor** shall ensure that products purchased or leased by the **Contractor** or any **Subcontractor** for the **Work** that are not specified by the **City** or are submitted as equivalents to a product specified by the **City** comply with the requirements of the New York City Environmentally Preferable Purchasing Program contained in Chapter 11 of Title 43 of the RCNY, pursuant to Chapter 3 of Title 6 of the Administrative Code.

## ARTICLE 6. INSPECTION

6.1 During the progress of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall at all times afford the representatives of the **City** every reasonable, safe, and proper facility for inspecting all **Work** done or being done at the **Site** and also for inspecting the manufacture or preparation of materials and equipment at the place of such manufacture or preparation.

6.2 The **Contractor's** obligation hereunder shall include the uncovering or taking down of finished **Work** and its restoration thereafter; provided, however, that the order to uncover, take down and restore shall be in writing, and further provided that if **Work** thus exposed proves satisfactory, and if the **Contractor** has complied with Article 6.1, such uncovering or taking down and restoration shall be considered an item of **Extra Work** to be paid for in accordance with the provisions of Article 26. If the **Work** thus exposed proves unsatisfactory, the **City** has no obligation to compensate the **Contractor** for the uncovering, taking down or restoration.

6.3 Inspection and approval by the **Commissioner**, the **Engineer**, **Project Manager**, or **Resident Engineer**, of finished **Work** or of **Work** being performed, or of materials and equipment at the place of manufacture or preparation, shall not relieve the **Contractor** of its obligation to perform the **Work** in strict accordance with the **Contract**. Finished or unfinished **Work** not found to be in strict accordance with the **Contract** shall be replaced as directed by the **Engineer**, even though such **Work** may have been previously approved and paid for. Such corrective **Work** is **Contract Work** and shall not be deemed **Extra Work**.

6.4 Rejected **Work** and materials shall be promptly taken down and removed from the **Site**, which must at all times be kept in a reasonably clean and neat condition.

**ARTICLE 7. PROTECTION OF WORK AND OF PERSONS  
AND PROPERTY; NOTICES AND INDEMNIFICATION**

7.1 During the performance of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall be under an absolute obligation to protect the finished and unfinished **Work** against any damage, loss, injury, theft and/or vandalism and in the event of such damage, loss, injury, theft and/or vandalism, it shall promptly replace and/or repair such **Work** at the **Contractor's** sole cost and expense, as directed by the **Resident Engineer**. The obligation to deliver finished **Work** in strict accordance with the **Contract** prior to **Final Acceptance** shall be absolute and shall not be affected by the **Resident Engineer's** approval of, or failure to prohibit, the **Means and Methods of Construction** used by the **Contractor**.

7.2 During the performance of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall take all reasonable precautions to protect all persons and the property of the **City** and of others from damage, loss or injury resulting from the **Contractor's**, and/or its **Subcontractors'** operations under this **Contract**. The **Contractor's** obligation to protect shall include the duty to provide, place or replace, and adequately maintain at or about the **Site** suitable and sufficient protection such as lights, barricades, and enclosures.

7.3 The **Contractor** shall comply with the notification requirements set forth below in the event of any loss, damage or injury to **Work**, persons or property, or any accidents arising out of the operations of the **Contractor** and/or its **Subcontractors** under this **Contract**.

7.3.1 The **Contractor** shall make a full and complete report in writing to the **Resident Engineer** within three (3) **Days** after the occurrence.

7.3.2 The **Contractor** shall also send written notice of any such event to all insurance carriers that issued potentially responsive policies (including commercial general liability insurance carriers for events relating to the **Contractor's** own employees) no later than twenty (20) days after such event and again no later than twenty (20) days after the initiation of any claim and/or action resulting therefrom. Such notice shall contain the following information: the number of the insurance policy, the name of the Named Insured, the date and location of the incident, and the identity of the persons injured or property damaged. For any policy on which the **City** and/or the **Engineer, Architect, or Project Manager** are Additional Insureds, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Additional Insured, such other Additional Insureds, as well as the Named Insured."

7.3.2(a) Whenever such notice is sent under a policy on which the **City** is an Additional Insured, the **Contractor** shall provide copies of the notice to the **Comptroller, the Commissioner** and the **City Corporation Counsel**. The copy to the **Comptroller** shall be sent to the Insurance Unit, NYC Comptroller's Office, 1 Centre Street – Room 1222, New York, New York, 10007. The copy to the **Commissioner** shall be sent to the address set forth in Schedule A of the General Conditions. The copy to the **City Corporation Counsel** shall be sent to Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.

7.3.2(b) If the **Contractor** fails to provide any of the foregoing notices to any appropriate insurance carrier(s) in a timely and complete manner, the **Contractor** shall indemnify the **City** for all losses, judgments, settlements, and expenses, including reasonable attorneys' fees, arising from an insurer's disclaimer of coverage citing late notice by or on behalf of the **City**.

7.4 To the fullest extent permitted by law, the **Contractor** shall defend, indemnify, and hold the **City**, its employees, and officials (the "Indemnitees") harmless against any and all claims (including but not limited to claims asserted by any employee of the **Contractor** and/or its **Subcontractors**) and costs and expenses of whatever kind (including but not limited to payment or reimbursement of attorneys' fees and disbursements) allegedly arising out of or in any way related to the operations of the **Contractor** and/or its **Subcontractors** in the performance of this **Contract** or from the **Contractor's** and/or its **Subcontractors'** failure to comply with any of the provisions of this **Contract** or of the **Law**. Such costs and expenses shall include all those incurred in defending the underlying claim and those incurred in connection with the enforcement of this Article 7.4 by way of cross-claim, third-party claim, declaratory action or otherwise. The parties expressly agree that the indemnification obligation hereunder contemplates (1) full indemnity in the event of liability imposed against the Indemnitees without negligence and solely by reason of statute, operation of **Law** or otherwise; and (2) partial indemnity in the event of any actual negligence on the part of the Indemnitees either causing or contributing to the underlying claim (in which case, indemnification will be limited to any liability imposed over and above that percentage attributable to actual fault whether by statute, by operation of **Law**, or otherwise). Where partial indemnity is provided hereunder, all costs and expenses shall be indemnified on a pro rata basis.

7.4.1 Indemnification under Article 7.4 or any other provision of the **Contract** shall operate whether or not **Contractor** or its **Subcontractors** have placed and maintained the insurance specified under Article 22.

7.5 The provisions of this Article 7 shall not be deemed to create any new right of action in favor of third parties against the **Contractor** or the **City**.

### CHAPTER III TIME PROVISIONS

#### ARTICLE 8. COMMENCEMENT AND PROSECUTION OF THE WORK

8.1 The **Contractor** shall commence the **Work** on the date specified in the **Notice to Proceed** or the **Order to Work**. The time for performance of the **Work** under the **Contract** shall be computed from the date specified in the **Notice to Proceed** or the **Order to Work**. **TIME BEING OF THE ESSENCE** to the **City**, the **Contractor** shall thereafter prosecute the **Work** diligently, using such **Means and Methods of Construction** as are in accord with Article 4 herein and as will assure its completion not later than the date specified in this Contract, or on the date to which the time for completion may be extended.

#### ARTICLE 9. PROGRESS SCHEDULES

9.1 To enable the **Work** to be performed in an orderly and expeditious manner, the **Contractor**, within fifteen (15) **Days** after the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Engineer**, shall submit to the **Engineer** a proposed progress schedule based on the Critical Path Method in the form of a bar graph or in such other form as specified by the **Engineer**, and monthly cash flow requirements, showing:



9.1.1 The anticipated time of commencement and completion of each of the various operations to be performed under this **Contract**; and

9.1.2 The sequence and interrelation of each of these operations with the others and with those of other related contracts; and

9.1.3 The estimated time required for fabrication or delivery, or both, of all materials and equipment required for the **Work**, including the anticipated time for obtaining required approvals pursuant to Article 10; and

9.1.4 The estimated amount in dollars the **Contractor** will claim on a monthly basis.

9.2 The proposed schedule shall be revised as directed by the **Engineer**, until finally approved by the **Engineer**, and after such approval, subject to the provisions of Article 11, shall be strictly adhered to by the **Contractor**.

9.3 If the **Contractor** shall fail to adhere to the approved progress schedule, or to the schedule as revised pursuant to Article 11, it shall promptly adopt such other or additional **Means and Methods of Construction**, at its sole cost and expense, as will make up for the time lost and will assure completion in accordance with the approved progress schedule. The approval by the **City** of a progress schedule which is shorter than the time allotted under the **Contract** shall not create any liability for the **City** if the approved progress schedule is not met.

9.4 The **Contractor** will not receive any payments until the proposed progress schedule is submitted.

#### **ARTICLE 10. REQUESTS FOR INFORMATION OR APPROVAL**

10.1 From time to time as the **Work** progresses and in the sequence indicated by the approved progress schedule, the **Contractor** shall submit to the **Engineer** a specific request in writing for each item of information or approval required by the **Contractor**. These requests shall state the latest date upon which the information or approval is actually required by the **Contractor**, and shall be submitted in a reasonable time in advance thereof to provide the **Engineer** a sufficient time to act upon such submissions, or any necessary re-submissions thereof.

10.2 The **Contractor** shall not have any right to an extension of time on account of delays due to the **Contractor's** failure to submit requests for the required information or the required approval in accordance with the above requirements.

#### **ARTICLE 11. NOTICE OF CONDITIONS CAUSING DELAY AND DOCUMENTATION OF DAMAGES CAUSED BY DELAY**

11.1 After the commencement of any condition which is causing or may cause a delay in completion of the **Work**, including conditions for which the **Contractor** may be entitled to an extension of time, the following notifications and submittals are required:

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

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

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

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

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

#### 11.4 Compensable Delays

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

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

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

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

11.4.1.4 The issuance by the **Engineer** of a stop work order relative to a substantial portion of the **Work** for a period exceeding thirty (30) **Days**, that was not brought about through any action or omission of the **Contractor**.

11.4.1.5 Differing site conditions that were neither known nor reasonably ascertainable on a pre-bid inspection of the **Site** or review of the bid documents or other publicly available sources, and that are not ordinarily encountered in the **Project's** geographical area or neighborhood or in the type of **Work** to be performed.

11.4.1.6 Delays caused by the **City's** bad faith or its willful, malicious, or grossly negligent conduct;

11.4.1.7 Delays not contemplated by the parties;

11.4.1.8 Delays so unreasonable that they constitute an intentional abandonment of the **Contract** by the **City**; and

11.4.1.9 Delays resulting from the **City's** breach of a fundamental obligation of the **Contract**.

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

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

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

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

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

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

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

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

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

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

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

#### 11.6 Required Content of Submission of Statement of Delay Damages

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

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

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

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

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

#### 11.7 Recoverable Costs

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

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

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

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

11.7.1.4 Insurance and bond costs;

11.7.1.5 Extended field office costs;

11.7.1.6 Extended **Site** overhead; and

11.7.1.7 Extended home office overhead.

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

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

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

11.7.3.1 Profit, or loss of anticipated or unanticipated profit;

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

11.7.3.3 Indirect costs or expenses of any nature;

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

11.7.3.5 Attorneys' fees and dispute and claims preparation expenses.

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

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

## ARTICLE 12. COORDINATION WITH OTHER CONTRACTORS

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

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

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

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

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

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

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

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

### **ARTICLE 13. EXTENSION OF TIME FOR PERFORMANCE**

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

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

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

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

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

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

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

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

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

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

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

13.8 Application for Extension of Time:

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

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

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

13.8.1(c) Original total bid price;

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

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

13.8.1(f) The extension of time requested.

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

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

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

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

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

### 13.9 Analysis and Approval of Time Extensions:

13.9.1 For time extensions for partial payments, a written determination shall be made by the **ACCO** who may, for good and sufficient cause, extend the time for the performance of the **Contract** as follows:

13.9.1(a) If the **Work** is to be completed within six (6) months, the time for performance may be extended for sixty (60) **Days**;

13.9.1(b) If the **Work** is to be completed within less than one (1) year but more than six (6) months, an extension of ninety (90) **Days** may be granted;

13.9.1(c) If the **Contract** period exceeds one (1) year, besides the extension granted in Article 13.9.1(b), an additional thirty (30) **Days** may be granted for each multiple of six (6) months involved beyond the one (1) year period; or

13.9.1(d) If exceptional circumstances exist, the **ACCO** may extend the time for performance beyond the extensions in Articles 13.9.1(a), 13.9.1(b), and 13.9.1(c). In that event, the **ACCO** shall file with the Mayor's Office of Contract Services a written explanation of the exceptional circumstances.

13.9.2 For extensions of time for **Substantial Completion** and final completion payments, the **Engineer**, in consultation with the **ACCO**, shall prepare a written analysis of the delay (including a preliminary determination of the causes of delay, the beginning and end dates for each such cause of delay, and whether the delays are excusable under the terms of this **Contract**). The report shall be subject to review by and approval of the Board, which shall have authority to question its analysis and determinations and request additional facts or documentation. The report as reviewed and made final by the Board shall be made a part of the **Agency** contract file. Neither the report itself nor anything contained therein shall operate as a waiver or release of any claim the **City** may have against the **Contractor** for either actual or liquidated damages.

13.9.3 Approval Mechanism for Time Extensions for **Substantial Completion** or Final Completion Payments: An extension shall be granted only with the approval of the Board which is comprised of the **ACCO** of the **Agency**, the **City** Corporation Counsel, and the **Comptroller**, or their authorized representatives.



13.9.4 Neither the granting of any application for an extension of time to the **Contractor** or any **Other Contractor** on this **Project** nor the papers, records or reports related to any application for or grant of an extension of time or determination related thereto shall be referred to or offered in evidence by the **Contractor** or its attorneys in any action or proceeding.

13.10 No Damage for Delay: The **Contractor** agrees to make no claim for damages for delay in the performance of this **Contract** occasioned by any act or omission to act of the **City** or any of its representatives, except as provided for in Article 11.

#### **ARTICLE 14. COMPLETION AND FINAL ACCEPTANCE OF THE WORK**

14.1 Date for **Substantial Completion**: The **Contractor** shall substantially complete the **Work** within the time fixed in Schedule A of the General Conditions, or within the time to which such **Substantial Completion** may be extended.

14.2 Determining the Date of **Substantial Completion**: The **Work** will be deemed to be substantially complete when the two conditions set forth below have been met.

14.2.1 Inspection: The **Engineer** has inspected the **Work** and has made a written determination that it is substantially complete.

14.2.2 Approval of **Final Approved Punch List** and Date for **Final Acceptance**: Following inspection of the **Work**, the **Engineer** shall furnish the **Contractor** with a final punch list, specifying all items of **Work** to be completed and proposing dates for the completion of each specified item of **Work**. The **Contractor** shall then submit in writing to the **Engineer** within ten (10) **Days** of the **Engineer** furnishing the final punch list either acceptance of the dates or proposed alternative dates for the completion of each specified item of **Work**. If the **Contractor** proposes alternative dates, then, within a reasonable time after receipt, the **Engineer**, in a written notification to the **Contractor**, shall approve the **Contractor's** completion dates or, if they are unable to agree, the **Engineer** shall establish dates for the completion of each item of **Work**. If the **Contractor** neither accepts the dates nor proposes alternative dates within ten (10) **Days**, the schedule proposed by the **Engineer** shall be deemed accepted. The latest completion date specified shall be the date for **Final Acceptance** of the **Work**.

14.3 Date of **Substantial Completion**. The date of approval of the **Final Approved Punch List**, shall be the date of **Substantial Completion**. The date of approval of the **Final Approved Punch List** shall be either (a) if the **Contractor** approves the final punch list and proposed dates for completion furnished by the **Engineer**, the date of the **Contractor's** approval; or (b) if the **Contractor** neither accepts the dates nor proposes alternative dates, ten (10) **Days** after the **Engineer** furnishes the **Contractor** with a final punch list and proposed dates for completion; or (c) if the **Contractor** proposes alternative dates, the date that the **Engineer** sends written notification to the **Contractor** either approving the **Contractor's** proposed alternative dates or establishing dates for the completion for each item of **Work**.

14.4 Determining the Date of **Final Acceptance**: The **Work** will be accepted as final and complete as of the date of the **Engineer's** inspection if, upon such inspection, the **Engineer** finds that all items on the **Final Approved Punch List** are complete and no further **Work** remains to be done. The **Commissioner** will then issue a written determination of **Final Acceptance**.

14.5 Request for Inspection: Inspection of the **Work** by the **Engineer** for the purpose of **Substantial Completion** or **Final Acceptance** shall be made within ten (10) **Days** after receipt of the **Contractor's** written request therefor.

14.6 Request for Re-inspection: If upon inspection for the purpose of **Substantial Completion** or **Final Acceptance**, the **Engineer** determines that there are items of **Work** still to be performed, the **Contractor** shall promptly perform them and then request a re-inspection. If upon re-inspection, the **Engineer** determines that the **Work** is substantially complete or finally accepted, the date of such re-inspection shall be the date of **Substantial Completion** or **Final Acceptance**. Re-inspection by the **Engineer** shall be made within ten (10) **Days** after receipt of the **Contractor's** written request therefor.

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

#### **ARTICLE 15. LIQUIDATED DAMAGES**

15.1 In the event the **Contractor** fails to substantially complete the **Work** within the time fixed for such **Substantial Completion** in Schedule A of the General Conditions, plus authorized time extensions, or if the **Contractor**, in the sole determination of the **Commissioner**, has abandoned the **Work**, the **Contractor** shall pay to the **City** the sum fixed in Schedule A of the General Conditions, for each and every **Day** that the time consumed in substantially completing the **Work** exceeds the time allowed therefor; which said sum, in view of the difficulty of accurately ascertaining the loss which the **City** will suffer by reason of delay in the **Substantial Completion** of the **Work** hereunder, is hereby fixed and agreed as the liquidated damages that the **City** will suffer by reason of such delay, and not as a penalty. This Article 15 shall also apply to the **Contractor** whether or not the **Contractor** is defaulted pursuant to Chapter X of this **Contract**. Neither the failure to assess liquidated damages nor the granting of any time extension shall operate as a waiver or release of any claim the **City** may have against the **Contractor** for either actual or liquidated damages.

15.2 Liquidated damages received hereunder are not intended to be nor shall they be treated as either a partial or full waiver or discharge of the **City's** right to indemnification, or the **Contractor's** obligation to indemnify the **City**, or to any other remedy provided for in this **Contract** or by **Law**.

15.3 The **Commissioner** may deduct and retain out of the monies which may become due hereunder, the amount of any such liquidated damages; and in case the amount which may become due hereunder shall be less than the amount of liquidated damages suffered by the **City**, the **Contractor** shall be liable to pay the difference.

#### **ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION**

16.1 Unless otherwise provided for in the **Specifications**, the **Commissioner** may take over, use, occupy or operate any part of the **Work** at any time prior to **Final Acceptance**, upon written notification to the **Contractor**. The **Engineer** shall inspect the part of the **Work** to be taken over, used, occupied, or operated, and will furnish the **Contractor** with a written statement of the **Work**, if any, which remains to be performed on such part. The **Contractor** shall not object to, nor interfere with, the **Commissioner's** decision to exercise the rights granted by Article 16. In the event the **Commissioner** takes over, uses, occupies, or operates any part of the **Work**:

16.1.1 the **Engineer** shall issue a written determination of **Substantial Completion** with respect to such part of the **Work**;

16.1.2 the **Contractor** shall be relieved of its absolute obligation to protect such part of the unfinished **Work** in accordance with Article 7;

16.1.3 the **Contractor's** guarantee on such part of the **Work** shall begin on the date of such use by the **City**; and;

16.1.4 the **Contractor** shall be entitled to a return of so much of the amount retained in accordance with Article 21 as it relates to such part of the **Work**, except so much thereof as may be retained under Articles 24 and 44.

## CHAPTER IV SUBCONTRACTS AND ASSIGNMENTS

### ARTICLE 17. SUBCONTRACTS

17.1 The **Contractor** shall not make subcontracts totaling an amount more than the percentage of the total **Contract** price fixed in Schedule A of the General Conditions, without prior written permission from the **Commissioner**. All subcontracts made by the **Contractor** shall be in writing. No **Work** may be performed by a **Subcontractor** prior to the **Contractor** entering into a written subcontract with the **Subcontractor** and complying with the provisions of this Article 17.

17.2 Before making any subcontracts, the **Contractor** shall submit a written statement to the **Commissioner** giving the name and address of the proposed **Subcontractor**; the portion of the **Work** and materials which it is to perform and furnish; the cost of the subcontract; the VENDEX questionnaire if required; the proposed subcontract if requested by the **Commissioner**; and any other information tending to prove that the proposed **Subcontractor** has the necessary facilities, skill, integrity, past experience, and financial resources to perform the **Work** in accordance with the terms and conditions of this **Contract**.

17.3 In addition to the requirements in Article 17.2, **Contractor** is required to list the **Subcontractor** in the web based Subcontractor Reporting System through the City's Payee Information Portal (PIP), available at [www.nyc.gov/pip](http://www.nyc.gov/pip).<sup>1</sup> For each **Subcontractor** listed, **Contractor** is required to provide the following information: maximum contract value, description of **Subcontractor's** Work, start and end date of the subcontract and identification of the **Subcontractor's** industry. Thereafter, **Contractor** will be required to report in the system the payments made to each **Subcontractor** within 30 days of making the payment. If any of the required information changes throughout the Term of the **Contract**, **Contractor** will be required to revise the information in the system.

Failure of the **Contractor** to list a **Subcontractor** and/or to report **Subcontractor** payments in a timely fashion may result in the **Commissioner** declaring the **Contractor** in default of the **Contract** and will subject **Contractor** to liquidated damages in the amount of \$100 per day for each day that the **Contractor** fails to identify a **Subcontractor** along with the required information about the **Subcontractor** and/or fails to report payments to a **Subcontractor**, beyond the time frames set forth herein or in the notice from the **City**. Article 15 shall govern the issue of liquidated damages.

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

17.4 If an approved **Subcontractor** elects to subcontract any portion of its subcontract, the proposed sub-subcontract shall be submitted in the same manner as directed above.

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

17.6 Before entering into any subcontract hereunder, the **Contractor** shall provide the proposed **Subcontractor** with a complete copy of this document and inform the proposed **Subcontractor** fully and completely of all provisions and requirements of this **Contract** relating either directly or indirectly to the **Work** to be performed and the materials to be furnished under such subcontract, and every such **Subcontractor** shall expressly stipulate that all labor performed and materials furnished by the **Subcontractor** shall strictly comply with the requirements of this **Contract**.

17.7 Documents given to a prospective **Subcontractor** for the purpose of soliciting the **Subcontractor's** bid shall include either a copy of the bid cover or a separate information sheet setting forth the **Project** name, the **Contract** number (if available), the **Agency** (as noted in Article 2.1.6), and the **Project's** location.

17.8 The **Commissioner's** approval of a **Subcontractor** shall not relieve the **Contractor** of any of its responsibilities, duties, and liabilities hereunder. The **Contractor** shall be solely responsible to the **City** for the acts or defaults of its **Subcontractor** and of such **Subcontractor's** officers, agents, and employees, each of whom shall, for this purpose, be deemed to be the agent or employee of the **Contractor** to the extent of its subcontract.

17.9 If the **Subcontractor** fails to maintain the necessary facilities, skill, integrity, past experience, and financial resources (other than due to the **Contractor's** failure to make payments where required) to perform the **Work** in accordance with the terms and conditions of this **Contract**, the **Contractor** shall promptly notify the **Commissioner** and replace such **Subcontractor** with a newly approved **Subcontractor** in accordance with this Article 17.

17.10 The **Contractor** shall be responsible for ensuring that all **Subcontractors** performing **Work** at the **Site** maintain all insurance required by **Law**.

17.11 The **Contractor** shall promptly, upon request, file with the **Engineer** a conformed copy of the subcontract and its cost. The subcontract shall provide the following:

17.11.1 **Payment to Subcontractors:** The agreement between the **Contractor** and its **Subcontractor** shall contain the same terms and conditions as to method of payment for **Work**, labor, and materials, and as to retained percentages, as are contained in this **Contract**.

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

17.11.3 **Section 6-123 of the Administrative Code:** Pursuant to the requirements of Section 6-123 of the Administrative Code, every agreement between the **Contractor** and a **Subcontractor** in excess of fifty thousand (\$50,000) dollars shall include a provision that the **Subcontractor** shall not engage in any unlawful discriminatory practice as defined in Title VIII of the Administrative Code (Section 8-101 *et seq.*).

17.11.4 All requirements required pursuant to federal and/or state grant agreement(s), if applicable to the **Work**.

17.12 The **Commissioner** may deduct from the amounts certified under this **Contract** to be due to the **Contractor**, the sum or sums due and owing from the **Contractor** to the **Subcontractors** according to the terms of the said subcontracts, and in case of dispute between the **Contractor** and its **Subcontractor**, or **Subcontractors**, as to the amount due and owing, the **Commissioner** may deduct and withhold from the amounts certified under this **Contract** to be due to the **Contractor** such sum or sums as may be claimed by such **Subcontractor**, or **Subcontractors**, in a sworn affidavit, to be due and owing until such time as such claim or claims shall have been finally resolved.

17.13 On contracts where performance bonds and payment bonds are executed, the **Contractor** shall include on each requisition for payment the following data: **Subcontractor's** name, value of the subcontract, total amount previously paid to **Subcontractor** for **Work** previously requisitioned, and the amount, including retainage, to be paid to the **Subcontractor** for **Work** included in the requisition.

17.14 On **Contracts** where performance bonds and payment bonds are not executed, the **Contractor** shall include with each requisition for payment submitted hereunder, a signed statement from each and every **Subcontractor** and/or **Materialman** for whom payment is requested in such requisition. Such signed statement shall be on the letterhead of the **Subcontractor** and/or **Materialman** for whom payment is requested and shall (i) verify that such **Subcontractor** and/or **Materialman** has been paid in full for all **Work** performed and/or material supplied to date, exclusive of any amount retained and any amount included on the current requisition, and (ii) state the total amount of retainage to date, exclusive of any amount retained on the current requisition.

## ARTICLE 18. ASSIGNMENTS

18.1 The **Contractor** shall not assign, transfer, convey or otherwise dispose of this **Contract**, or the right to execute it, or the right, title or interest in or to it or any part thereof, or assign, by power of attorney or otherwise any of the monies due or to become due under this **Contract**, unless the previous written consent of the **Commissioner** shall first be obtained thereto, and the giving of any such consent to a particular assignment shall not dispense with the necessity of such consent to any further or other assignments.

18.2 Such assignment, transfer, conveyance or other disposition of this **Contract** shall not be valid until filed in the office of the **Commissioner** and the **Comptroller**, with the written consent of the **Commissioner** endorsed thereon or attached thereto.

18.3 Failure to obtain the previous written consent of the **Commissioner** to such an assignment, transfer, conveyance or other disposition, may result in the revocation and annulment of this **Contract**. The **City** shall thereupon be relieved and discharged from any further liability to the **Contractor**, its assignees, transferees or sublessees, who shall forfeit and lose all monies therefor earned under the **Contract**, except so much as may be required to pay the **Contractor's** employees.

18.4 The provisions of this clause shall not hinder, prevent, or affect an assignment by the **Contractor** for the benefit of its creditors made pursuant to the **Laws** of the State of New York.

18.5 This **Contract** may be assigned by the **City** to any corporation, agency or instrumentality having authority to accept such assignment.

**CHAPTER V  
CONTRACTOR'S SECURITY AND GUARANTEE**

**ARTICLE 19. SECURITY DEPOSIT**

19.1 If performance and payment bonds are required, the **City** shall retain the bid security to ensure that the successful bidder executes the **Contract** and furnishes the required payment and performance security within ten (10) **Days** after notice of the award of the **Contract**. If the successful bidder fails to execute the **Contract** and furnish the required payment and performance security, the **City** shall retain such bid security as set forth in the Information for Bidders. If the successful bidder executes the **Contract** and furnishes the required payment and performance security, the **City** shall return the bid security within a reasonable time after the furnishing of such bonds and execution of the **Contract** by the **City**.

19.2 If performance and payment bonds are not required, the bid security shall be retained by the **City** as security for the **Contractor's** faithful performance of the **Contract**. If partial payments are provided, the bid security will be returned to the **Contractor** after the sum retained under Article 21 equals the amount of the bid security, subject to other provisions of this **Contract**. If partial payments are not provided, the bid security will be released when final payment is certified by the **City** for payment.

19.3 If the **Contractor** is declared in default under Article 48 prior to the return of the deposit, or if any claim is made such as referred to in Article 23, the amount of such deposit, or so much thereof as the **Comptroller** may deem necessary, may be retained and then applied by the **Comptroller**:

19.3.1 To compensate the **City** for any expense, loss or damage suffered or incurred by reason of or resulting from such default, including the cost of re-letting and liquidated damages; or

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

**ARTICLE 20. PAYMENT GUARANTEE**

20.1 On **Contracts** where one hundred (100%) percent performance bonds and payment bonds are executed, this Article 20 does not apply.

20.2 In the event the terms of this **Contract** do not require the **Contractor** to provide a payment bond or where the **Contract** does not require a payment bond for one hundred (100%) percent of the **Contract** price, the **City** shall, in accordance with the terms of this Article 20, guarantee payment of all lawful claims for:

20.2.1 Wages and compensation for labor performed and/or services rendered; and

20.2.2 Materials, equipment, and supplies provided, whether incorporated into the **Work** or not, when demands have been filed with the **City** as provided hereinafter by any person, firm, or corporation which furnished labor, material, equipment, supplies, or any combination thereof, in connection with the **Work** performed hereunder (hereinafter referred to as the "beneficiary") at the direction of the **City** or the **Contractor**.

20.3 The provisions of Article 20.2 are subject to the following limitations and conditions:

20.3.1 If the **Contractor** provides a payment bond for a value that is less than one hundred (100%) percent of the value of the **Contract Work**, the payment bond provided by the **Contractor** shall be primary (and non-contributing) to the payment guarantee provided under this Article 20.

20.3.2 The guarantee is made for the benefit of all beneficiaries as defined in Article 20.2 provided that those beneficiaries strictly adhere to the terms and conditions of Article 20.3.4 and 20.3.5.

20.3.3 Nothing in this Article 20 shall prevent a beneficiary providing labor, services or material for the **Work** from suing the **Contractor** for any amounts due and owing the beneficiary by the **Contractor**.

20.3.4 Every person who has furnished labor or material, to the **Contractor** or to a **Subcontractor** of the **Contractor**, in the prosecution of the **Work** and who has not been paid in full therefor before the expiration of a period of ninety (90) **Days** after the date on which the last of the labor was performed or material was furnished by him/her for which the claim is made, shall have the right to sue on this payment guarantee in his/her own name for the amount, or the balance thereof, unpaid at the time of commencement of the action; provided, however, that a person having a direct contractual relationship with a **Subcontractor** of the **Contractor** but no contractual relationship express or implied with the **Contractor** shall not have a right of action upon the guarantee unless he/she shall have given written notice to the **Contractor** within one hundred twenty (120) **Days** from the date on which the last of the labor was performed or the last of the material was furnished, for which his/her claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the material was furnished or for whom the labor was performed. The notice shall be served by delivering the same personally to the **Contractor** or by mailing the same by registered mail, postage prepaid, in an envelope addressed to the **Contractor** at any place where it maintains an office or conducts its business; provided, however, that where such notice is actually received by the **Contractor** by other means, such notice shall be deemed sufficient.

20.3.5 Except as provided in Labor Law Section 220-g, no action on this payment guarantee shall be commenced after the expiration of the one-year limitations period set forth in Section 137(4)(b) of the State Finance Law.

20.3.6 The **Contractor** shall promptly forward to the **City** any notice or demand received pursuant to Article 20.3.4. The **Contractor** shall inform the **City** of any defenses to the notice or demand and shall forward to the **City** any documents the **City** requests concerning the notice or demand.

20.3.7 All demands made against the **City** by a beneficiary of this payment guarantee shall be presented to the **Engineer** along with all written documentation concerning the demand which the **Engineer** deems reasonably appropriate or necessary, which may include, but shall not be limited to: the subcontract; any invoices presented to the **Contractor** for payment; the notarized statement of the beneficiary that the demand is due and payable, that a request for payment has been made of the **Contractor** and that the demand has not been paid by the **Contractor** within the time allowed for such payment by the subcontract; and copies of any correspondence between the beneficiary and the **Contractor** concerning such demand. The **City** shall notify the **Contractor** that a demand has been made. The **Contractor** shall inform the **City** of any defenses to the demand and shall forward to the **City** any documents the **City** requests concerning the demand.

20.3.8 The **City** shall make payment only if, after considering all defenses presented by the **Contractor**, it determines that the payment is due and owing to the beneficiary making the demand.

20.3.9 No beneficiary shall be entitled to interest from the **City**, or to any other costs, including, but not limited to, attorneys' fees, except to the extent required by State Finance Law Section 137.

20.4 Upon the receipt by the **City** of a demand pursuant to this Article 20, the **City** may withhold from any payment otherwise due and owing to the **Contractor** under this **Contract** an amount sufficient to satisfy the demand.

20.4.1 In the event the **City** determines that the demand is valid, the **City** shall notify the **Contractor** of such determination and the amount thereof and direct the **Contractor** to immediately pay such amount to the beneficiary. In the event the **Contractor**, within seven (7) **Days** of receipt of such notification from the **City**, fails to pay the beneficiary, such failure shall constitute an automatic and irrevocable assignment of payment by the **Contractor** to the beneficiary for the amount of the demand determined by the **City** to be valid. The **Contractor**, without further notification or other process, hereby gives its unconditional consent to such assignment of payment to the beneficiary and authorizes the **City**, on its behalf, to take all necessary actions to implement such assignment of payment, including without limitation the execution of any instrument or documentation necessary to effectuate such assignment.

20.4.2 In the event that the amount otherwise due and owing to the **Contractor** by the **City** is insufficient to satisfy such demand, the **City** may, at its option, require payment from the **Contractor** of an amount sufficient to cover such demand and exercise any other right to require or recover payment which the **City** may have under **Law** or **Contract**.

20.4.3 In the event the **City** determines that the demand is invalid, any amount withheld pending the **City's** review of such demand shall be paid to the **Contractor**; provided, however, no lien has been filed. In the event a claim or an action has been filed, the terms and conditions set forth in Article 23 shall apply. In the event a lien has been filed, the parties will be governed by the provisions of the Lien Law of the State of New York.

20.5 The provisions of this Article 20 shall not prevent the **City** and the **Contractor** from resolving disputes in accordance with the **PPB** Rules, where applicable.

20.6 In the event the **City** determines that the beneficiary is entitled to payment pursuant to this Article 20, such determination and any defenses and counterclaims raised by the **Contractor** shall be taken into account in evaluating the **Contractor's** performance.

20.7 Nothing in this Article 20 shall relieve the **Contractor** of the obligation to pay the claims of all persons with valid and lawful claims against the **Contractor** relating to the **Work**.

20.8 The **Contractor** shall not require any performance, payment or other bonds of any **Subcontractor** if this **Contract** does not require such bonds of the **Contractor**.

20.9 The payment guarantee made pursuant to this Article 20 shall be construed in a manner consistent with Section 137 of the State Finance Law and shall afford to persons furnishing labor or materials to the **Contractor** or its **Subcontractors** in the prosecution of the **Work** under this **Contract** all of the rights and remedies afforded to such persons by such section, including but not limited to, the right



to commence an action against the **City** on the payment guarantee provided by this Article 20 within the one-year limitations period set forth in Section 137(4)(b).

## **ARTICLE 21. RETAINED PERCENTAGE**

21.1 If this **Contract** requires one hundred (100%) percent performance and payment security, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, five (5%) percent of the value of **Work** certified for payment in each partial payment voucher.

21.2 If this **Contract** does not require one hundred (100%) percent performance and payment security and if the price for which this **Contract** was awarded does not exceed one million (\$1,000,000) dollars, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, five (5%) percent of the value of **Work** certified for payment in each partial payment voucher.

21.3 If this **Contract** does not require one hundred (100%) percent performance and payment security and if the price for which this **Contract** was awarded exceeds one million (\$1,000,000) dollars, then as further security for the faithful performance of this **Contract**, the **Commissioner** shall deduct, and retain until the substantial completion of the **Work**, up to ten (10%) percent of the value of **Work** certified for payment in each partial payment voucher. The percentage to be retained is set forth in Schedule A of the General Conditions.

## **ARTICLE 22. INSURANCE**

22.1 Types of Insurance: The **Contractor** shall procure and maintain the following types of insurance if, and as indicated, in Schedule A of the General Conditions (with the minimum limits and special conditions specified in Schedule A). Such insurance shall be maintained from the date the **Contractor** is required to provide Proof of Insurance pursuant to Article 22.3.1 through the date of completion of all required **Work** (including punch list work as certified in writing by the **Resident Engineer**), except for insurance required pursuant to Article 22.1.4, which may terminate upon **Substantial Completion** of the **Contract**. All insurance shall meet the requirements set forth in this Article 22. Wherever this Article requires that insurance coverage be "at least as broad" as a specified form (including all ISO forms), there is no obligation that the form itself be used, provided that the **Contractor** can demonstrate that the alternative form or endorsement contained in its policy provides coverage at least as broad as the specified form.

22.1.1 Commercial General Liability Insurance: The **Contractor** shall provide Commercial General Liability Insurance covering claims for property damage and/or bodily injury, including death, which may arise from any of the operations under this **Contract**. Coverage under this insurance shall be at least as broad as that provided by the latest edition of Insurance Services Office ("ISO") Form CG 0001. Such insurance shall be "occurrence" based rather than "claims-made" and include, without limitation, the following types of coverage: premises operations; products and completed operations; contractual liability (including the tort liability of another assumed in a contract); broad form property damage; independent contractors; explosion, collapse and underground (XCU); construction means and methods; and incidental malpractice. Such insurance shall contain a "per project" aggregate limit, as specified in Schedule A, that applies separately to operations under this **Contract**.

22.1.1(a) Such Commercial General Liability Insurance shall name the **City** as an Additional Insured. Coverage for the **City** shall specifically include the **City's** officials and employees, be at least as broad as the latest edition of ISO Form CG 20 10 and provide completed operations coverage at least as broad as the latest edition of ISO Form CG 20 37.

22.1.1(b) Such Commercial General Liability Insurance shall name all other entities designated as additional insureds in Schedule A but only for claims arising from the **Contractor's** operations under this **Contract**, with coverage at least as broad as the latest edition of ISO Form CG 20 26.

22.1.1(c) If the **Work** requires a permit from the Department of Buildings pursuant to 1 RCNY Section 101-08, at [http://www.nyc.gov/html/dob/downloads/rules/1\\_RCNY\\_101-08.pdf](http://www.nyc.gov/html/dob/downloads/rules/1_RCNY_101-08.pdf), the **Contractor** shall provide Commercial General Liability Insurance with limits of at least those required by 1 RCNY section 101-08. If the **Work** does not require such a permit, the minimum limits shall be those provided for in Schedule A.

22.1.1(d) If any of the **Work** includes repair of a waterborne vessel owned by or to be delivered to the **City**, such Commercial General Liability shall include, or be endorsed to include, Ship Repairer's Legal Liability Coverage to protect against, without limitation, liability arising from navigation of such vessels prior to delivery to and acceptance by the **City**.

22.1.2 Workers' Compensation Insurance, Employers' Liability Insurance, and Disability Benefits Insurance: The **Contractor** shall provide, and shall cause its **Subcontractors** to provide, Workers Compensation Insurance, Employers' Liability Insurance, and Disability Benefits Insurance in accordance with the **Laws** of the State of New York on behalf of all employees providing services under this **Contract** (except for those employees, if any, for which the **Laws** require insurance only pursuant to Article 22.1.3).

22.1.3 United States Longshoremen's and Harbor Workers Act and/or Jones Act Insurance: If specified in Schedule A of the General Conditions or if required by **Law**, the **Contractor** shall provide insurance in accordance with the United States Longshoremen's and Harbor Workers Act and/or the Jones Act, on behalf of all qualifying employees providing services under this **Contract**.

22.1.4 Builders Risk Insurance: If specified in Schedule A of the General Conditions, the **Contractor** shall provide Builders Risk Insurance on a completed value form for the total value of the **Work** through **Substantial Completion** of the **Work** in its entirety. Such insurance shall be provided on an All Risk basis and include coverage, without limitation, for windstorm (including named windstorm), storm surge, flood and earth movement. Unless waived by the **Commissioner**, it shall include coverage for ordinance and law, demolition and increased costs of construction, debris removal, pollutant clean up and removal, and expediting costs. Such insurance shall cover, without limitation, (a) all buildings and/or structures involved in the **Work**, as well as temporary structures at the **Site**, and (b) any property that is intended to become a permanent part of such building or structure, whether such property is on the **Site**, in transit or in temporary storage. Policies shall name the **Contractor** as Named Insured and list the **City** as both an Additional Insured and a Loss Payee as its interest may appear.

22.1.4(a) Policies of such insurance shall specify that, in the event a loss occurs at an occupied facility, occupancy of such facility is permitted without the consent of the issuing insurance company.

22.1.4(b) Such insurance may be provided through an Installation Floater, at the **Contractor's** option, if it otherwise conforms with the requirements of this Article 22.1.4.

22.1.5 Commercial Automobile Liability Insurance: The **Contractor** shall provide Commercial Automobile Liability Insurance for liability arising out of ownership, maintenance or use of any owned (if any), non-owned and hired vehicles to be used in connection with this **Contract**. Coverage shall be at least as broad as the latest edition of ISO Form CA0001. If vehicles are used for transporting hazardous materials, the Automobile Liability Insurance shall be endorsed to provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90.

22.1.6 Contractors Pollution Liability Insurance: If specified in Schedule A of the General Conditions, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Contractors Pollution Liability Insurance covering bodily injury and property damage. Such insurance shall provide coverage for actual, alleged or threatened emission, discharge, dispersal, seepage, release or escape of pollutants (including asbestos), including any loss, cost or expense incurred as a result of any cleanup of pollutants (including asbestos) or in the investigation, settlement or defense of any claim, action, or proceedings arising from the operations under this **Contract**. Such insurance shall be in the **Contractor's** name and list the **City** as an Additional Insured and any other entity specified in Schedule A. Coverage shall include, without limitation, (a) loss of use of damaged property or of property that has not been physically injured, (b) transportation, and (c) non-owned disposal sites.

22.1.6(a) Coverage for the **City** as Additional Insured shall specifically include the **City's** officials and employees and be at least as broad as provided to the **Contractor** for this **Project**.

22.1.6(b) If such insurance is written on a claims-made policy, such policy shall have a retroactive date on or before the effective date of this **Contract**, and continuous coverage shall be maintained, or an extended discovery period exercised, for a period of not less than three (3) years from the time the **Work** under this **Contract** is completed.

22.1.7 Marine Insurance:

22.1.7(a) Marine Protection and Indemnity Insurance: If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Marine Protection and Indemnity Insurance with coverage at least as broad as Form SP-23. The insurance shall provide coverage for the **Contractor** or **Subcontractor** (whichever is doing this **Work**) and for the **City** (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured for bodily injury and property damage arising from marine operations under this **Contract**. Coverage shall include, without limitation, injury or death of crew members (if not fully provided through other insurance), removal of wreck, damage to piers, wharves and other fixed or floating objects and loss of or damage to any other vessel or craft, or to property on such other vessel or craft.

22.1.7(b) Hull and Machinery Insurance: If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Hull and Machinery Insurance with coverage for the **Contractor** or **Subcontractor** (whichever is doing this Work) and for the **City** (together with its officials and employees) as Additional Insured at least as broad as the latest edition of American Institute Tug Form for all tugs used under this **Contract** and Collision Liability at least as broad as the latest edition of American Institute Hull Clauses.

22.1.7(c) Marine Pollution Liability Insurance: If specified in Schedule A of the General Conditions or if the **Contractor** engages in marine operations in the execution of any part of the **Work**, the **Contractor** shall maintain, or cause the **Subcontractor** doing such Work to maintain, Marine Pollution Liability Insurance covering itself (or the Subcontractor doing such Work) as Named Insured and the **City** (together with its officials and employees) and any other entity specified in Schedule A as an Additional Insured. Coverage shall be at least as broad as that provided by the latest edition of Water Quality Insurance Syndicate Form and include, without limitation, liability arising from the discharge or substantial threat of a discharge of oil, or from the release or threatened release of a hazardous substance including injury to, or economic losses resulting from, the destruction of or damage to real property, personal property or natural resources.

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

## 22.2 General Requirements for Insurance Coverage and Policies:

22.2.1 All required insurance policies shall be maintained with companies that may lawfully issue the required policy and have an A.M. Best rating of at least A-/VII or a Standard and Poor's rating of at least A, unless prior written approval is obtained from the **City** Corporation Counsel.

22.2.2 The **Contractor** shall be solely responsible for the payment of all premiums for all required policies and all deductibles and self-insured retentions to which such policies are subject, whether or not the **City** is an insured under the policy.

22.2.3 In his/her sole discretion, the **Commissioner** may, subject to the approval of the **Comptroller** and the **City** Corporation Counsel, accept Letters of Credit and/or custodial accounts in lieu of required insurance.

22.2.4 The **City's** limits of coverage for all types of insurance required pursuant to Schedule A of the General Conditions shall be the greater of (i) the minimum limits set forth in Schedule A or (ii) the limits provided to the **Contractor** as Named Insured under all primary, excess, and umbrella policies of that type of coverage.

22.2.5 The **Contractor** may satisfy its insurance obligations under this Article 22 through primary policies or a combination of primary and excess/umbrella policies, so long as all policies provide the scope of coverage required herein.

22.2.6 Policies of insurance provided pursuant to this Article 22 shall be primary and non-contributing to any insurance or self-insurance maintained by the **City**.

### 22.3 Proof of Insurance:

22.3.1 For all types of insurance required by Article 22.1 and Schedule A, except for insurance required by Articles 22.1.4 and 22.1.7, the **Contractor** shall file proof of insurance in accordance with this Article 22.3 within ten (10) **Days** of award. For insurance provided pursuant to Articles 22.1.4 and 22.1.7, proof shall be filed by a date specified by the **Commissioner** or ten (10) **Days** prior to the commencement of the portion of the **Work** covered by such policy, whichever is earlier.

22.3.2 For Workers' Compensation Insurance provided pursuant to Article 22.1.2, the **Contractor** shall submit one of the following forms: C-105.2 Certificate of Workers' Compensation Insurance; U-26.3 - State Insurance Fund Certificate of Workers' Compensation Insurance; Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the **Commissioner**. For Disability Benefits Insurance provided pursuant to Article 22.1.2, the Contractor shall submit DB-120.1 - Certificate of Insurance Coverage Under The NYS Disability Benefits Law, Request for WC/DB Exemption (Form CE-200); equivalent or successor forms used by the New York State Workers' Compensation Board; or other proof of insurance in a form acceptable to the **Commissioner**. ACORD forms are not acceptable.

22.3.3 For policies provided pursuant to all of Article 22.1 other than Article 22.1.2, the **Contractor** shall submit one or more Certificates of Insurance on forms acceptable to the **Commissioner**. All such Certificates of Insurance shall certify (a) the issuance and effectiveness of such policies of insurance, each with the specified minimum limits (b) for insurance secured pursuant to Article 22.1.1 that the **City** and any other entity specified in Schedule A is an Additional Insured with coverage at least as broad as the most recent edition of ISO Forms CG 20 10, CG 20 37, and CG 20 26, as applicable; (c) in the event insurance is required pursuant to Article 22.1.6 and/or Article 22.1.7, that the **City** is an Additional Insured thereunder; (d) the company code issued to the insurance company by the National Association of Insurance Commissioners (the NAIC number); and (e) the number assigned to the **Contract** by the **City**. All such Certificates of Insurance shall be accompanied by either a duly executed "Certification by Broker" in the form contained in Part III of Schedule A or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

22.3.4 Documentation confirming renewals of insurance shall be submitted to the **Commissioner** prior to the expiration date of coverage of policies required under this **Contract**. Such proofs of insurance shall comply with the requirements of Articles 22.3.2 and 22.3.3.

22.3.5 The **Contractor** shall be obligated to provide the **City** with a copy of any policy of insurance provided pursuant to this Article 22 upon the demand for such policy by the **Commissioner** or the **City** Corporation Counsel.

### 22.4 Operations of the Contractor:

22.4.1 The **Contractor** shall not commence the **Work** unless and until all required certificates have been submitted to and accepted by the **Commissioner**. Acceptance by the **Commissioner** of a certificate does not excuse the **Contractor** from securing insurance

consistent with all provisions of this Article 22 or of any liability arising from its failure to do so.

22.4.2 The **Contractor** shall be responsible for providing continuous insurance coverage in the manner, form, and limits required by this **Contract** and shall be authorized to perform **Work** only during the effective period of all required coverage.

22.4.3 In the event that any of the required insurance policies lapse, are revoked, suspended or otherwise terminated, for whatever cause, the **Contractor** shall immediately stop all **Work**, and shall not recommence **Work** until authorized in writing to do so by the **Commissioner**. Upon quitting the **Site**, except as otherwise directed by the **Commissioner**, the **Contractor** shall leave all plant, materials, equipment, tools, and supplies on the **Site**. **Contract** time shall continue to run during such periods and no extensions of time will be granted. The **Commissioner** may also declare the **Contractor** in default for failure to maintain required insurance.

22.4.4 In the event the **Contractor** receives notice, from an insurance company or other person, that any insurance policy required under this Article 22 shall be cancelled or terminated (or has been cancelled or terminated) for any reason, the **Contractor** shall immediately forward a copy of such notice to both the **Commissioner** and the New York City Comptroller, attn: Office of Contract Administration, Municipal Building, One Centre Street, room 1005, New York, New York 10007. Notwithstanding the foregoing, the **Contractor** shall ensure that there is no interruption in any of the insurance coverage required under this Article 22.

22.4.5 Where notice of loss, damage, occurrence, accident, claim or suit is required under an insurance policy maintained in accordance with this Article 22, the **Contractor** shall notify in writing all insurance carriers that issued potentially responsive policies of any such event relating to any operations under this **Contract** (including notice to Commercial General Liability insurance carriers for events relating to the **Contractor**'s own employees) no later than 20 days after such event. For any policy where the **City** is an Additional Insured, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Insured as well as the Named Insured." Such notice shall also contain the following information: the number of the insurance policy, the name of the named insured, the date and location of the damage, occurrence, or accident, and the identity of the persons or things injured, damaged or lost. The **Contractor** shall simultaneously send a copy of such notice to the City of New York c/o Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.

22.4.6 In the event of any loss, accident, claim, action, or other event that does or can give rise to a claim under any insurance policy required under this Article 22, the **Contractor** shall at all times fully cooperate with the **City** with regard to such potential or actual claim.

22.5 **Subcontractor Insurance:** In the event the **Contractor** requires any **Subcontractor** to procure insurance with regard to any operations under this **Contract** and requires such **Subcontractor** to name the **Contractor** as an **Additional Insured** thereunder, the **Contractor** shall ensure that the **Subcontractor** name the **City**, including its officials and employees, as an **Additional Insured** with coverage at least as broad as the most recent edition of ISO Form CG 20 26.

22.6 Wherever reference is made in Article 7 or this Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents shall be sent to the address set forth in Schedule A of the General Conditions. In the event no address is set forth in Schedule A, such documents are to be sent to the **Commissioner**'s address as provided elsewhere in this **Contract**.

22.7 Apart from damages or losses covered by insurance provided pursuant to Articles 22.1.2, 22.1.3, or 22.1.5, the **Contractor** waives all rights against the **City**, including its officials and employees, for any damages or losses that are covered under any insurance required under this Article 22 (whether or not such insurance is actually procured or claims are paid thereunder) or any other insurance applicable to the operations of the **Contractor** and/or its employees, agents, or **Subcontractors**.

22.8 In the event the **Contractor** utilizes a self-insurance program to satisfy any of the requirements of this Article 22, the **Contractor** shall ensure that any such self-insurance program provides the **City** with all rights that would be provided by traditional insurance under this Article 22, including but not limited to the defense and indemnification obligations that insurers are required to undertake in liability policies.

22.9 Materiality/Non-Waiver: The **Contractor's** failure to secure policies in complete conformity with this Article 22, or to give an insurance company timely notice of any sort required in this **Contract** or to do anything else required by this Article 22 shall constitute a material breach of this **Contract**. Such breach shall not be waived or otherwise excused by any action or inaction by the **City** at any time.

22.10 Pursuant to General Municipal Law Section 108, this **Contract** shall be void and of no effect unless **Contractor** maintains Workers' Compensation Insurance for the term of this **Contract** to the extent required and in compliance with the New York State Workers' Compensation Law.

22.11 Other Remedies: Insurance coverage provided pursuant to this Article 22 or otherwise shall not relieve the **Contractor** of any liability under this **Contract**, nor shall it preclude the **City** from exercising any rights or taking such other actions available to it under any other provisions of this **Contract** or **Law**.

### **ARTICLE 23. MONEY RETAINED AGAINST CLAIMS**

23.1 If any claim shall be made by any person or entity (including **Other Contractors** with the **City** on this **Project**) against the **City** or against the **Contractor** and the **City** for any of the following:

- (a) An alleged loss, damage, injury, theft or vandalism of any of the kinds referred to in Articles 7 and 12, plus the reasonable costs of defending the **City**, which in the opinion of the **Comptroller** may not be paid by an insurance company (for any reason whatsoever); or
- (b) An infringement of copyrights, patents or use of patented articles, tools, etc., as referred to in Article 57; or
- (c) Damage claimed to have been caused directly or indirectly by the failure of the **Contractor** to perform the **Work** in strict accordance with this **Contract**,

the amount of such claim, or so much thereof as the **Comptroller** may deem necessary, may be withheld by the **Comptroller**, as security against such claim, from any money due hereunder. The **Comptroller**, in his/her discretion, may permit the **Contractor** to substitute other satisfactory security in lieu of the monies so withheld.

23.2 If an action on such claim is timely commenced and the liability of the **City**, or the **Contractor**, or both, shall have been established therein by a final judgment of a court of competent jurisdiction, or if such claim shall have been admitted by the **Contractor** to be valid, the **Comptroller**

shall pay such judgment or admitted claim out of the monies retained by the **Comptroller** under the provisions of this Article 23, and return the balance, if any, without interest, to the **Contractor**.

#### ARTICLE 24. MAINTENANCE AND GUARANTY

24.1 The **Contractor** shall promptly repair, replace, restore or rebuild, as the **Commissioner** may determine, any finished **Work** in which defects of materials or workmanship may appear or to which damage may occur because of such defects, during the one (1) year period subsequent to the date of **Substantial Completion** (or use and occupancy in accordance with Article 16), except where other periods of maintenance and guaranty are provided for in Schedule A.

24.2 As security for the faithful performance of its obligations hereunder, the **Contractor**, upon filing its requisition for payment on **Substantial Completion**, shall deposit with the **Commissioner** a sum equal to one (1%) percent of the price (or the amount fixed in Schedule A of the General Conditions) in cash or certified check upon a state or national bank and trust company or a check of such bank and trust company signed by a duly authorized officer thereof and drawn to the order of the **Comptroller**, or obligations of the **City**, which the **Comptroller** may approve as of equal value with the sum so required.

24.3 In lieu of the above, the **Contractor** may make such security payment to the **City** by authorizing the **Commissioner** in writing to deduct the amount from the **Substantial Completion** payment which shall be deemed the deposit required above.

24.4 If the **Contractor** has faithfully performed all of its obligations hereunder the **Commissioner** shall so certify to the **Comptroller** within five (5) **Days** after the expiration of one (1) year from the date of **Substantial Completion** and acceptance of the **Work** or within thirty (30) **Days** after the expiration of the guarantee period fixed in the **Specifications**. The security payment shall be repaid to the **Contractor** without interest within thirty (30) **Days** after certification by the **Commissioner** to the **Comptroller** that the **Contractor** has faithfully performed all of its obligations hereunder.

24.5 Notice by the **Commissioner** to the **Contractor** to repair, replace, rebuild or restore such defective or damaged **Work** shall be timely, pursuant to this article, if given not later than ten (10) **Days** subsequent to the expiration of the one (1) year period or other periods provided for herein.

24.6 If the **Contractor** shall fail to repair, replace, rebuild or restore such defective or damaged **Work** promptly after receiving such notice, the **Commissioner** shall have the right to have the **Work** done by others in the same manner as provided for in the completion of a defaulted **Contract**, under Article 51.

24.7 If the security payment so deposited is insufficient to cover the cost of such **Work**, the **Contractor** shall be liable to pay such deficiency on demand by the **Commissioner**.

24.8 The **Engineer's** certificate setting forth the fair and reasonable cost of repairing, replacing, rebuilding or restoring any damaged or defective **Work** when performed by one other than the **Contractor**, shall be binding and conclusive upon the **Contractor** as to the amount thereof.

24.9 The **Contractor** shall obtain all manufacturers' warranties and guaranties of all equipment and materials required by this **Contract** in the name of the **City** and shall deliver same to the **Commissioner**. All of the **City's** rights and title and interest in and to said manufacturers' warranties and guaranties may be assigned by the **City** to any subsequent purchasers of such equipment and materials or lessees of the premises into which the equipment and materials have been installed.



**CHAPTER VI**  
**CHANGES, EXTRA WORK, AND DOCUMENTATION OF CLAIM**

**ARTICLE 25. CHANGES**

25.1 Changes may be made to this **Contract** only as duly authorized in writing by the **Commissioner** in accordance with the **Law** and this **Contract**. All such changes, modifications, and amendments will become a part of the **Contract**. **Work** so ordered shall be performed by the **Contractor**.

25.2 **Contract** changes will be made only for **Work** necessary to complete the **Work** included in the original scope of the **Contract** and/or for non-material changes to the scope of the **Contract**. Changes are not permitted for any material alteration in the scope of **Work** in the **Contract**.

25.3 The **Contractor** shall be entitled to a price adjustment for **Extra Work** performed pursuant to a written change order. Adjustments to price shall be computed in one or more of the following ways:

25.3.1 By applicable unit prices specified in the **Contract**; and/or

25.3.2 By agreement of a fixed price; and/or

25.3.3 By time and material records; and/or

25.3.4 In any other manner approved by the **CCPO**.

25.4 All payments for change orders are subject to pre-audit by the **Engineering Audit Officer** and may be post-audited by the **Comptroller** and/or the **Agency**.

**ARTICLE 26. METHODS OF PAYMENT FOR OVERRUNS AND EXTRA WORK**

26.1 **Overrun of Unit Price Item:** An overrun is any quantity of a unit price item which the **Contractor** is directed to provide which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule.

26.1.1 For any unit price item, the **Contractor** will be paid at the unit price bid for any quantity up to one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule. If during the progress of the **Work**, the actual quantity of any unit price item required to complete the **Work** approaches the estimated quantity for that item, and for any reason it appears that the actual quantity of any unit price item necessary to complete the **Work** will exceed the estimated quantity for that item by twenty-five (25%) percent, the **Contractor** shall immediately notify the **Engineer** of such anticipated overrun. The **Contractor** shall not be compensated for any quantity of a unit price item provided which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule without written authorization from the **Engineer**.

26.1.2 If the actual quantity of any unit price item necessary to complete the **Work** will exceed one hundred twenty five (125%) percent of the estimated quantity for that item set forth in the bid schedule, the **City** reserves the right and the **Contractor** agrees to negotiate a new unit price for such item. In no event shall such negotiated new unit price exceed the unit bid price. If the **City** and **Contractor** cannot agree on a new unit price, then the **City** shall order the **Contractor** and the **Contractor** agrees to provide additional quantities of the

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

26.2 **Extra Work:** For **Extra Work** where payment is by agreement on a fixed price in accordance with Article 25.3.2, the price to be paid for such **Extra Work** shall be based on the fair and reasonable estimated cost of the items set forth below. For **Extra Work** where payment is based on time and material records in accordance with Article 25.3.3, the price to be paid for such **Extra Work** shall be the actual and reasonable cost of the items set forth below, calculated in accordance with the formula specified therein, if any.

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

26.2.2 Necessary direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits; plus

26.2.3 Sales and personal property taxes, if any, required to be paid on materials not incorporated into such **Extra Work**; plus

26.2.4 Reasonable rental value of **Contractor**-owned (or **Subcontractor**-owned, as applicable), necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per operating hour:  $(.035) \times (\text{HP rating}) \times (\text{Fuel cost/gallon})$ . Reasonable rental value is defined as the lower of either seventy-five percent of the monthly prorated rental rates established in "The AED Green Book, Rental Rates and Specifications for Construction Equipment" published by Equipment Watch (the "Green Book"), or seventy-five percent of the monthly prorated rental rates established in the "Rental Rate Blue Book for Construction Equipment" published by Equipment Watch (the "Blue Book") (the applicable Blue Book rate being for rental only without the addition of any operational costs listed in the Blue Book). The reasonable rental value is deemed to be inclusive of all operating costs except for fuel/energy consumption and equipment operator's wages/costs. For multiple shift utilization, reimbursement shall be calculated as follows: first shift shall be seventy-five (75%) percent of such rental rates; second shift shall be sixty (60%) percent of the first shift rate; and third shift shall be forty (40%) percent of the first shift rate. Equipment on standby shall be reimbursed at one-third (1/3) the prorated monthly rental rate. **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment includes equipment from rental companies affiliated with or controlled by the **Contractor** (or **Subcontractor**, as applicable), as determined by the **Commissioner**. In establishing cost reimbursement for non-operating **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment (scaffolding, sheeting systems, road plates, etc.), the **City** may restrict reimbursement to a purchase-salvage/life cycle basis if less than the computed rental costs; plus

26.2.5 Necessary installation and dismantling of such plant and equipment, including transportation to and from the **Site**, if any, provided that, in the case of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) equipment rented from a third party, the cost of installation and dismantling are not allowable if such costs are included in the rental rate; plus

26.2.6 Necessary fees charged by governmental entities; plus

26.2.7 Necessary construction-related service fees charged by non-governmental entities, such as landfill tipping fees; plus

26.2.8 Reasonable rental costs of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per hour of operation:  $(.035) \times (\text{HP rating}) \times (\text{Fuel cost/gallon})$ . In lieu of renting, the **City** reserves the right to direct the purchase of non-operating equipment (scaffolding, sheeting systems, road plates, etc.), with payment on a purchase-salvage/life cycle basis, if less than the projected rental costs; plus

26.2.9 Workers' Compensation Insurance, and any insurance coverage expressly required by the **City** for the performance of the **Extra Work** which is different than the types of insurance required by Article 22 and Schedule A of the General Conditions. The cost of Workers' Compensation Insurance is subject to applicable payroll limitation caps and shall be based upon the carrier's Manual Rate for such insurance derived from the applicable class Loss Cost ("LC") and carrier's Lost Cost Multiplier ("LCM") approved by the New York State Department of Financial Services, and with the exception of experience rating, rate modifiers as promulgated by the New York Compensation Insurance Rating Board ("NYCIRB"); plus

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

26.2.11 Twelve percent (12%) percent of the total of items in Articles 26.2.1 through 26.2.5 as compensation for overhead, except that no percentage for overhead will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes. Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, small tools, and insurance required by Schedule A of the General Conditions other than Workers' Compensation Insurance; plus

26.2.12 Ten (10%) percent of the total of items in Articles 26.2.1 through 26.2.5, plus the items in Article 26.2.11, as compensation for profit, except that no percentage for profit will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes; plus

26.2.13 Five (5%) percent of the total of items in Articles 26.2.6 through 26.2.10 as compensation for overhead and profit.

26.3 Where the **Extra Work** is performed in whole or in part by other than the **Contractor's** own forces pursuant to Article 26.2, the **Contractor** shall be paid, subject to pre-audit by the **Engineering Audit Officer**, the cost of such **Work** computed in accordance with Article 26.2 above, plus an additional allowance of five (5%) percent to cover the **Contractor's** overhead and profit.

26.4 Where a change is ordered, involving both **Extra Work** and omitted or reduced **Contract Work**, the **Contract** price shall be adjusted, subject to pre-audit by the **EAO**, in an amount based on the difference between the cost of such **Extra Work** and of the omitted or reduced **Work**.

26.5 Where the **Contractor** and the **Commissioner** can agree upon a fixed price for **Extra Work** in accordance with Article 25.3.2 or another method of payment for **Extra Work** in accordance with Article

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

## ARTICLE 27. RESOLUTION OF DISPUTES

27.1 All disputes between the **City** and the **Contractor** of the kind delineated in this Article 27.1 that arise under, or by virtue of, this **Contract** shall be finally resolved in accordance with the provisions of this Article 27 and the **PPB Rules**. This procedure for resolving all disputes of the kind delineated herein shall be the exclusive means of resolving any such disputes.

27.1.1 This Article 27 shall not apply to disputes concerning matters dealt with in other sections of the **PPB Rules**, or to disputes involving patents, copyrights, trademarks, or trade secrets (as interpreted by the courts of New York State) relating to proprietary rights in computer software.

27.1.2 This Article 27 shall apply only to disputes about the scope of **Work** delineated by the **Contract**, the interpretation of **Contract** documents, the amount to be paid for **Extra Work** or disputed work performed in connection with the **Contract**, the conformity of the **Contractor's Work** to the **Contract**, and the acceptability and quality of the **Contractor's Work**; such disputes arise when the **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner** makes a determination with which the **Contractor** disagrees.

27.2 All determinations required by this Article 27 shall be made in writing clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination. Failure to make such determination within the time required by this Article 27 shall be deemed a non-determination without prejudice that will allow application to the next level.

27.3 During such time as any dispute is being presented, heard, and considered pursuant to this Article 27, the **Contract** terms shall remain in force and the **Contractor** shall continue to perform **Work** as directed by the **ACCO** or the **Engineer**. Failure of the **Contractor** to continue **Work** as directed shall constitute a waiver by the **Contractor** of its claim.

### 27.4 Presentation of Disputes to **Commissioner**.

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

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

27.4.1 **Commissioner Inquiry.** The **Commissioner** shall examine the material and may, in his or her discretion, convene an informal conference with the **Contractor**, the **ACCO**, and the **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner** to resolve the issue by mutual consent prior to reaching a determination. The **Commissioner** may seek such technical or other expertise as he or she shall deem appropriate, including the use of neutral mediators, and require any such additional material from either or both parties as he or she deems fit. The **Commissioner's** ability to render, and the effect of, a decision hereunder shall not be impaired by any negotiations in connection with the dispute presented, whether or not the **Commissioner** participated therein. The **Commissioner** may or, at the request of any party to the dispute, shall compel the participation of any **Other Contractor** with a contract related to the **Work** of this **Contract**, and that **Contractor** shall be bound by the decision of the **Commissioner**. Any **Other Contractor** thus brought into the dispute resolution proceeding shall have the same rights and obligations under this Article 27 as the **Contractor** initiating the dispute.

27.4.2 **Commissioner Determination.** Within thirty (30) **Days** after the receipt of all materials and information, or such longer time as may be agreed to by the parties, the **Commissioner** shall make his or her determination and shall deliver or send a copy of such determination to the **Contractor**, the **ACCO**, and **Engineer, Resident Engineer, Engineering Audit Officer**, or other designee of the **Commissioner**, as applicable, together with a statement concerning how the decision may be appealed.

27.4.3 **Finality of Commissioner's Decision.** The **Commissioner's** decision shall be final and binding on all parties, unless presented to the Contract Dispute Resolution Board pursuant to this Article 27. The **City** may not take a petition to the Contract Dispute Resolution Board. However, should the **Contractor** take such a petition, the **City** may seek, and the Contract Dispute Resolution Board may render, a determination less favorable to the **Contractor** and more favorable to the **City** than the decision of the **Commissioner**.

27.5 **Presentation of Dispute to the Comptroller.** Before any dispute may be brought by the **Contractor** to the Contract Dispute Resolution Board, the **Contractor** must first present its claim to the **Comptroller** for his or her review, investigation, and possible adjustment.

27.5.1 **Time, Form, and Content of Notice.** Within thirty (30) **Days** of its receipt of a decision by the **Commissioner**, the **Contractor** shall submit to the **Comptroller** and to the **Commissioner** a Notice of Claim regarding its dispute with the **Agency**. The Notice of Claim shall consist of (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written decision of the **Commissioner**; and (iii) a copy of all materials submitted by the **Contractor** to the **Agency**, including the Notice of Dispute. The **Contractor** may not present to the **Comptroller** any material not presented to the **Commissioner**, except at the request of the **Comptroller**.

27.5.2 **Response.** Within thirty (30) **Days** of receipt of the Notice of Claim, the **Agency** shall make available to the **Comptroller** a copy of all material submitted by the **Agency** to the **Commissioner** in connection with the dispute. The **Agency** may not present to the

**Comptroller** any material not presented to the **Commissioner** except at the request of the **Comptroller**.

27.5.3 **Comptroller Investigation.** The **Comptroller** may investigate the claim in dispute and, in the course of such investigation, may exercise all powers provided in Sections 7-201 and 7-203 of the Administrative Code. In addition, the **Comptroller** may demand of either party, and such party shall provide, whatever additional material the **Comptroller** deems pertinent to the claim, including original business records of the **Contractor**. Willful failure of the **Contractor** to produce within fifteen (15) **Days** any material requested by the **Comptroller** shall constitute a waiver by the **Contractor** of its claim. The **Comptroller** may also schedule an informal conference to be attended by the **Contractor**, **Agency** representatives, and any other personnel desired by the **Comptroller**.

27.5.4 **Opportunity of Comptroller to Compromise or Adjust Claim.** The **Comptroller** shall have forty-five (45) **Days** from his or her receipt of all materials referred to in Article 27.5.3 to investigate the disputed claim. The period for investigation and compromise may be further extended by agreement between the **Contractor** and the **Comptroller**, to a maximum of ninety (90) **Days** from the **Comptroller's** receipt of all materials. The **Contractor** may not present its petition to the Contract Dispute Resolution Board until the period for investigation and compromise delineated in this Article 27.5.4 has expired. In compromising or adjusting any claim hereunder, the **Comptroller** may not revise or disregard the terms of the **Contract** between the parties.

27.6 **Contract Dispute Resolution Board.** There shall be a Contract Dispute Resolution Board composed of:

27.6.1 The chief administrative law judge of the Office of Administrative Trials and Hearings (OATH) or his/her designated OATH administrative law judge, who shall act as chairperson, and may adopt operational procedures and issue such orders consistent with this Article 27 as may be necessary in the execution of the Contract Dispute Resolution Board's functions, including, but not limited to, granting extensions of time to present or respond to submissions;

27.6.2 The **CCPO** or his/her designee; any designee shall have the requisite background to consider and resolve the merits of the dispute and shall not have participated personally and substantially in the particular matter that is the subject of the dispute or report to anyone who so participated; and

27.6.3 A person with appropriate expertise who is not an employee of the **City**. This person shall be selected by the presiding administrative law judge from a prequalified panel of individuals, established and administered by OATH with appropriate background to act as decision-makers in a dispute. Such individual may not have a contract or dispute with the **City** or be an officer or employee of any company or organization that does, or regularly represents persons, companies, or organizations having disputes with the **City**.

27.7 **Petition to the Contract Dispute Resolution Board.** In the event the claim has not been settled or adjusted by the **Comptroller** within the period provided in this Article 27, the **Contractor**, within thirty (30) **Days** thereafter, may petition the Contract Dispute Resolution Board to review the **Commissioner's** determination.

27.7.1 **Form and Content of Petition by Contractor.** The **Contractor** shall present its dispute to the Contract Dispute Resolution Board in the form of a petition, which shall

include (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed, and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written Decision of the **Commissioner**, (iii) copies of all materials submitted by the **Contractor** to the Agency; (iv) a copy of the written decision of the **Comptroller**, if any, and (v) copies of all correspondence with, or written material submitted by the **Contractor**, to the **Comptroller**. The **Contractor** shall concurrently submit four (4) complete sets of the Petition: one set to the **City Corporation Counsel** (Attn: Commercial and Real Estate Litigation Division) and three (3) sets to the Contract Dispute Resolution Board at OATH's offices with proof of service on the **City Corporation Counsel**. In addition, the **Contractor** shall submit a copy of the written statement of the substance of the dispute, cited in (i) above, to both the **Commissioner** and the **Comptroller**.

27.7.2 **Agency Response.** Within thirty (30) **Days** of its receipt of the Petition by the **City Corporation Counsel**, the **Agency** shall respond to the brief written statement of the **Contractor** and make available to the Contract Dispute Resolution Board all material it submitted to the **Commissioner** and **Comptroller**. Three (3) complete copies of the **Agency** response shall be provided to the Contract Dispute Resolution Board and one to the **Contractor**. Extensions of time for submittal of the **Agency** response shall be given as necessary upon a showing of good cause or, upon consent of the parties, for an initial period of up to thirty (30) **Days**.

27.7.3 **Further Proceedings.** The Contract Dispute Resolution Board shall permit the **Contractor** to present its case by submission of memoranda, briefs, and oral argument. The Contract Dispute Resolution Board shall also permit the **Agency** to present its case in response to the **Contractor** by submission of memoranda, briefs, and oral argument. If requested by the **City Corporation Counsel**, the **Comptroller** shall provide reasonable assistance in the preparation of the **Agency's** case. Neither the **Contractor** nor the **Agency** may support its case with any documentation or other material that was not considered by the **Comptroller**, unless requested by the Contract Dispute Resolution Board. The Contract Dispute Resolution Board, in its discretion, may seek such technical or other expert advice as it shall deem appropriate and may seek, on its own or upon application of a party, any such additional material from any party as it deems fit. The Contract Dispute Resolution Board, in its discretion, may combine more than one dispute between the parties for concurrent resolution.

27.7.4 **Contract Dispute Resolution Board Determination.** Within forty-five (45) **Days** of the conclusion of all written submissions and oral arguments, the Contract Dispute Resolution Board shall render a written decision resolving the dispute. In an unusually complex case, the Contract Dispute Resolution Board may render its decision in a longer period, not to exceed ninety (90) **Days**, and shall so advise the parties at the commencement of this period. The Contract Dispute Resolution Board's decision must be consistent with the terms of the **Contract**. Decisions of the Contract Dispute Resolution Board shall only resolve matters before the Contract Dispute Resolution Board and shall not have precedential effect with respect to matters not before the Contract Dispute Resolution Board.

27.7.5 **Notification of Contract Dispute Resolution Board Decision.** The Contract Dispute Resolution Board shall send a copy of its decision to the **Contractor**, the **ACCO**, the Engineer, the **Comptroller**, the **City Corporation Counsel**, the **CCPO**, and the **PPB**. A decision in favor of the **Contractor** shall be subject to the prompt payment provisions of the **PPB Rules**. The Required Payment Date shall be thirty (30) **Days** after the date the parties are formally notified of the Contract Dispute Resolution Board's decision.

27.7.6 Finality of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution

Board's decision shall be final and binding on all parties. Any party may seek review of the Contract Dispute Resolution Board's decision solely in the form of a challenge, filed within four (4) months of the date of the Contract Dispute Resolution Board's decision, in a court of competent jurisdiction of the State of New York, County of New York pursuant to Article 78 of the Civil Practice Law and Rules. Such review by the court shall be limited to the question of whether or not the Contract Dispute Resolution Board's decision was made in violation of lawful procedure, was affected by an error of **Law**, or was arbitrary and capricious or an abuse of discretion. No evidence or information shall be introduced or relied upon in such proceeding that was not presented to the Contract Dispute Resolution Board in accordance with this Article 27.

27.8 Any termination, cancellation, or alleged breach of the **Contract** prior to or during the pendency of any proceedings pursuant to this Article 27 shall not affect or impair the ability of the **Commissioner** or Contract Dispute Resolution Board to make a binding and final decision pursuant to this Article 27.

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

28.1 While the **Contractor** or any of its **Subcontractors** is performing **Work** on a time and material basis or **Extra Work** on a time and material basis ordered by the **Commissioner** under Article 25, or where the **Contractor** believes that it or any of its **Subcontractors** is performing **Extra Work** but a final determination by **Agency** has not been made, or the **Contractor** or any of its **Subcontractors** is performing disputed **Work** (whether on or off the **Site**), or complying with a determination or order under protest in accordance with Articles 11, 27, and 30, in each such case the **Contractor** shall furnish the **Resident Engineer** daily with three (3) copies of written statements signed by the **Contractor's** representative at the **Site** showing:

28.1.1 The name, trade, and number of each worker employed on such **Work** or engaged in complying with such determination or order, the number of hours employed, and the character of the **Work** each is doing; and

28.1.2 The nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such **Work** or compliance with such determination or order, and from whom purchased or rented.

28.2 A copy of such statement will be countersigned by the **Resident Engineer**, noting thereon any items not agreed to or questioned, and will be returned to the **Contractor** within two (2) **Days** after submission.

28.3 The **Contractor** and its **Subcontractors**, when required by the **Commissioner**, or the **Comptroller**, shall also produce for inspection, at the office of the **Contractor** or **Subcontractor**, any and all of its books, bid documents, financial statements, vouchers, records, daily job diaries and reports, and cancelled checks, and any other documents relating to showing the nature and quantity of the labor, materials, plant and equipment actually used in the performance of such **Work**, or in complying with such determination or order, and the amounts expended therefor, and shall permit the **Commissioner** and the **Comptroller** to make such extracts therefrom, or copies thereof, as they or either of them may desire.

28.4 In connection with the examination provided for herein, the **Commissioner**, upon demand therefor, will produce for inspection by the **Contractor** such records as the **Agency** may have with



respect to such **Extra Work** or disputed **Work** performed under protest pursuant to order of the **Commissioner**, except those records and reports which may have been prepared for the purpose of determining the accuracy and validity of the **Contractor's** claim.

28.5 Failure to comply strictly with these requirements shall constitute a waiver of any claim for extra compensation or damages on account of the performance of such **Work** or compliance with such determination or order.

#### **ARTICLE 29. OMITTED WORK**

29.1 If any **Contract Work** in a lump sum **Contract**, or if any part of a lump sum item in a unit price, lump sum, or percentage-bid **Contract** is omitted by the **Commissioner** pursuant to Article 33, the **Contract** price, subject to audit by the EAO, shall be reduced by a pro rata portion of the lump sum bid amount based upon the percent of **Work** omitted subject to Article 29.4. For the purpose of determining the pro rata portion of the lump sum bid amount, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be the determining factor.

29.2 If the whole of a lump sum item or units of any other item is so omitted by the **Commissioner** in a unit price, lump sum, or percentage-bid **Contract**, then no payment will be made therefor except as provided in Article 29.4.

29.3 For units that have been ordered but are only partially completed, the unit price shall be reduced by a pro rata portion of the unit price bid based upon the percentage of **Work** omitted subject to Article 29.4.

29.4 In the event the **Contractor**, with respect to any omitted **Work**, has purchased any non-cancelable material and/or equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated into the **Work**, the **Contractor** shall be paid for such material and/or equipment in accordance with Article 64.2.1(b); provided, however, such payment is contingent upon the **Contractor's** delivery of such material and/or equipment in acceptable condition to a location designated by the **City**.

29.5 The **Contractor** agrees to make no claim for damages or for loss of overhead and profit with regard to any omitted **Work**.

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

30.1 If the **Contractor** shall claim to be sustaining damages by reason of any act or omission of the **City** or its agents, it shall submit to the **Commissioner** within forty-five (45) **Days** from the time such damages are first incurred, and every thirty (30) **Days** thereafter for as long as such damages are incurred, verified statements of the details and the amounts of such damages, together with documentary evidence of such damages. The **Contractor** may submit any of the above statements within such additional time as may be granted by the **Commissioner** in writing upon written request therefor. Failure of the **Commissioner** to respond in writing to a written request for additional time within thirty (30) **Days** shall be deemed a denial of the request. On failure of the **Contractor** to strictly comply with the foregoing provisions, such claims shall be deemed waived and no right to recover on such claims shall exist. Damages that the **Contractor** may claim in any action or dispute resolution procedure arising under or by reason of this **Contract** shall not be different from or in excess of the statements and documentation made pursuant to this Article 30.

30.2 In addition to the foregoing statements, the **Contractor** shall, upon notice from the **Commissioner**, produce for examination at the **Contractor's** office, by the **Engineer, Architect or Project Manager**, all of its books of account, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**, and submit itself and persons in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.3 In addition to the statements required under Article 28 and this Article 30, the **Contractor** and/or its **Subcontractor** shall, within thirty (30) **Days** upon notice from the **Commissioner** or **Comptroller**, produce for examination at the **Contractor's** and/or **Subcontractor's** office, by a representative of either the **Commissioner** or **Comptroller**, all of its books of account, bid documents, financial statements, accountant workpapers, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**. Further, the **Contractor** and/or its **Subcontractor** shall submit any person in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.4 Unless the information and examination required under Article 30.3 is provided by the **Contractor** and/or its **Subcontractor** upon thirty (30) **Days'** notice from the **Commissioner** or **Comptroller**, or upon the **Commissioner's** or **Comptroller's** written authorization to extend the time to comply, the **City** shall be released from all claims arising under, relating to or by reason of this **Contract**, except for sums certified by the **Commissioner** to be due under the provisions of this **Contract**. It is further stipulated and agreed that no person has the power to waive any of the foregoing provisions and that in any action or dispute resolution procedure against the **City** to recover any sum in excess of the sums certified by the **Commissioner** to be due under or by reason of this **Contract**, the **Contractor** must allege in its complaint and prove, at trial or during such dispute resolution procedure, compliance with the provisions of this Article 30.

30.5 In addition, after the commencement of any action or dispute resolution procedure by the **Contractor** arising under or by reason of this **Contract**, the **City** shall have the right to require the **Contractor** to produce for examination under oath, up until the trial of the action or hearing before the Contract Dispute Resolution Board, the books and documents described in Article 30.3 and submit itself and all persons in its employ for examination under oath. If this Article 30 is not complied with as required, then the **Contractor** hereby consents to the dismissal of the action or dispute resolution procedure.

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

**ARTICLE 31. THE RESIDENT ENGINEER**

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

## ARTICLE 32. THE ENGINEER OR ARCHITECT OR PROJECT MANAGER

32.1 The **Engineer** or **Architect** or **Project Manager**, in addition to those matters elsewhere herein delegated to the **Engineer** and expressly made subject to his/her determination, direction or approval, shall have the power, subject to review by the **Commissioner**:

32.1.1 To determine the amount, quality, and location of the **Work** to be paid for hereunder; and

32.1.2 To determine all questions in relation to the **Work**, to interpret the **Contract Drawings, Specifications, and Addenda**, and to resolve all patent inconsistencies or ambiguities therein; and

32.1.3 To determine how the **Work** of this **Contract** shall be coordinated with **Work** of **Other Contractors** engaged simultaneously on this **Project**, including the power to suspend any part of the **Work**, but not the whole thereof; and

32.1.4 To make minor changes in the **Work** as he/she deems necessary, provided such changes do not result in a net change in the cost to the **City** or to the **Contractor** of the **Work** to be done under the **Contract**; and

32.1.5 To amplify the **Contract Drawings**, add explanatory information and furnish additional **Specifications** and drawings, consistent with this **Contract**.

32.2 The foregoing enumeration shall not imply any limitation upon the power of the **Engineer** or **Architect** or **Project Manager**, for it is the intent of this **Contract** that all of the **Work** shall generally be subject to his/her determination, direction, and approval, except where the determination, direction or approval of someone other than the **Engineer** or **Architect** or **Project Manager** is expressly called for herein.

32.3 The **Engineer** or **Architect** or **Project Manager** shall not, however, have the power to issue an **Extra Work** order, except as specifically designated in writing by the **Commissioner**.

## ARTICLE 33. THE COMMISSIONER

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

33.1.1 To review and make determinations on any and all questions in relation to this **Contract** and its performance; and

33.1.2 To modify or change this **Contract** so as to require the performance of **Extra Work** (subject, however, to the limitations specified in Article 25) or the omission of **Contract Work**; and

33.1.3 To suspend the whole or any part of the **Work** whenever in his/her judgment such suspension is required:

33.1.3(a) In the interest of the **City** generally; or

33.1.3(b) To coordinate the **Work** of the various contractors engaged on this **Project** pursuant to the provisions of Article 12; or

33.1.3(c) To expedite the completion of the entire **Project** even though the completion of this particular **Contract** may thereby be delayed.

#### ARTICLE 34. NO ESTOPPEL

34.1 Neither the **City** nor any **Agency**, official, agent or employee thereof, shall be bound, precluded or estopped by any determination, decision, approval, order, letter, payment or certificate made or given under or in connection with this **Contract** by the **City**, the **Commissioner**, the **Engineer**, the **Resident Engineer**, or any other official, agent or employee of the **City**, either before or after the final completion and acceptance of the **Work** and payment therefor:

34.1.1 From showing the true and correct classification, amount, quality or character of the **Work** actually done; or that any such determination, decision, order, letter, payment or certificate was untrue, incorrect or improperly made in any particular, or that the **Work**, or any part thereof, does not in fact conform to the requirements of this **Contract**; and

34.1.2 From demanding and recovering from the **Contractor** any overpayment made to it, or such damages as the **City** may sustain by reason of the **Contractor's** failure to perform each and every part of its **Contract**.

### CHAPTER VIII LABOR PROVISIONS

#### ARTICLE 35. EMPLOYEES

35.1 The **Contractor** and its **Subcontractors** shall not employ on the **Work**:

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

35.1.2 Any labor, materials or means whose employment, or utilization during the course of this **Contract**, may tend to or in any way cause or result in strikes, work stoppages, delays, suspension of **Work** or similar troubles by workers employed by the **Contractor** or its **Subcontractors**, or by any of the trades working in or about the buildings and premises where **Work** is being performed under this **Contract**, or by **Other Contractors** or their **Subcontractors** pursuant to other contracts, or on any other building or premises owned or operated by the **City**, its **Agencies**, departments, boards or authorities. Any violation by the **Contractor** of this requirement may, upon certification of the **Commissioner**, be considered as proper and sufficient cause for declaring the **Contractor** to be in default, and for the **City** to take action against it as set forth in Chapter X of this **Contract**, or such other article of this **Contract** as the **Commissioner** may deem proper; or

35.1.3 In accordance with Section 220.3-e of the Labor Law of the State of New York (hereinafter "Labor Law"), the **Contractor** and its **Subcontractors** shall not employ on the **Work** any apprentice, unless he/she is a registered individual, under a bona fide program

registered with the New York State Department of Labor. The allowable ratio of apprentices to journey-level workers in any craft classification shall not be greater than the ratio permitted to the **Contractor** as to its work force on any job under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the wage rate determined by the **Comptroller** of the **City** for the classification of **Work** actually performed. The **Contractor** or **Subcontractor** will be required to furnish written evidence of the registration of its program and apprentices as well as all the appropriate ratios and wage rates, for the area of the construction prior to using any apprentices on the **Contract Work**.

35.2 If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand (\$250,000) dollars, all laborers, workers, and mechanics employed in the performance of the **Contract** on the public work site, either by the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by the **Contract**, shall be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration.

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

35.3.1 The **Contractor** shall not take an adverse personnel action with respect to an officer or employee in retaliation for such officer or employee making a report of information concerning conduct which such officer or employee knows or reasonably believes to involve corruption, criminal activity, conflict of interest, gross mismanagement or abuse of authority by any officer or employee relating to this **Contract** to (a) the Commissioner of the Department of Investigation, (b) a member of the New York City Council, the Public Advocate, or the **Comptroller**, or (c) the **CCPO**, **ACCO**, **Agency** head, or **Commissioner**.

35.3.2 If any of the **Contractor's** officers or employees believes that he or she has been the subject of an adverse personnel action in violation of Article 35.3.1, he or she shall be entitled to bring a cause of action against the **Contractor** to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (a) an injunction to restrain continued retaliation, (b) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (c) reinstatement of full fringe benefits and seniority rights, (d) payment of two times back pay, plus interest, and (e) compensation for any special damages sustained as a result of the retaliation, including litigation costs and reasonable attorney's fees.

35.3.3 The **Contractor** shall post a notice provided by the **City** in a prominent and accessible place on any site where work pursuant to the **Contract** is performed that contains information about:

35.3.3(a) how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising out of or in connection with the **Contract**; and

35.3.3(b) the rights and remedies afforded to its employees under Administrative Code sections 7-805 (the New York City False Claims Act) and 12-113 (the Whistleblower Protection Expansion Act) for lawful acts taken in connection with the reporting of allegations of fraud, false claims, criminality or corruption in connection with the **Contract**.

35.3.4 For the purposes of this Article 35.3, "adverse personnel action" includes dismissal, demotion, suspension, disciplinary action, negative performance evaluation, any action resulting in loss of staff, office space, equipment or other benefit, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected officer or employee.

35.3.5 This Article 35.3 is applicable to all of the **Contractor's Subcontractors** having subcontracts with a value in excess of \$100,000; accordingly, the **Contractor** shall include this rider in all subcontracts with a value a value in excess of \$100,000.

35.4 Article 35.3 is not applicable to this **Contract** if it is valued at \$100,000 or less. Articles 35.3.1, 35.3.2, 35.3.4, and 35.3.5 are not applicable to this **Contract** if it was solicited pursuant to a finding of an emergency.

### ARTICLE 36. NO DISCRIMINATION

36.1 The **Contractor** specifically agrees, as required by Labor Law Section 220-e, as amended, that:

36.1.1 In the hiring of employees for the performance of **Work** under this **Contract** or any subcontract hereunder, neither the **Contractor, Subcontractor**, nor any person acting on behalf of such **Contractor** or **Subcontractor**, shall by reason of race, creed, color or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the **Work** to which the employment relates;

36.1.2 Neither the **Contractor, Subcontractor**, nor any person on its behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of **Work** under this **Contract** on account of race, creed, color or national origin;

36.1.3 There may be deducted from the amount payable to the **Contractor** by the **City** under this **Contract** a penalty of fifty (\$50.00) dollars for each person for each **Day** during which such person was discriminated against or intimidated in violation of the provisions of this **Contract**; and

36.1.4 This **Contract** may be cancelled or terminated by the **City** and all moneys due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this Article 36.

36.1.5 This Article 36 covers all construction, alteration and repair of any public building or public work occurring in the State of New York and the manufacture, sale, and distribution of materials, equipment, and supplies to the extent that such operations are performed within the State of New York pursuant to this **Contract**.

36.2 The **Contractor** specifically agrees, as required by Section 6-108 of the Administrative Code, as amended, that:

36.2.1 It shall be unlawful for any person engaged in the construction, alteration or repair of buildings or engaged in the construction or repair of streets or highways pursuant to a **Contract** with the **City** or engaged in the manufacture, sale or distribution of materials, equipment or supplies pursuant to a **Contract** with the **City** to refuse to employ or to refuse to continue in any employment any person on account of the race, color or creed of such person.

36.2.2 It shall be unlawful for any person or any servant, agent or employee of any person, described in Article 36.1.2, to ask, indicate or transmit, orally or in writing, directly or indirectly, the race, color or creed or religious affiliation of any person employed or seeking employment from such person, firm or corporation.

36.2.3 Breach of the foregoing provisions shall be deemed a violation of a material provision of this **Contract**.

36.2.4 Any person, or the employee, manager or owner of or officer of such firm or corporation who shall violate any of the provisions of this Article 36.2 shall, upon conviction thereof, be punished by a fine of not more than one hundred (\$100.00) dollars or by imprisonment for not more than thirty (30) **Days**, or both.

36.3 This **Contract** is subject to the requirements of Executive Order No. 50 (1980) ("E.O. 50"), as revised, and the rules and regulations promulgated thereunder. No contract will be awarded unless and until these requirements have been complied with in their entirety. By signing this **Contract**, the **Contractor** agrees that it:

36.3.1 Will not engage in any unlawful discrimination against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability, marital status or sexual orientation with respect to all employment decisions including, but not limited to, recruitment, hiring, upgrading, demotion, downgrading, transfer, training, rates of pay or other forms of compensation, layoff, termination, and all other terms and conditions of employment; and

36.3.2 Will not engage in any unlawful discrimination in the selection of **Subcontractors** on the basis of the owner's race, color, creed, national origin, sex, age, disability, marital status or sexual orientation; and

36.3.3 Will state in all solicitations or advertisements for employees placed by or on behalf of the **Contractor** that all qualified applicants will receive consideration for employment without unlawful discrimination based on race, creed, color, national origin, sex, age, citizens status, disability, marital status, sexual orientation, or that it is an equal employment opportunity employer; and

36.3.4 Will send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or memorandum of understanding, written notification of its equal employment opportunity commitments under E.O. 50 and the rules and regulations promulgated thereunder; and

36.3.5 Will furnish, before the award of the **Contract**, all information and reports, including an employment report, that are required by E.O. 50, the rules and regulations promulgated thereunder, and orders of the City Department of Business Services, Division of Labor Services (**DLS**) and will permit access to its books, records, and accounts by the **DLS** for the purposes of investigation to ascertain compliance with such rules, regulations, and orders.

36.4 The **Contractor** understands that in the event of its noncompliance with the nondiscrimination clauses of this **Contract** or with any of such rules, regulations, or orders, such noncompliance shall constitute a material breach of this **Contract** and noncompliance with E.O. 50 and the rules and regulations promulgated thereunder. After a hearing held pursuant to the rules of the **DLS**, the Director of the **DLS** may direct the **Commissioner** to impose any or all of the following sanctions:

36.4.1 Disapproval of the **Contractor**; and/or

36.4.2 Suspension or termination of the **Contract**; and/or

36.4.3 Declaring the **Contractor** in default; and/or

36.4.4 In lieu of any of the foregoing sanctions, the Director of the **DLS** may impose an employment program.

In addition to any actions taken under this **Contract**, failure to comply with E.O. 50 and the rules and regulations promulgated thereunder, in one or more instances, may result in a **City Agency** declaring the **Contractor** to be non-responsible in future procurements. The **Contractor** further agrees that it will refrain from entering into any **Contract** or **Contract** modification subject to E.O. 50 and the rules and regulations promulgated thereunder with a **Subcontractor** who is not in compliance with the requirements of E.O. 50 and the rules and regulations promulgated thereunder.

36.5 The **Contractor** specifically agrees, as required by Section 6-123 of the Administrative Code, that:

36.5.1 The **Contractor** will not engage in any unlawful discriminatory practice in violation of Title 8 of the Administrative Code; and

36.5.2 Any failure to comply with this Article 36.5 may subject the **Contractor** to the remedies set forth in Section 6-123 of the Administrative Code, including, where appropriate, sanctions such as withholding of payment, imposition of an employment program, finding the **Contractor** to be in default, cancellation of the **Contract**, or any other sanction or remedy provided by Law or **Contract**.

### ARTICLE 37. LABOR LAW REQUIREMENTS

37.1 The **Contractor** shall strictly comply with all applicable provisions of the Labor Law, as amended. Such compliance is a material term of this **Contract**.

37.2 The **Contractor** specifically agrees, as required by Labor Law Sections 220 and 220-d, as amended, that:

37.2.1 Hours of **Work**: No laborer, worker, or mechanic in the employ of the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by this **Contract** shall be permitted or required to work more than eight (8) hours in any one (1) **Day**, or more than five (5) **Days** in any one (1) week, except as provided in the Labor Law and in cases of extraordinary emergency including fire, flood, or danger to life or property, or in the case of national emergency when so proclaimed by the President of the United States of America.

37.2.2 In situations in which there are not sufficient laborers, workers, and mechanics who may be employed to carry on expeditiously the **Work** contemplated by this **Contract** as a result of such restrictions upon the number of hours and **Days** of labor, and the immediate commencement or prosecution or completion without undue delay of the **Work** is necessary for the preservation of the **Site** and/or for the protection of the life and limb of the persons using the same, such laborers, workers, and mechanics shall be permitted or required to



work more than eight (8) hours in any one (1) **Day**; or five (5) **Days** in any one (1) week; provided, however, that upon application of any **Contractor**, the **Commissioner** shall have first certified to the Commissioner of Labor of the State of New York (hereinafter "Commissioner of Labor") that such public **Work** is of an important nature and that a delay in carrying it to completion would result in serious disadvantage to the public; and provided, further, that such Commissioner of Labor shall have determined that such an emergency does in fact exist as provided in Labor Law Section 220.2.

37.2.3 Failure of the **Commissioner** to make such a certification to the Commissioner of Labor shall not entitle the **Contractor** to damages for delay or for any cause whatsoever.

37.2.4 Prevailing Rate of Wages: The wages to be paid for a legal day's **Work** to laborers, workers, or mechanics employed upon the **Work** contemplated by this **Contract** or upon any materials to be used thereon shall not be less than the "prevailing rate of wage" as defined in Labor Law Section 220, and as fixed by the **Comptroller** in the attached Schedule of Wage Rates and in updated schedules thereof. The prevailing wage rates and supplemental benefits to be paid are those in effect at the time the **Work** is being performed.

37.2.5 Requests for interpretation or correction in the Information for Bidders includes all requests for clarification of the classification of trades to be employed in the performance of the **Work** under this **Contract**. In the event that a trade not listed in the **Contract** is in fact employed during the performance of this **Contract**, the **Contractor** shall be required to obtain from the **Agency** the prevailing wage rates and supplementary benefits for the trades used and to complete the performance of this **Contract** at the price at which the **Contract** was awarded.

37.2.6 Minimum Wages: Except for employees whose wage is required to be fixed pursuant to Labor Law Section 220, all persons employed by the **Contractor** and any **Subcontractor** in the manufacture or furnishing of the supplies, materials, or equipment, or the furnishing of work, labor, or services, used in the performance of this **Contract**, shall be paid, without subsequent deduction or rebate unless expressly authorized by **Law**, not less than the sum mandated by **Law**.

37.3 Working Conditions: No part of the **Work**, labor or services shall be performed or rendered by the **Contractor** in any plants, factories, buildings or surroundings or under working conditions which are unsanitary or hazardous or dangerous to the health and safety of employees engaged in the performance of this **Contract**. Compliance with the safety, sanitary, and factory inspection **Laws** of the state in which the **Work** is to be performed shall be prima facie evidence of compliance with this Article 37.3.

37.4 Prevailing Wage Enforcement: The **Contractor** agrees to pay for all costs incurred by the **City** in enforcing prevailing wage requirements, including the cost of any investigation conducted by or on behalf of the **Agency** or the **Comptroller**, where the **City** discovers a failure to comply with any of the requirements of this Article 37 by the **Contractor** or its **Subcontractor(s)**. The **Contractor** also agrees that, should it fail or refuse to pay for any such investigation, the **Agency** is hereby authorized to deduct from a **Contractor's** account an amount equal to the cost of such investigation.

37.4.1 The Labor Law Section 220 and Section 220-d, as amended, provide that this **Contract** shall be forfeited and no sum paid for any **Work** done hereunder on a second conviction for willfully paying less than:

37.4.1(a) The stipulated prevailing wage scale as provided in Labor Law section 220, as amended, or

37.4.1(b) The stipulated minimum hourly wage scale as provided in Labor Law section 220-d, as amended.

37.4.2 For any breach or violation of either working conditions (Article 37.3) or minimum wages (Article 37.2.6) provisions, the party responsible therefor shall be liable to the **City** for liquidated damages, which may be withheld from any amounts due on any contracts with the **City** of such party responsible, or may be recovered in actions brought by the **City** Corporation Counsel in the name of the **City**, in addition to damages for any other breach of this **Contract**, for a sum equal to the amount of any underpayment of wages due to any employee engaged in the performance of this **Contract**. In addition, the **Commissioner** shall have the right to cancel contracts and enter into other contracts for the completion of the original contract, with or without public letting, and the original **Contractor** shall be liable for any additional cost. All sums withheld or recovered as deductions, rebates, refunds, or underpayment of wages hereunder, shall be held in a special deposit account and shall be paid without interest, on order of the **Comptroller**, directly to the employees who have been paid less than minimum rates of pay as set forth herein and on whose account such sums were withheld or recovered, provided that no claims by employees for such payments shall be entertained unless made within two (2) years from the date of actual notice to the **Contractor** of the withholding or recovery of such sums by the **City**.

37.4.3 A determination by the **Comptroller** that a **Contractor** and/or its **Subcontractor** willfully violated Labor Law Section 220 will be forwarded to the **City's** five District Attorneys for review.

37.4.4 The **Contractor's** or **Subcontractor's** noncompliance with this Article 37.4 and Labor Law Section 220 may result in an unsatisfactory performance evaluation and the **Comptroller** may also find and determine that the **Contractor** or **Subcontractor** willfully violated the New York Labor Law.

37.4.4(a) An unsatisfactory performance evaluation for noncompliance with this Article 37.4 may result in a determination that the **Contractor** is a non-responsible bidder on subsequent procurements with the **City** and thus a rejection of a future award of a contract with the **City**, as well as any other sanctions provided for by **Law**.

37.4.4(b) Labor Law Section 220-b, as amended, provides that when two (2) final determinations have been rendered against a **Contractor** or **Subcontractor** within any consecutive six (6) year period determining that such **Contractor** or **Subcontractor** has willfully failed to pay the prevailing rate of wages or to provide supplements in accordance with the Labor Law and this Article 37.4, whether such failures were concurrent or consecutive and whether or not such final determinations concerning separate public works projects are rendered simultaneously, such **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public works contract with the **City** for a period of five (5) years from the second final determination. If the final determination involves the falsification of payroll records or the kickback of wages or supplements, the **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public works contract with the **City** for a period of five (5) years from the first final determination.

37.4.4(c) Labor Law Section 220, as amended, provides that the **Contractor** or **Subcontractor** found to have violated this Article 37.4 may be directed to make payment of wages or supplements including interest found to be due, and the **Contractor** or **Subcontractor** may be directed to make payment of a further sum as

a civil penalty in an amount not exceeding twenty-five (25%) percent of the total amount found to be due.

37.5 The **Contractor** and its **Subcontractors** shall within ten (10) **Days** after mailing of a Notice of Award or written order, post in prominent and conspicuous places in each and every plant, factory, building, and structure where employees of the **Contractor** and its **Subcontractors** engaged in the performance of this **Contract** are employed, notices furnished by the **City**, in relation to prevailing wages and supplements, minimum wages, and other stipulations contained in Sections 220 and 220-h of the Labor Law, and the **Contractor** and its **Subcontractors** shall continue to keep such notices posted in such prominent and conspicuous places until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services required to be furnished or rendered under this **Contract**.

37.6 The **Contractor** shall strictly comply with all of the provisions of Articles 37.6.1 through 37.6.5, and provide for all workers, laborers or mechanics in its employ, the following:

37.6.1 Notices Posted At **Site**: Post, in a location designated by the **City**, schedules of prevailing wages and supplements for this **Project**, a copy of all re-determinations of such schedules for the **Project**, the Workers' Compensation Law Section 51 notice, all other notices required by **Law** to be posted at the **Site**, the **City** notice that this **Project** is a public works project on which each worker is entitled to receive the prevailing wages and supplements for the occupation at which he or she is working, and all other notices which the **City** directs the **Contractor** to post. The **Contractor** shall provide a surface for such notices which is satisfactory to the **City**. The **Contractor** shall maintain and keep current such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. The **Contractor** shall post such notices before commencing any **Work** on the **Site** and shall maintain such notices until all **Work** on the **Site** is complete; and

37.6.2 Daily **Site** Sign-in Sheets: Maintain daily **Site** sign-in sheets, and require that **Subcontractors** maintain daily **Site** sign-in sheets for its employees, which include blank spaces for an employee's name to be both printed and signed, job title, date started and Social Security number, the time the employee began work and the time the employee left work, until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services to be furnished or rendered under this **Contract** unless exception is granted by the **Comptroller** upon application by the **Agency**. In the alternative, subject to the approval of the **CCPO**, the **Contractor** and **Subcontractor** may maintain an electronic or biometric sign-in system, which provides the information required by this Article 37.6.2; and

37.6.3 Individual Employee Information Notices: Distribute a notice to each worker, laborer or mechanic employed under this **Contract**, in a form provided by the **Agency**, that this **Project** is a public works project on which each worker, laborer or mechanic is entitled to receive the prevailing rate of wages and supplements for the occupation at which he or she is working. If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand (\$250,000) dollars, such notice shall also include a statement that each worker, laborer or mechanic must be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration. Such notice shall be distributed to each worker before he or she starts performing any **Work** of this **Contract** and with the first paycheck after July first of each year. "Worker, laborer or mechanic" includes employees of the **Contractor** and all **Subcontractors** and all employees of suppliers entering the **Site**. At the time of distribution, the **Contractor** shall have each worker, laborer or mechanic sign a statement, in a form provided by the **Agency**, certifying that the worker has received the notice required by this

Article 37.6.3, which signed statement shall be maintained with the payroll records required by this **Contract**; and

37.6.3(a) The **Contractor** and each **Subcontractor** shall notify each worker, laborer or mechanic employed under this **Contract** in writing of the prevailing rate of wages for their particular job classification. Such notification shall be given to every worker, laborer, and mechanic on their first pay stub and with every pay stub thereafter; and

37.6.4 **Site Laminated Identification Badges:** The **Contractor** shall provide laminated identification badges which include a photograph of the worker's, laborer's or mechanic's face and indicate the worker's, laborer's or mechanic's name, trade, employer's name, and employment starting date (month/day/year). Further, the **Contractor** shall require as a condition of employment on the **Site**, that each and every worker, laborer or mechanic wear the laminated identification badge at all times and that it may be seen by any representative of the **City**. The **Commissioner** may grant a written waiver from the requirement that the laminated identification badge include a photograph if the **Contractor** demonstrates that the identity of an individual wearing a laminated identification badge can be easily verified by another method; and

37.6.5 **Language Other Than English Used On Site:** Provide the **ACCO** notice when three (3) or more employees (worker and/or laborer and/or mechanic) on the **Site**, at any time, speak a language other than English. The **ACCO** will then provide the **Contractor** the notices described in Article 37.6.1 in that language or languages as may be required. The **Contractor** is responsible for all distributions under this Article 37; and

37.6.6 **Provision of Records:** The **Contractor** and **Subcontractor(s)** shall produce within five (5) **Days** on the **Site** of the **Work** and upon a written order of the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, or the **Comptroller**, such records as are required to be kept by this Article 37.6; and

37.6.7 The **Contractor** and **Subcontractor(s)** shall pay employees by check or direct deposit. If this **Contract** is for an amount greater than one million (\$1,000,000) dollars, checks issued by the **Contractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**). For any subcontract for an amount greater than seven hundred fifty thousand (\$750,000) dollars, checks issued by a **Subcontractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**); and

37.6.8 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 37.6.1 through 37.6.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

37.7 The **Contractor** and its **Subcontractors** shall keep such employment and payroll records as are required by Section 220 of the Labor Law. The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of this Article 37.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

37.8 At the time the **Contractor** makes application for each partial payment and for final payment, the **Contractor** shall submit to the **Commissioner** a written payroll certification, in the form provided by this **Contract**, of compliance with the prevailing wage, minimum wage, and other provisions and stipulations required by Labor Law Section 220 and of compliance with the training requirements of

Labor Law Section 220-h set forth in Article 35.2. This certification of compliance shall be a condition precedent to payment and no payment shall be made to the **Contractor** unless and until each such certification shall have been submitted to and received by the **Commissioner**.

37.9 This **Contract** is executed by the **Contractor** with the express warranty and representation that the **Contractor** is not disqualified under the provisions of Section 220 of the Labor Law from the award of the **Contract**.

37.10 Any breach or violation of any of the foregoing shall be deemed a breach or violation of a material provision of this **Contract**, and grounds for cancellation thereof by the **City**.

### **ARTICLE 38. PAYROLL REPORTS**

38.1 The **Contractor** and its **Subcontractor(s)** shall maintain on the **Site** during the performance of the **Work** the original payrolls or transcripts thereof which the **Contractor** and its **Subcontractor(s)** are required to maintain and shall submit such original payrolls or transcripts, subscribed and affirmed by it as true, within thirty (30) **Days** after issuance of its first payroll, and every thirty (30) **Days** thereafter, pursuant to Labor Law Section 220(3-a)(a)(iii). The **Contractor** and **Subcontractor(s)** shall submit such original payrolls or transcripts along with each and every payment requisition. If payment requisitions are not submitted at least once a month, the **Contractor** and its **Subcontractor(s)** shall submit original payrolls and transcripts both along with its payment requisitions and independently of its payment requisitions.

38.2 The **Contractor** shall maintain payrolls or transcripts thereof for six (6) years from the date of completion of the **Work** on this **Contract**. If such payrolls and transcripts are maintained outside of New York City after the completion of the **Work** and their production is required pursuant to this Article 38, the **Contractor** shall produce such records in New York City upon request by the **City**.

38.3 The **Contractor** and **Subcontractor(s)** shall comply with any written order, direction, or request made by the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law Investigator(s)**, or the **Comptroller**, to provide to the requesting party any of the following information and/or records within five (5) **Days** of such written order, direction, or request:

38.3.1 Such original payrolls or transcripts thereof subscribed and affirmed by it as true and the statements signed by each worker pursuant to this Chapter VIII; and/or

38.3.2 Attendance sheets for each **Day** on which any employee of the **Contractor** and/or any of the **Subcontractor(s)** performed **Work** on the **Site**, which attendance sheet shall be in a form acceptable to the **Agency** and shall provide information acceptable to the **Agency** to identify each such employee; and/or

38.3.3 Any other information to satisfy the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law Investigator(s)** or the **Comptroller**, that this Chapter VIII and the Labor Law, as to the hours of employment and prevailing rates of wages and/or supplemental benefits, are being observed.

38.4 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 38.1 and/or 38.2 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

### ARTICLE 39. DUST HAZARDS

39.1 Should a harmful dust hazard be created in performing the **Work** of this **Contract**, for the elimination of which appliances or methods have been approved by the Board of Standards and Appeals of the City of New York, such appliances and methods shall be installed, maintained, and effectively operated during the continuance of such harmful dust hazard. Failure to comply with this provision after notice shall make this **Contract** voidable at the sole discretion of the **City**.

## CHAPTER IX PARTIAL AND FINAL PAYMENTS

### ARTICLE 40. CONTRACT PRICE

40.1 The **City** shall pay, and the **Contractor** agrees to accept, in full consideration for the **Contractor's** performance of the **Work** subject to the terms and conditions hereof, the lump sum price or unit prices for which this **Contract** was awarded, plus the amount required to be paid for any **Extra Work** ordered by the **Commissioner** under Article 25, less credit for any **Work** omitted pursuant to Article 29.

### ARTICLE 41. BID BREAKDOWN ON LUMP SUM

41.1 Within fifteen (15) **Days** after the commencement date specified in the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Resident Engineer**, the **Contractor** shall submit to the **Resident Engineer** a breakdown of its bid price, or of lump sums bid for items of the **Contract**, showing the various operations to be performed under the **Contract**, as directed in the progress schedule required under Article 9, and the value of each of such operations, the total of such items to equal the lump sum price bid. Said breakdown must be approved in writing by the **Resident Engineer**.

41.2 No partial payment will be approved until the **Contractor** submits a bid breakdown that is acceptable to the **Resident Engineer**.

41.3 The **Contractor** shall also submit such other information relating to the bid breakdown as directed by the **Resident Engineer**. Thereafter, the breakdown may be used only for checking the **Contractor's** applications for partial payments hereunder, but shall not be binding upon the **City**, the **Commissioner**, or the **Engineer** for any purpose whatsoever.

### ARTICLE 42. PARTIAL PAYMENTS

42.1 From time to time as the **Work** progresses satisfactorily, but not more often than once each calendar month (except where the **Commissioner** approves in writing the submission of invoices on a more frequent basis and for invoices relating to **Work** performed pursuant to a change order), the **Contractor** may submit to the **Engineer** a requisition for a partial payment in the prescribed form, which shall contain an estimate of the quantity and the fair value of the **Work** done during the payment period.

42.2 Partial payments may be made for materials, fixtures, and equipment in advance of their actual incorporation in the **Work**, as the **Commissioner** may approve, and upon the terms and conditions set forth in the General Conditions.

42.3 The **Contractor** shall also submit to the **Commissioner** in connection with every application for partial payment a verified statement in the form prescribed by the **Comptroller** setting forth the information required under Labor Law Section 220-a.

42.4 Within thirty (30) **Days** after receipt of a satisfactory payment application, and within sixty (60) **Days** after receipt of a satisfactory payment application in relation to **Work** performed pursuant to a change order, the **Engineer** will prepare and certify, and the **Commissioner** will approve, a voucher for a partial payment in the amount of such approved estimate, less any and all deductions authorized to be made by the **Commissioner** under the terms of this **Contract** or by **Law**.

#### **ARTICLE 43. PROMPT PAYMENT**

43.1 The Prompt Payment provisions of the **PPB** Rules in effect at the time of the bid will be applicable to payments made under this **Contract**. The provisions require the payment to the **Contractor** of interest on payments made after the required payment date, except as set forth in the **PPB** Rules.

43.2 The **Contractor** shall submit a proper invoice to receive payment, except where the **Contract** provides that the **Contractor** will be paid at predetermined intervals without having to submit an invoice for each scheduled payment.

43.3 Determination of interest due will be made in accordance with the **PPB** Rules.

43.4 If the **Contractor** is paid interest, the proportionate share(s) of that interest shall be forwarded by the **Contractor** to its **Subcontractor(s)**.

43.5 The **Contractor** shall pay each **Subcontractor** or **Materialman** not later than seven (7) **Days** after receipt of payment out of amounts paid to the **Contractor** by the **City** for **Work** performed by the **Subcontractor** or **Materialman** under this **Contract**.

43.5.1 If **Contractor** fails to make any payment to any **Subcontractor** or **Materialman** within seven (7) **Days** after receipt of payment by the **City** pursuant to this Article 43.5, then the **Contractor** shall pay interest on amounts due to such **Subcontractor** or **Materialman** at the rate of interest in effect on the date such payment is made by the **Contractor** computed in accordance with Section 756-b (1)(b) of the New York General Business Law. Accrual of interest shall commence on the **Day** immediately following the expiration of the seventh **Day** following receipt of payment by the **Contractor** from the **City** and shall end on the date on which payment is made.

43.6 The **Contractor** shall include in each of its subcontracts a provision requiring each **Subcontractor** to make payment to each of its **Subcontractors** or **Materialmen** for **Work** performed under this **Contract** in the same manner and within the same time period set forth above.

#### **ARTICLE 44. SUBSTANTIAL COMPLETION PAYMENT**

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

44.1.1 A final verified statement of any pending Article 27 disputes in accordance with the **PPB** Rules and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) setting forth with respect to each

such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the **Contractor** claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay.

44.1.1(a) With respect to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City Corporation Counsel** shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 44.1.1(a) is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor** upon acceptance of the **Substantial Completion** payment pursuant to this Article 44, will have waived any such claims.

44.1.2 A **Final Approved Punch List**.

44.1.3 Where required, a request for an extension of time to achieve **Substantial Completion** or final extension of time.

44.2 The **Commissioner** shall issue a voucher calling for payment of any part or all of the balance due for **Work** performed under the **Contract**, including monies retained under Article 21, less any and all deductions authorized to be made by the **Commissioner**, under this **Contract** or by **Law**, and less twice the amount the **Commissioner** considers necessary to ensure the completion of the balance of the **Work** by the **Contractor**. Such a payment shall be considered a partial and not a final payment. No **Substantial Completion** payment shall be made under this Article 44 where the **Contractor** failed to complete the **Work** within the time fixed for such completion in the Schedule A of the General Conditions, or within the time to which completion may have been extended, until an extension or extensions of time for the completion of **Work** have been acted upon pursuant to Article 13.

44.3 No further partial payments shall be made to the **Contractor** after **Substantial Completion**, except the **Substantial Completion** payment and payment pursuant to any **Contractor's** requisition that were properly filed with the **Commissioner** prior to the date of **Substantial Completion**; however, the **Commissioner** may grant a waiver for further partial payments after the date of **Substantial Completion** to permit payments for change order **Work** and/or release of retainage and deposits pursuant to Articles 21 and 24. Such waiver shall be in writing.

44.4 The **Contractor** acknowledges that nothing contained in this Article 44 is intended to or shall in any way diminish the force and effect of Article 13.

#### **ARTICLE 45. FINAL PAYMENT**

45.1 After completion and **Final Acceptance** of the **Work**, the **Contractor** shall submit all required certificates and documents, together with a requisition for the balance claimed to be due under the **Contract**, less the amount authorized to be retained for maintenance under Article 24. Such submission shall be within 90 days of the date of the **Commissioner's** written determination of **Final Acceptance**, or within such additional time as may be granted by the **Commissioner** in writing. If the **Contractor** fails to submit all required certificates and documents within the time allowed, no payment of the balance claimed shall be made to the **Contractor** and the **Contractor** shall be deemed to have forfeited its right to



payment of any balance claimed. A verified statement similar to that required in connection with applications for partial payments shall also be submitted to the **Commissioner**.

45.2 Amended Verified Statement of Claims: The **Contractor** shall also submit with the final requisition any amendments to the final verified statement of any pending dispute resolution procedures in accordance with the **PPB** Rules and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) that have occurred subsequent to **Substantial Completion**, setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each such item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the **Contractor** claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay. With reference to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City Corporation Counsel** shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 45.2, is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor**, upon acceptance of the Final Payment pursuant to Article 46, will have waived any such claims.

45.3 Preparation of Final Voucher: Upon determining the balance due hereunder other than on account of claims, the **Engineer** will prepare and certify, for the **Commissioner's** approval, a voucher for final payment in that amount less any and all deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**. In the case of a lump sum **Contract**, the **Commissioner** shall certify the voucher for final payment within thirty (30) **Days** from the date of completion and acceptance of the **Work**, provided all requests for extensions of time have been acted upon.

45.3.1 All prior certificates and vouchers upon which partial payments were made, being merely estimates made to enable the **Contractor** to prosecute the **Work** more advantageously, shall be subject to correction in the final voucher, and the certification of the **Engineer** thereon and the approval of the **Commissioner** thereof, shall be conditions precedent to the right of the **Contractor** to receive any money hereunder. Such final voucher shall be binding and conclusive upon the **Contractor**.

45.3.2 Payment pursuant to such final voucher, less any deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**, shall constitute the final payment, and shall be made by the **Comptroller** within thirty (30) **Days** after the filing of such voucher in his/her office.

45.4 The **Contractor** acknowledges that nothing contained in this Article 45 is intended to or shall in any way diminish the force and effect of Article 13.

#### **ARTICLE 46. ACCEPTANCE OF FINAL PAYMENT**

46.1 The acceptance by the **Contractor**, or by anyone claiming by or through it, of the final payment, whether such payment be made pursuant to any judgment of any court, or otherwise, shall constitute and operate as a release of the **City** from any and all claims of and liability to the **Contractor** for anything heretofore done or furnished for the **Contractor** relating to or arising out of this **Contract** and the **Work** done hereunder, and for any prior act, neglect or default on the part of the **City** or any of its officials, agents or employees, excepting only a claim against the **City** for the amounts deducted or retained in accordance with the terms and provisions of this **Contract** or by **Law**, and excepting any

claims, not otherwise waived, or any pending dispute resolution procedures which are contained in the verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45.

46.2 The **Contractor** is warned that the execution by it of a release, in connection with the acceptance of the final payment, containing language purporting to reserve claims other than those herein specifically excepted from the operation of this Article 46, or those for amounts deducted by the **Commissioner** from the final requisition or from the final payment as certified by the **Engineer** and approved by the **Commissioner**, shall not be effective to reserve such claims, anything stated to the **Contractor** orally or in writing by any official, agent or employee of the **City** to the contrary notwithstanding.

46.3 Should the **Contractor** refuse to accept the final payment as tendered by the **Comptroller**, it shall constitute a waiver of any right to interest thereon.

46.4 The **Contractor**, however, shall not be barred by this Article 46 from commencing an action for breach of **Contract** to the extent permitted by **Law** and by the terms of the **Contract** for any claims that are contained in the verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45 or that arose after submission of the final payment requisition, provided that a detailed and verified statement of claim is served upon the contracting **Agency** and **Comptroller** not later than forty (40) **Days** after the making of such final payment by electronic funds transfer (EFT) or the mailing of such final payment. The statement shall specify the items upon which the claim will be based and any such claim shall be limited to such items.

#### **ARTICLE 47. APPROVAL BY PUBLIC DESIGN COMMISSION**

47.1 All works of art, including paintings, mural decorations, stained glass, statues, bas-reliefs, and other sculptures, monuments, fountains, arches, and other structures of a permanent character intended for ornament or commemoration, and every design of the same to be used in the performance of this **Contract**, and the design of all bridges, approaches, buildings, gates, fences, lamps, or structures to be erected, pursuant to the terms of this **Contract**, shall be submitted to the Art Commission, d/b/a the Public Design Commission of the City of New York, and shall be approved by the Public Design Commission prior to the erection or placing in position of the same. The final payment shall not become due or payable under this **Contract** unless and until the Public Design Commission shall certify that the design for the **Work** herein contracted for has been approved by the said Public Design Commission, and that the same has been executed in substantial accordance with the design so approved, pursuant to the provisions of Chapter 37, Section 854 of the **City Charter**, as amended.

### **CHAPTER X CONTRACTOR'S DEFAULT**

#### **ARTICLE 48. COMMISSIONER'S RIGHT TO DECLARE CONTRACTOR IN DEFAULT**

48.1 In addition to those instances specifically referred to in other Articles herein, the **Commissioner** shall have the right to declare the **Contractor** in default of this **Contract** if:

48.1.1 The **Contractor** fails to commence **Work** when notified to do so by the **Commissioner**; or  
if

48.1.2 The **Contractor** shall abandon the **Work**; or if

48.1.3 The **Contractor** shall refuse to proceed with the **Work** when and as directed by the **Commissioner**; or if

48.1.4 The **Contractor** shall, without just cause, reduce its working force to a number which, if maintained, would be insufficient, in the opinion of the **Commissioner**, to complete the **Work** in accordance with the progress schedule; or if

48.1.5 The **Contractor** shall fail or refuse to increase sufficiently such working force when ordered to do so by the **Commissioner**; or if

48.1.6 The **Contractor** shall sublet, assign, transfer, convert or otherwise dispose of this **Contract** other than as herein specified; or sell or assign a majority interest in the **Contractor**; or if

48.1.7 The **Contractor** fails to secure and maintain all required insurance; or if

48.1.8 A receiver or receivers are appointed to take charge of the **Contractor's** property or affairs; or if

48.1.9 The **Commissioner** shall be of the opinion that the **Contractor** is or has been unnecessarily or unreasonably or willfully delaying the performance and completion of the **Work**, or the award of necessary subcontracts, or the placing of necessary material and equipment orders; or if

48.1.10 The **Commissioner** shall be of the opinion that the **Contractor** is or has been willfully or in bad faith violating any of the provisions of this **Contract**; or if

48.1.11 The **Commissioner** shall be of the opinion that the **Work** cannot be completed within the time herein provided therefor or within the time to which such completion may have been extended; provided, however, that the impossibility of timely completion is, in the **Commissioner's** opinion, attributable to conditions within the **Contractor's** control; or if

48.1.12 The **Work** is not completed within the time herein provided therefor or within the time to which the **Contractor** may be entitled to have such completion extended; or if

48.1.13 Any statement or representation of the **Contractor** in the **Contract** or in any document submitted by the **Contractor** with respect to the **Work**, the **Project**, or the **Contract** (or for purposes of securing the **Contract**) was untrue or incorrect when made; or if

48.1.14 The **Contractor** or any of its officers, directors, partners, five (5%) percent shareholders, principals, or other persons substantially involved in its activities, commits any of the acts or omissions specified as the grounds for debarment in the **PPB** Rules.

48.2 Before the **Commissioner** shall exercise his/her right to declare the **Contractor** in default, the **Commissioner** shall give the **Contractor** an opportunity to be heard, upon not less than two (2) **Days** notice.

#### ARTICLE 49. EXERCISE OF THE RIGHT TO DECLARE DEFAULT

49.1 The right to declare the **Contractor** in default for any of the grounds specified or referred to in Article 48 shall be exercised by sending the **Contractor** a notice, signed by the **Commissioner**, setting forth the ground or grounds upon which such default is declared (hereinafter referred to as a "Notice of Default").

49.2 The **Commissioner's** determination that the **Contractor** is in default shall be conclusive, final, and binding on the parties and such a finding shall preclude the **Contractor** from commencing a plenary action for any damages relating to the **Contract**. If the **Contractor** protests the determination of the **Commissioner**, the **Contractor** may commence an action in a court of competent jurisdiction of the State of New York under Article 78 of the New York Civil Practice Law and Rules.

#### ARTICLE 50. QUITTING THE SITE

50.1 Upon receipt of such notice the **Contractor** shall immediately discontinue all further operations under this **Contract** and shall immediately quit the **Site**, leaving untouched all plant, materials, equipment, tools, and supplies then on the **Site**.

#### ARTICLE 51. COMPLETION OF THE WORK

51.1 The **Commissioner**, after declaring the **Contractor** in default, may then have the **Work** completed by such means and in such manner, by contract with or without public letting, or otherwise, as he/she may deem advisable, utilizing for such purpose such of the **Contractor's** plant, materials, equipment, tools, and supplies remaining on the **Site**, and also such **Subcontractors**, as he/she may deem advisable.

51.2 After such completion, the **Commissioner** shall make a certificate stating the expense incurred in such completion, which shall include the cost of re-letting and also the total amount of liquidated damages (at the rate provided for in the **Contract**) from the date when the **Work** should have been completed by the **Contractor** in accordance with the terms hereof to the date of actual completion of the **Work**. Such certificate shall be binding and conclusive upon the **Contractor**, its sureties, and any person claiming under the **Contractor**, as to the amount thereof.

51.3 The expense of such completion, including any and all related and incidental costs, as so certified by the **Commissioner**, and any liquidated damages assessed against the **Contractor**, shall be charged against and deducted out of monies which are earned by the **Contractor** prior to the date of default. Should the expense of such completion, as certified by the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.

#### ARTICLE 52. PARTIAL DEFAULT

52.1 In case the **Commissioner** shall declare the **Contractor** in default as to a part of the **Work** only, the **Contractor** shall discontinue such part, shall continue performing the remainder of the **Work** in strict conformity with the terms of this **Contract**, and shall in no way hinder or interfere with any **Other**

**Contractor(s)** or persons whom the **Commissioner** may engage to complete the **Work** as to which the **Contractor** was declared in default.

52.2 The provisions of this Chapter relating to declaring the **Contractor** in default as to the entire **Work** shall be equally applicable to a declaration of partial default, except that the **Commissioner** shall be entitled to utilize for completion of the part of the **Work** as to which the **Contractor** was declared in default only such plant, materials, equipment, tools, and supplies as had been previously used by the **Contractor** on such part.

#### **ARTICLE 53. PERFORMANCE OF UNCOMPLETED WORK**

53.1 In completing the whole or any part of the **Work** under the provisions of this Chapter X, the **Commissioner** shall have the power to depart from or change or vary the terms and provisions of this **Contract**, provided, however, that such departure, change or variation is made for the purpose of reducing the time or expense of such completion. Such departure, change or variation, even to the extent of accepting a lesser or different performance, shall not affect the conclusiveness of the **Commissioner's** certificate of the cost of completion referred to in Article 51, nor shall it constitute a defense to an action to recover the amount by which such certificate exceeds the amount which would have been payable to the **Contractor** hereunder but for its default.

#### **ARTICLE 54. OTHER REMEDIES**

54.1 In addition to the right to declare the **Contractor** in default pursuant to this Chapter X, the **Commissioner** shall have the absolute right, in his/her sole discretion and without a hearing, to complete or cause to be completed in the same manner as described in Articles 51 and 53, any or all unsatisfactory or uncompleted punch list **Work** that remains after the completion date specified in the **Final Approved Punch List**. A written notice of the exercise of this right shall be sent to the **Contractor** who shall immediately quit the **Site** in accordance with the provisions of Article 50.

54.2 The expense of completion permitted under Article 54.1, including any and all related and incidental costs, as so certified by the **Commissioner**, shall be charged against and deducted out of monies which have been earned by the **Contractor** prior to the date of the exercise of the right set forth in Article 54.1; the balance of such monies, if any, subject to the other provisions of this **Contract**, to be paid to the **Contractor** without interest after such completion. Should the expense of such completion, as certified by the **Commissioner**, exceed the total sum which would have been payable under the **Contract** if it had been completed by the **Contractor**, any excess shall be paid by the **Contractor**.

54.3 The previous provisions of this Chapter X shall be in addition to any and all other remedies available under **Law** or in equity.

54.4 The exercise by the **City** of any remedy set forth herein shall not be deemed a waiver by the **City** of any other legal or equitable remedy contained in this **Contract** or provided under **Law**.

**CHAPTER XI  
MISCELLANEOUS PROVISIONS**

**ARTICLE 55. CONTRACTOR'S WARRANTIES**

55.1 In consideration of, and to induce, the award of this **Contract** to the **Contractor**, the **Contractor** represents and warrants:

55.1.1 That it is financially solvent, sufficiently experienced and competent to perform the **Work**; and

55.1.2 That the facts stated in its bid and the information given by it pursuant to the Information for Bidders is true and correct in all respects; and

55.1.3 That it has read and complied with all requirements set forth in the **Contract**.

**ARTICLE 56. CLAIMS AND ACTIONS THEREON**

56.1 Any claim, that is not subject to dispute resolution under the **PPB** Rules or this **Contract**, against the **City** for damages for breach of **Contract** shall not be made or asserted in any action, unless the **Contractor** shall have strictly complied with all requirements relating to the giving of notice and of information with respect to such claims, as herein before provided.

56.2 Nor shall any action be instituted or maintained on any such claims unless such action is commenced within six (6) months after **Substantial Completion**; except that:

56.2.1 Any claims arising out of events occurring after **Substantial Completion** and before **Final Acceptance** of the **Work** shall be asserted within six (6) months of **Final Acceptance** of the **Work**;

56.2.2 Any claims for monies deducted, retained or withheld under the provisions of this **Contract** shall be asserted within six (6) months after the date when such monies otherwise become due and payable hereunder; and

56.2.3 If the **Commissioner** exercises his/her right to terminate the **Contract** pursuant to Article 64, any such action shall be commenced within six (6) months of the date the **Commissioner** exercises said right.

**ARTICLE 57. INFRINGEMENT**

57.1 The **Contractor** shall be solely responsible for and shall defend, indemnify, and hold the **City** harmless from any and all claims (even if the allegations of the lawsuit are without merit) and judgments for damages and from costs and expenses to which the **City** may be subject to or which it may suffer or incur allegedly arising out of or in connection with any infringement by the **Contractor** of any copyright, trade secrets, trademark or patent rights or any other property or personal right of any third party by the **Contractor** and/or its **Subcontractors** in the performance or completion of the **Work**. Insofar as the facts or **Law** relating to any claim would preclude the **City** from being completely indemnified by the **Contractor**, the **City** shall be partially indemnified by the **Contractor** to the fullest extent permitted by **Law**.

**ARTICLE 58. NO CLAIM AGAINST OFFICIALS, AGENTS OR EMPLOYEES**

58.1 No claim whatsoever shall be made by the **Contractor** against any official, agent or employee of the **City** for, or on account of, anything done or omitted to be done in connection with this **Contract**.

**ARTICLE 59. SERVICE OF NOTICES**

59.1 The **Contractor** hereby designates the business address, fax number, and email address specified in its bid, as the place where all notices, directions or other communications to the **Contractor** may be delivered, or to which they may be mailed. Any notice, direction, or communication from either party to the other shall be in writing and shall be deemed to have been given when (i) delivered personally; (ii) sent by certified mail, return receipt requested; (iii) delivered by overnight or same day courier service in a properly addressed envelope with confirmation; or (iv) sent by fax or email and, unless receipt of the fax or e-mail is acknowledged by the recipient by fax or e-mail, deposited in a post office box regularly maintained by the United States Postal Service in a properly addressed, postage pre-paid envelope.

59.2 **Contractor's** notice address, email address, or fax number may be changed at any time by an instrument in writing, executed and acknowledged by the **Contractor**, and delivered to the **Commissioner**.

59.3 Nothing herein contained shall, however, be deemed to preclude or render inoperative the service of any notice, direction or other communication upon the **Contractor** personally, or, if the **Contractor** is a corporation, upon any officer thereof.

**ARTICLE 60. UNLAWFUL PROVISIONS DEEMED STRICKEN FROM CONTRACT**

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

**ARTICLE 61. ALL LEGAL PROVISIONS DEEMED INCLUDED**

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

**ARTICLE 62. TAX EXEMPTION**

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

though it is consumed, is not incorporated into the completed **Work** (consumable supplies) and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**. The **Contractor** and its **Subcontractors** and **Materialmen** shall be responsible for and pay any and all applicable taxes, including sales and compensating use taxes, on such leased tools, machinery, equipment or other property and upon all such consumable supplies and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**.

62.2 The **Contractor** agrees to sell and the **City** agrees to purchase all tangible personal property, other than consumable supplies and other tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work**, that is required, necessary or proper for or incidental to the construction of the **Project** covered by this **Contract**. The sum paid under this **Contract** for such tangible personal property shall be in full payment and consideration for the sale of such tangible personal property.

62.2.1 The **Contractor** agrees to construct the **Project** and to perform all **Work**, labor and services rendered, necessary, proper or incidental thereto for the sum shown in the bid for the performance of such **Work**, labor, and services, and the sum so paid pursuant to this **Contract** for such **Work**, labor, and services, shall be in full consideration for the performance by the **Contractor** of all its duties and obligations under this **Contract** in connection with said **Work**, labor, and services.

62.3 20 NYCRR Section 541.3(d) provides that a **Contractor's** purchases of tangible personal property that is either incorporated into real property owned by a governmental entity or purchased for and sold to a governmental entity are exempt from sales and use tax. The **City** shall not pay sales tax for any such tangible personal property that it purchases from the **Contractor** pursuant to the **Contract**. With respect to such tangible personal property, the **Contractor**, at the request of the **City**, shall furnish to the **City** such bills of sale and other instruments as may be required by the **City**, properly executed, acknowledged and delivered assuring to the **City** title to such tangible personal property, free of liens and/or encumbrances, and the **Contractor** shall mark or otherwise identify all such tangible personal property as the property of the **City**.

62.4 Title to all tangible personal property to be sold by the **Contractor** to the **City** pursuant to the provisions of the **Contract** shall immediately vest in and become the sole property of the **City** upon delivery of such tangible personal property to the **Site**. Notwithstanding such transfer of title, the **Contractor** shall have the full and continuing responsibility to install such tangible personal property in accordance with the provisions of this **Contract**, protect it, maintain it in a proper condition and forthwith repair, replace and make good any damage thereto, theft or disappearance thereof, and furnish additional tangible personal property in place of any that may be lost, stolen or rendered unusable, without cost to the **City**, until such time as the **Work** covered by the **Contract** is fully accepted by the **City**. Such transfer of title shall in no way affect any of the **Contractor's** obligations hereunder. In the event that, after title has passed to the **City**, any of the tangible personal property is rejected as being defective or otherwise unsatisfactory, title to all such tangible personal property shall be deemed to have been transferred back to the **Contractor**.

62.5 The purchase by **Subcontractors** or **Materialmen** of tangible personal property to be sold hereunder shall be a purchase or procurement for resale to the **Contractor** (either directly or through other **Subcontractors**) and therefore not subject to the aforesaid sales and compensating use taxes, provided that the subcontracts and purchase agreements provide for the resale of such tangible personal property and that such subcontracts and purchase agreements are in a form similar to this **Contract** with respect to the separation of the sale of consumable supplies and tangible personal property that the **Contractor** is required to remove from the **Site** during or upon completion of the **Work** from the **Work** and labor, services, and any other matters to be provided, and provided further that the subcontracts and



purchase agreements provide separate prices for tangible personal property and all other services and matters. Such separation shall actually be followed in practice, including the separation of payments for tangible personal property from the payments for other **Work** and labor and other things to be provided.

62.6 The **Contractor** and its **Subcontractors** and **Materialmen** shall furnish a **Contractor Exempt Purchase Certificate** to all persons, firms or corporations from which they purchase tangible personal property for the performance of the **Work** covered by this **Contract**.

62.7 In the event any of the provisions of this Article 62 shall be deemed to be in conflict with any other provisions of this **Contract** or create any ambiguity, then the provisions of this Article 62 shall control.

### ARTICLE 63. INVESTIGATION(S) CLAUSE

63.1 The parties to this **Contract** agree to cooperate fully and faithfully with any investigation, audit or inquiry conducted by a United States, a State of New York (State) or a **City** governmental agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General of a governmental agency that is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit or license that is the subject of the investigation, audit or inquiry.

63.2 If any person who has been advised that his/her statement, and any information from such statement, will not be used against him/her in any subsequent criminal proceeding refuses to testify before a grand jury or other governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath concerning the award of or performance under any transaction, agreement, lease, permit, contract, or license entered into with the **City**, the State, or any political subdivision or public authority thereof, or the Port Authority of New York and New Jersey, or any local development corporation within the **City**, or any public benefit corporation organized under the **Laws** of the State of New York, or;

63.3 If any person refuses to testify for a reason other than the assertion of his/her privilege against self incrimination in an investigation, audit or inquiry conducted by a **City** or State governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to take testimony under oath, or by the Inspector General of the governmental agency that is a party in interest in, and is seeking testimony concerning the award of, or performance under any transaction, agreement, lease, permit, contract, or license entered into with the **City**, the State, or any political subdivision thereof or any local development corporation within the **City**, then;

63.4 The **Commissioner** whose **Agency** is a party in interest to the transaction, submitted bid, submitted proposal, contract, lease, permit, or license shall convene a hearing, upon not less than five (5) **Days'** written notice to the parties involved to determine if any penalties should attach for the failure of a person to testify.

63.5 If any non-governmental party to the hearing requests an adjournment, the **Commissioner** who convened the hearing may, upon granting the adjournment, suspend any contract, lease, permit, or license, pending the final determination pursuant to Article 63.7 without the **City** incurring any penalty or damages for delay or otherwise.

63.6 The penalties which may attach after a final determination by the **Commissioner** may include but shall not exceed:

63.6.1 The disqualification for a period not to exceed five (5) years from the date of an adverse determination for any person, or any entity of which such person was a member at the time the testimony was sought, from submitting bids for, or transacting business with, or entering into or obtaining any contract, lease, permit or license with or from the **City**; and/or

63.6.2 The cancellation or termination of any and all such existing **City** contracts, leases, permits or licenses that the refusal to testify concerns and that have not been assigned as permitted under this **Contract**, nor the proceeds of which pledged, to an unaffiliated and unrelated institutional lender for fair value prior to the issuance of the notice scheduling the hearing, without the **City** incurring any penalty or damages on account of such cancellation or termination; monies lawfully due for goods delivered, work done, rentals, or fees accrued prior to the cancellation or termination shall be paid by the **City**.

63.7 The **Commissioner** shall consider and address in reaching his/her determination and in assessing an appropriate penalty the factors in Articles 63.7.1 and 63.7.2. The **Commissioner** may also consider, if relevant and appropriate, the criteria established in Articles 63.7.3 and 63.7.4, in addition to any other information which may be relevant and appropriate:

63.7.1 The party's good faith endeavors or lack thereof to cooperate fully and faithfully with any governmental investigation or audit, including but not limited to the discipline, discharge, or disassociation of any person failing to testify, the production of accurate and complete books and records, and the forthcoming testimony of all other members, agents, assignees or fiduciaries whose testimony is sought.

63.7.2 The relationship of the person who refused to testify to any entity that is a party to the hearing, including but not limited to, whether the person whose testimony is sought has an ownership interest in the entity and/or the degree of authority and responsibility the person has within the entity.

63.7.3 The nexus of the testimony sought to the subject entity and its contracts, leases, permits or licenses with the **City**.

63.7.4 The effect a penalty may have on an unaffiliated and unrelated party or entity that has a significant interest in an entity subject to penalties under Article 63.6, provided that the party or entity has given actual notice to the **Commissioner** upon the acquisition of the interest, or at the hearing called for in Article 63.4, gives notice and proves that such interest was previously acquired. Under either circumstance the party or entity shall present evidence at the hearing demonstrating the potential adverse impact a penalty will have on such person or entity.

#### 63.8 Definitions:

63.8.1 The term "license" or "permit" as used in this Article 63 shall be defined as a license, permit, franchise or concession not granted as a matter of right.

63.8.2 The term "person" as used in this Article 63 shall be defined as any natural person doing business alone or associated with another person or entity as a partner, director, officer, principal or employee.

63.8.3 The term "entity" as used in this Article 63 shall be defined as any firm, partnership, corporation, association, joint venture, or person that receives monies, benefits, licenses, leases, or permits from or through the **City** or otherwise transacts business with the **City**.

63.8.4 The term "member" as used in this Article 63 shall be defined as any person associated with another person or entity as a partner, director, officer, principal or employee.

63.9 In addition to and notwithstanding any other provision of this **Contract**, the **Commissioner** may in his/her sole discretion terminate this **Contract** upon not less than three (3) **Days'** written notice in the event the **Contractor** fails to promptly report in writing to the **Commissioner** of the Department of Investigations ("DOI") of the **City** any solicitation of money, goods, requests for future employment or other benefit or thing of value, by or on behalf of any employee of the **City** or other person, firm, corporation or entity for any purpose which may be related to the procurement or obtaining of this **Contract** by the **Contractor**, or affecting the performance of this **Contract**.

#### ARTICLE 64. TERMINATION BY THE CITY

64.1 In addition to termination pursuant to any other article of this **Contract**, the **Commissioner** may, at any time, terminate this **Contract** by written notice to the **Contractor**. In the event of termination, the **Contractor** shall, upon receipt of such notice, unless otherwise directed by the **Commissioner**:

64.1.1 Stop **Work** on the date specified in the notice;

64.1.2 Take such action as may be necessary for the protection and preservation of the **City's** materials and property;

64.1.3 Cancel all cancelable orders for material and equipment;

64.1.4 Assign to the **City** and deliver to the **Site** or another location designated by the **Commissioner**, any non-cancelable orders for material and equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract** and not incorporated in the **Work**;

64.1.5 Take no action which will increase the amounts payable by the **City** under this **Contract**.

64.2 In the event of termination by the **City** pursuant to this Article 64, payment to the **Contractor** shall be in accordance with Articles 64.2.1, 64.2.2 or 64.2.3, to the extent that each respective article applies.

64.2.1 Lump Sum Contracts or Items: On all lump sum **Contracts**, or on lump sum items in a **Contract**, the **City** will pay the **Contractor** the sum of the amounts described in Articles 64.2.1(a) and 64.2.1(b), less all payments previously made pursuant to this **Contract**. On lump sum **Contracts** only, the **City** will also pay the **Contractor** an additional sum as provided in Article 64.2.1(c).

64.2.1(a) For **Work** completed prior to the notice of termination, the **Contractor** shall be paid a pro rata portion of the lump sum bid amount, plus approved change orders, based upon the percent completion of the **Work**, as determined by the **Commissioner**. For the purpose of determining the pro rata portion of the lump sum bid amount to which the **Contractor** is entitled, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be dispositive. The **Commissioner's** determination hereunder shall be final, binding, and conclusive.

64.2.1(b) For non-cancelable material and equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated in the **Work**, the **Contractor** shall be paid the lesser of the following, less salvage value:

64.2.1(b)(i) The Direct Cost, as defined in Article 64.2.4; or

64.2.1(b)(ii) The fair and reasonable value, if less than Direct Cost, of such material and equipment, plus necessary and reasonable delivery costs.

64.2.1(b)(iii) In addition, the **Contractor** shall be paid five (5%) percent of the amount described in Article 64.2.1(b)(i) or Article 64.2.1(b)(ii), whichever applies.

64.2.1(c) Except as otherwise provided in Article 64.2.1(d), on all lump sum **Contracts**, the **Contractor** shall be paid the percentage indicated below applied to the difference between the total lump sum bid amount and the total of all payments made prior to the notice of termination plus all payments allowed pursuant to Articles 64.2.1(a) and 64.2.1(b):

64.2.1(c)(i) Five (5%) percent of the first five million (\$5,000,000) dollars; and

64.2.1(c)(ii) Three (3%) percent of any amount between five million (\$5,000,000) dollars and fifteen million (\$15,000,000) dollars; plus

64.2.1(c)(iii) One (1%) percent of any amount over fifteen million (\$15,000,000) dollars.

64.2.1(d) In the event the **City** terminates a lump sum **Contract** pursuant to this Article 64 within ninety (90) **Days** after registration of the **Contract** with the **Comptroller**, the **Contractor** shall be paid one (1%) percent of the difference between the lump sum bid amount and the total of all payments made pursuant to this Article 64.2.

64.2.2 Unit Price Contracts or Items: On all unit price **Contracts**, or on unit price items in a **Contract**, the **City** will pay the **Contractor** the sum of the amounts described in Articles 64.2.2(a) and 64.2.2(b), less all payments previously made pursuant to this **Contract**:

64.2.2(a) For all completed units, the unit price stated in the **Contract**, and

64.2.2(b) For units that have been ordered but are only partially completed, the **Contractor** will be paid:

64.2.2(b)(i) A pro rata portion of the unit price stated in the **Contract** based upon the percent completion of the unit and

64.2.2(b)(ii) For non-cancelable material and equipment, payment will be made pursuant to Article 64.2.1(b).

64.2.3 Time and Materials Contracts or Items Based on Time and Material Records: On all **Contracts** or items in a **Contract** where payment for the **Work** is based on time and

material records, the **Contractor** shall be paid in accordance with Article 26, less all payments previously made pursuant to this **Contract**.

64.2.4 Direct Costs: Direct Costs as used in this Article 64.2 shall mean:

64.2.4(a) The actual purchase price of material and equipment, plus necessary and reasonable delivery costs,

64.2.4(b) The actual cost of labor involved in construction and installation at the **Site**, and

64.2.4(c) The actual cost of necessary bonds and insurance purchased pursuant to requirements of this **Contract** less any amounts that have been or should be refunded by the **Contractor's** sureties or insurance carriers.

64.2.4(d) Direct Costs shall not include overhead.

64.3 In no event shall any payments under this Article 64 exceed the **Contract** price for such items.

64.4 All payments pursuant to Article 64 shall be in the nature of liquidated damages and shall be accepted by the **Contractor** in full satisfaction of all claims against the **City**.

64.5 The **City** may deduct or set off against any sums due and payable pursuant to this Article 64, any deductions authorized by this **Contract** or by **Law** (including but not limited to liquidated damages) and any claims it may have against the **Contractor**. The **City's** exercise of the right to terminate the **Contract** pursuant to this Article 64 shall not impair or otherwise effect the **City's** right to assert any claims it may have against the **Contractor** in a plenary action.

64.6 Where the **Work** covered by the **Contract** has been substantially completed, as determined in writing by the **Commissioner**, termination of the **Work** shall be handled as an omission of **Work** pursuant to Articles 29 and 33, in which case a change order will be issued to reflect an appropriate reduction in the **Contract** sum, or if the amount is determined after final payment, such amount shall be paid by the **Contractor**.

#### **ARTICLE 65. CHOICE OF LAW, CONSENT TO JURISDICTION AND VENUE**

65.1 This **Contract** shall be deemed to be executed in the **City** regardless of the domicile of the **Contractor**, and shall be governed by and construed in accordance with the **Laws** of the State of New York and the **Laws** of the United States, where applicable.

65.2 The parties agree that any and all claims asserted against the **City** arising under this **Contract** or related thereto shall be heard and determined in the courts of the State of New York ("New York State Courts") located in the **City** and County of New York. To effect this **Contract** and intent, the **Contractor** agrees:

65.2.1 If the **City** initiates any action against the **Contractor** in Federal court or in a New York State Court, service of process may be made on the **Contractor** either in person, wherever such **Contractor** may be found, or by registered mail addressed to the **Contractor** at its address as set forth in this **Contract**, or to such other address as the **Contractor** may provide to the **City** in writing; and

65.2.2 With respect to any action between the **City** and the **Contractor** in a New York State Court, the **Contractor** hereby expressly waives and relinquishes any rights it might otherwise have:

65.2.2(a) To move to dismiss on grounds of forum non conveniens;

65.2.2(b) To remove to Federal Court; and

65.2.2(c) To move for a change of venue to a New York State Court outside New York County.

65.2.3 With respect to any action brought by the **City** against the **Contractor** in a Federal Court located in the **City**, the **Contractor** expressly waives and relinquishes any right it might otherwise have to move to transfer the action to a Federal Court outside the **City**.

65.2.4 If the **Contractor** commences any action against the **City** in a court located other than in the **City** and County of New York, upon request of the **City**, the **Contractor** shall either consent to a transfer of the action to a New York State Court of competent jurisdiction located in the **City** and County of New York or, if the Court where the action is initially brought will not or cannot transfer the action, the **Contractor** shall consent to dismiss such action without prejudice and may thereafter reinstate the action in a New York State Court of competent jurisdiction in New York County.

65.3 If any provision(s) of this Article 65 is held unenforceable for any reason, each and all other provision(s) shall nevertheless remain in full force and effect.

#### **ARTICLE 66. PARTICIPATION IN AN INTERNATIONAL BOYCOTT**

66.1 The **Contractor** agrees that neither the **Contractor** nor any substantially owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the Federal Export Administration Act of 1979, as amended, or the regulations of the United States Department of Commerce (Commerce Department) promulgated thereunder.

66.2 Upon the final determination by the Commerce Department or any other agency of the United States as to, or conviction of the **Contractor** or a substantially-owned affiliated company thereof for participation in an international boycott in violation of the provisions of the Export Administration Act of 1979, as amended, or the regulations promulgated thereunder, the **Comptroller** may, at his/her option, render forfeit and void this **Contract**.

66.3 The **Contractor** shall comply in all respects, with the provisions of Section 6-114 of the Administrative Code and the rules and regulations issued by the **Comptroller** thereunder.

#### **ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM**

67.1 This **Contract** is subject to the requirements of Section 6-108.1 of the Administrative Code and regulations promulgated thereunder. No construction contract shall be awarded unless and until these requirements have been complied with in their entirety; however, compliance with this Article 67 is not required if the Agency sets Subcontractor Participation Goals for Minority- and Women-Owned Business Enterprises (M/WBEs).

67.2 Unless specifically waived by the **Commissioner** with the approval of the Division of Economic and Financial Opportunity of the **City** Department of Business Services, if any portion of the **Contract** is subcontracted, not less than ten (10%) percent of the total dollar amount of the **Contract** shall be awarded to locally based enterprises (LBEs); except that where less than ten (10%) percent of the total dollar amount of the **Contract** is subcontracted, such lesser percentage shall be so awarded.

67.3 The **Contractor** shall not require performance and payment bonds from LBE **Subcontractors**.

67.4 If the **Contractor** has indicated prior to award that no **Work** will be subcontracted, no **Work** shall be subcontracted without the prior approval of the **Commissioner**, which shall be granted only if the **Contractor** makes a good faith effort beginning at least six (6) weeks before the **Work** is to be performed to obtain LBE **Subcontractors** to perform the **Work**.

67.5 If the **Contractor** has not identified sufficient LBE **Subcontractors** prior to award, it shall sign a letter of compliance stating that it complies with Section 6-108.1 of the Administrative Code, recognizes that achieving the LBE requirement is a condition of its **Contract**, and shall submit documentation demonstrating its good faith efforts to obtain LBEs. After award, the **Contractor** shall begin to solicit LBE's to perform subcontracted **Work** at least six (6) weeks before the date such **Work** is to be performed and shall demonstrate that a good faith effort has been made to obtain LBEs on each subcontract until it meets the required percentage.

67.6 Failure of the **Contractor** to comply with the requirements of Section 6-108.1 of the Administrative Code and the regulations promulgated thereunder shall constitute a material breach of this **Contract**. Remedy for such breach may include the imposition of any or all of the following sanctions:

67.6.1 Reducing the **Contractor's** compensation by an amount equal to the dollar value of the percentage of the LBE subcontracting requirement not complied with;

67.6.2 Declaring the **Contractor** in default;

67.6.3 If the **Contractor** is an LBE, de-certifying and declaring the **Contractor** ineligible to participate in the LBE program for a period of up to three (3) years.

#### **ARTICLE 68. ANTITRUST**

68.1 The **Contractor** hereby assigns, sells, and transfers to the **City** all right, title, and interest in and to any claims and causes of action arising under the antitrust **Laws** of New York State or of the United States relating to the particular goods or services purchased or procured by the **City** under this **Contract**.

#### **ARTICLE 69. MacBRIDE PRINCIPLES PROVISIONS**

69.1 Notice To All Prospective **Contractors**:

69.1.1 Local Law No. 34 of 1991 became effective on September 10, 1991 and added Section 6-115.1 of the Administrative Code. The local **Law** provides for certain restrictions on **City Contracts** to express the opposition of the people of the **City** to employment discrimination practices in Northern Ireland to promote freedom of work-place opportunity.

69.1.2 Pursuant to Section 6-115.1, prospective **Contractors** for **Contracts** to provide goods or services involving an expenditure of an amount greater than ten thousand

(\$10,000.) dollars, or for construction involving an amount greater than fifteen thousand (\$15,000.) dollars, are asked to sign a rider in which they covenant and represent, as a material condition of their **Contract**, that any business operations in Northern Ireland conducted by the **Contractor** and any individual or legal entity in which the **Contractor** holds a ten (10%) percent or greater ownership interest in the **Contractor** will be conducted in accordance with the MacBride Principles of nondiscrimination in employment.

69.1.3 Prospective **Contractors** are not required to agree to these conditions. However, in the case of **Contracts** let by competitive sealed bidding, whenever the lowest responsible bidder has not agreed to stipulate to the conditions set forth in this notice and another bidder who has agreed to stipulate to such conditions has submitted a bid within five (5%) percent of the lowest responsible bid for a **Contract** to supply goods, services or contraction of comparable quality, the **Agency** shall refer such bids to the Mayor, the Speaker or other officials, as appropriate, who may determine, in accordance with applicable **Law**, that it is in the best interest of the **City** that the **Contract** be awarded to other than the lowest responsible pursuant to Section 313(b)(2) of the **City** Charter.

69.1.4 In the case of **Contracts** let by other than competitive sealed bidding, if a prospective **Contractor** does not agree to these conditions, no **Agency**, elected official or the **City** Council shall award the **Contract** to that bidder unless the **Agency** seeking to use the goods, services or construction certifies in writing that the **Contract** is necessary for the **Agency** to perform its functions and there is no other responsible **Contractor** who will supply goods, services or construction of comparable quality at a comparable price.

69.2 In accordance with Section 6-115.1 of the Administrative Code, the **Contractor** stipulates that such **Contractor** and any individual or legal entity in which the **Contractor** holds a ten (10%) percent or greater ownership interest in the **Contractor** either:

69.2.1 Have no business operations in Northern Ireland, or

69.2.2 Shall take lawful steps in good faith to conduct any business operations they have in Northern Ireland in accordance with the MacBride Principles, and shall permit independent monitoring of their compliance with such principles.

69.3 For purposes of this Article, the following terms shall have the following meanings:

69.3.1 "MacBride Principles" shall mean those principles relating to nondiscrimination in employment and freedom of work-place opportunity which require employers doing business in Northern Ireland to:

69.3.1(a) increase the representation of individuals from under-represented religious groups in the workforce, including managerial, supervisory, administrative, clerical and technical jobs;

69.3.1(b) take steps to promote adequate security for the protection of employees from under-represented religious groups both at the work-place and while traveling to and from **Work**;

69.3.1(c) ban provocative religious or political emblems from the workplace;

69.3.1(d) publicly advertise all job openings and make special recruitment efforts to attract applicants from under-represented religious groups;



69.3.1(e) establish layoff, recall, and termination procedures which do not in practice favor a particular religious group;

69.3.1(f) abolish all job reservations, apprenticeship restrictions and different employment criteria which discriminate on the basis of religion;

69.3.1(g) develop training programs that will prepare substantial numbers of current employees from under-represented religious groups for skilled jobs, including the expansion of existing programs and the creation of new programs to train, upgrade, and improve the skills of workers from under-represented religious groups;

69.3.1(h) establish procedures to assess, identify, and actively recruit employees from under-represented religious groups with potential for further advancement; and

69.3.1(i) appoint a senior management staff member to oversee affirmative action efforts and develop a timetable to ensure their full implementation.

69.4 The **Contractor** agrees that the covenants and representations in Article 69.2 are material conditions to this **Contract**. In the event the **Agency** receives information that the **Contractor** who made the stipulation required by this Article 69 is in violation thereof, the **Agency** shall review such information and give the **Contractor** an opportunity to respond. If the **Agency** finds that a violation has occurred, the **Agency** shall have the right to declare the **Contractor** in default and/or terminate this **Contract** for cause and procure supplies, services or **Work** from another source in the manner the **Agency** deems proper. In the event of such termination, the **Contractor** shall pay to the **Agency**, or the **Agency** in its sole discretion may withhold from any amounts otherwise payable to the **Contractor**, the difference between the **Contract** price for the uncompleted portion of this **Contract** and the cost to the **Agency** of completing performance of this **Contract** either itself or by engaging another **Contractor** or **Contractors**. In the case of a requirement **Contract**, the **Contractor** shall be liable for such difference in price for the entire amount of supplies required by the **Agency** for the uncompleted term of **Contractor's Contract**. In the case of a construction **Contract**, the **Agency** shall also have the right to hold the **Contractor** in partial or total default in accordance with the default provisions of this **Contract**, and/or may seek debarment or suspension of the **Contractor**. The rights and remedies of the **Agency** hereunder shall be in addition to, and not in lieu of, any rights and remedies the **Agency** has pursuant to this **Contract** or by operation of **Law**.

#### **ARTICLE 70. ELECTRONIC FILING/NYC DEVELOPMENT HUB**

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

#### **ARTICLE 71. PROHIBITION OF TROPICAL HARDWOODS**

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

## ARTICLE 72. CONFLICTS OF INTEREST

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

## ARTICLE 73. MERGER CLAUSE

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

## ARTICLE 74. STATEMENT OF WORK

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

## 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 BELOW Dollars, (\$ 80,013,850.88), 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. EIGHTY MILLION, THIRTEEN THOUSAND, EIGHT HUNDRED AND FIFTY DOLLARS 88,100

## ARTICLE 76. ELECTRONIC FUNDS TRANSFER

76.1 In accordance with Section 6-107.1 of the Administrative Code, the Contractor agrees to accept payments under this Contract from the City by electronic funds transfer (EFT). An EFT is any transfer of funds, other than a transaction originated by check, draft or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument or computer or magnetic tape so as to order, instruct or authorize a financial institution to debit or credit an account. Prior to the first payment made under this Contract, the Contractor shall designate one financial institution or other authorized payment agent and shall complete the attached "EFT Vendor Payment Enrollment Form" in order to provide the Commissioner of the City Department of Finance with information necessary for the Contractor to receive electronic funds transfer payments through a designated financial institution or authorized payment agent. The crediting of the amount of a payment to the appropriate account on the books of a financial institution or other authorized payment agent designated by the Contractor shall constitute full satisfaction by the City for the amount of the payment under this Contract. The account information supplied by the Contractor to facilitate the electronic funds transfer shall remain confidential to the fullest extent provided by Law.

76.2 The Commissioner may waive the application of the requirements of this Article 76 to payments on contracts entered into pursuant to Section 315 of the City Charter. In addition, the Commissioner of the Department of Finance and the Comptroller may jointly issue standards pursuant to

which the **Agency** may waive the requirements of this Article 76 for payment in the following circumstances: (i) for individuals or classes of individuals for whom compliance imposes a hardship; (ii) for classifications or types of checks; or (iii) in other circumstances as may be necessary in the interest of the **City**.

#### **ARTICLE 77. RECORDS RETENTION**

77.1 The **Contractor** agrees to retain all books, records, and other documents relevant to this **Contract** for six years after the final payment or termination of this **Contract**, whichever is later. **City**, state, and federal auditors and any other persons duly authorized by the **City** shall have full access to and the right to examine any such books, records, and other documents during the retention period.

#### **ARTICLE 78. PARTICIPATION BY MINORITY-OWNED AND WOMEN-OWNED BUSINESS ENTERPRISES IN CITY PROCUREMENT**

##### **NOTICE TO ALL PROSPECTIVE CONTRACTORS**

#### **ARTICLE I. M/WBE PROGRAM**

Local Law No. 129 of 2005 added and Local Law 1 of 2013 amended Section 6-129 of the Administrative Code of the City of New York (hereinafter "Section 6-129"). Section 6-129 establishes the program for participation in City procurement ("M/WBE Program") by minority-owned business enterprises ("MBEs") and women-owned business enterprises ("WBEs"), certified in accordance with Section 1304 of the New York City Charter. As stated in Section 6-129, the intent of the program is to address the impact of discrimination on the City's procurement process, and to promote the public interest in avoiding fraud and favoritism in the procurement process, increasing competition for City business, and lowering contract costs. The contract provisions contained herein are pursuant to Section 6-129, and the rules of the Department of Small Business Services ("DSBS") promulgated thereunder.

If this Contract is subject to the M/WBE Program established by Section 6-129, the specific requirements of MBE and/or WBE participation for this Contract are set forth in Schedule B of the Contract (entitled the "M/WBE Utilization Plan"), and are detailed below. The Contractor must comply with all applicable MBE and WBE requirements for this Contract.

All provisions of Section 6-129 are hereby incorporated in the Contract by reference and all terms used herein that are not defined herein shall have the meanings given such terms in Section 6-129. Article I, Part A, below, sets forth provisions related to the participation goals for construction, standard and professional services contracts. Article I, Part B, below, sets forth miscellaneous provisions related to the M/WBE Program.

#### **PART A**

#### **PARTICIPATION GOALS FOR CONSTRUCTION, STANDARD AND PROFESSIONAL SERVICES CONTRACTS OR TASK ORDERS**

1. The **MBE and/or WBE Participation Goals** established for this Contract or Task Orders issued pursuant to this Contract, ("**Participation Goals**"), as applicable, are set forth on Schedule B, Part I to this Contract (see Page 1, line 1 Total Participation Goals) or will be set forth on Schedule B, Part I to Task Orders issued pursuant to this Contract, as applicable.

The **Participation Goals** represent a percentage of the total dollar value of the Contract or Task Order, as applicable, that may be achieved by awarding subcontracts to firms certified with New York City Department of Small Business Services as MBEs and/or WBEs, and/or by crediting the participation of prime contractors and/or qualified joint ventures as provided in Section 3 below, unless the goals have been waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

2. If **Participation Goals** have been established for this Contract or Task Orders issued pursuant to this Contract, Contractor agrees or shall agree as a material term of the Contract that Contractor shall be subject to the **Participation Goals**, unless the goals are waived or modified by Agency in accordance with Section 6-129 and Part A, Sections 10 and 11 below, respectively.

3. If **Participation Goals** have been established for this Contract or Task Order issued pursuant to this Contract, a Contractor that is an MBE and/or WBE shall be permitted to count its own participation toward fulfillment of the relevant **Participation Goal**, provided that in accordance with Section 6-129 the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that the Contractor pays to direct subcontractors (as defined in Section 6-129(c)(13)), and provided further that a Contractor that is certified as both an MBE and a WBE may count its own participation either toward the goal for MBEs or the goal for WBEs, but not both.

A Contractor that is a qualified joint venture (as defined in Section 6-129(c)(30)) shall be permitted to count a percentage of its own participation toward fulfillment of the relevant **Participation Goal**. In accordance with Section 6-129, the value of Contractor's participation shall be determined by subtracting from the total value of the Contract or Task Order, as applicable, any amounts that Contractor pays to direct subcontractors, and then multiplying the remainder by the percentage to be applied to total profit to determine the amount to which an MBE or WBE is entitled pursuant to the joint venture agreement, provided that where a participant in a joint venture is certified as both an MBE and a WBE, such amount shall be counted either toward the goal for MBEs or the goal for WBEs, but not both.

4. A. If **Participation Goals** have been established for this Contract, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Utilization Plan, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. In the event that this M/WBE Utilization Plan indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals**, the bid or proposal, as applicable, shall be deemed non-responsive, unless Agency has granted the bidder or proposer, as applicable, a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

B. (i) If this Contract is for a master services agreement or other requirements type contract that will result in the issuance of Task Orders that will be individually registered ("Master Services Agreement") and is subject to M/WBE **Participation Goals**, a prospective contractor shall be required to submit with its bid or proposal, as applicable, a completed Schedule B, M/WBE Participation Requirements for Master Services Agreements That Will Require Individually Registered Task Orders, Part II (page 2) indicating the prospective contractor's certification and required affirmations to make all reasonable good faith efforts to meet participation goals established on each individual Task Order issued pursuant to this Contract, or if a partial waiver is obtained or such goals are modified by the Agency, to meet the modified **Participation Goals** by soliciting and obtaining the participation of certified MBE and/or WBE firms. In the event that the Schedule B indicates that the bidder or proposer, as applicable, does not intend to meet the **Participation Goals** that may be established on Task Orders issued pursuant to this Contract, the bid or proposal, as applicable, shall be deemed nonresponsive.

(ii) **Participation Goals** on a Master Services Agreement will be established for individual Task Orders issued after the Master Services Agreement is awarded. If **Participation Goals** have been established on a Task Order, a contractor shall be required to submit a Schedule B – M/WBE Utilization Plan For Independently Registered Task Orders That Are Issued Pursuant to Master Services Agreements, Part II (see Pages 2-4) indicating: (a) whether the contractor is an MBE or WBE, or qualified joint venture; (b) the percentage of work it intends to award to direct subcontractors; and (c) in cases where the contractor intends to award direct subcontracts, a description of the type and dollar value of work designated for participation by MBEs and/or WBEs, and the time frames in which such work is scheduled to begin and end. The contractor must engage in good faith efforts to meet the **Participation Goals** as established for the Task Order unless Agency has granted the contractor a pre-award waiver of the Participation Goals in accordance with Section 6-129 and Part A, Section 10 below.

**C. THE BIDDER/PROPOSER MUST COMPLETE THE SCHEDULE B INCLUDED HEREIN (SCHEDULE B, PART II). A SCHEDULE B SUBMITTED BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS (SEE SECTION V OF PART II) WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART III). IN THE EVENT THAT THE CITY DETERMINES THAT THE BIDDER/PROPOSER HAS SUBMITTED A SCHEDULE B WHERE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS ARE COMPLETED BUT OTHER ASPECTS OF THE SCHEDULE B ARE NOT COMPLETE, OR CONTAIN A COPY OR COMPUTATION ERROR THAT IS AT ODDS WITH THE VENDOR CERTIFICATION AND AFFIRMATIONS, THE BIDDER/PROPOSER WILL BE NOTIFIED BY THE AGENCY AND WILL BE GIVEN FOUR (4) CALENDAR DAYS FROM RECEIPT OF NOTIFICATION TO CURE THE SPECIFIED DEFICIENCIES AND RETURN A COMPLETED SCHEDULE B TO THE AGENCY. FAILURE TO DO SO WILL RESULT IN A DETERMINATION THAT THE BID/PROPOSAL IS NON-RESPONSIVE. RECEIPT OF NOTIFICATION IS DEFINED AS THE DATE NOTICE IS E-MAILED OR FAXED (IF THE BIDDER/PROPOSER HAS PROVIDED AN E-MAIL ADDRESS OR FAX NUMBER), OR NO LATER THAN FIVE (5) CALENDAR DAYS FROM THE DATE OF MAILING OR UPON DELIVERY, IF DELIVERED.**

5. Where an M/WBE Utilization Plan has been submitted, the Contractor shall, within 30 days of issuance by Agency of a notice to proceed, submit a list of proposed persons or entities to which it intends to award subcontracts within the subsequent 12 months. In the case of multiyear contracts, such list shall also be submitted every year thereafter. The Agency may also require the Contractor to report periodically about the contracts awarded by its direct subcontractors to indirect subcontractors (as defined in Section 6-129(c)(22)). **PLEASE NOTE: If this Contract is a public works project subject to GML §101(5) (i.e., a contract valued at or below \$3M for projects in New York City) or if the Contract is subject to a project labor agreement in accordance with Labor Law §222, and the bidder is required to identify at the time of bid submission its intended subcontractors for the Wicks trades (plumbing and gas fitting; steam heating, hot water heating, ventilating and air conditioning (HVAC); and electric wiring), the Contractor must identify all those to which it intends to award construction subcontracts for any portion of the Wicks trade work at the time of bid submission, regardless of what point in the life of the contract such subcontracts will occur. In identifying intended subcontractors in the bid submission, bidders may satisfy any Participation Goals established for this Contract by proposing one or more subcontractors that are MBEs and/or WBEs for any portion of the Wicks trade work. In the event that the Contractor's selection of a subcontractor is disapproved, the Contractor shall have a reasonable time to propose alternate subcontractors.**

6. MBE and WBE firms must be certified by DSBS in order for the Contractor to credit such firms' participation toward the attainment of the **Participation Goals**. Such certification must occur prior to the

firms' commencement of work. A list of MBE and WBE firms may be obtained from the DSBS website at [www.nyc.gov/buycertified](http://www.nyc.gov/buycertified), by emailing DSBS at [buyer@sbs.nyc.gov](mailto:buyer@sbs.nyc.gov), by calling (212) 513-6356, or by visiting or writing DSBS at 110 William St., New York, New York, 10038, 7th floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting [www.nyc.gov/getcertified](http://www.nyc.gov/getcertified), emailing [MWBE@sbs.nyc.gov](mailto:MWBE@sbs.nyc.gov), or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

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

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

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

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

(b) To apply for a full or partial waiver of the **Participation Goals**, a bidder, proposer, or contractor, as applicable, must complete Part III (Page 5) of Schedule B and submit such request no later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due, in writing to the Agency by email at [poped@ddc.nyc.gov](mailto:poped@ddc.nyc.gov) or via facsimile at (718) 391-1886. Bidders, proposers, or contractors, as applicable, who have submitted requests will receive an Agency response by no later than two (2) calendar days prior to the due date for bids, proposals, or Task Orders; provided, however, that if that date would fall on a weekend or holiday, an Agency response will be provided by close-of-business on the business day before such weekend or holiday date.

(c) If the Agency determines that the **Participation Goals** are unreasonable in light of the availability of certified firms to perform the services required, it shall revise the solicitation and extend the deadline for bids and proposals, or revise the Task Order, as applicable.

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

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

- (i) The Contractor advertised opportunities to participate in the Contract, where appropriate, in general circulation media, trade and professional association publications and small business media, and publications of minority and women's business organizations;
- (ii) The Contractor provided notice of specific opportunities to participate in the Contract, in a timely manner, to minority and women's business organizations;
- (iii) The Contractor sent written notices, by certified mail or facsimile, in a timely manner, to advise MBEs or WBEs that their interest in the Contract was solicited;
- (iv) The Contractor made efforts to identify portions of the work that could be substituted for portions originally designated for participation by MBEs and/or WBEs in the **M/WBE Utilization Plan**, and for which the Contractor claims an inability to retain MBEs or WBEs;
- (v) The Contractor held meetings with MBEs and/or WBEs prior to the date their bids or proposals were due, for the purpose of explaining in detail the scope and requirements of the work for which their bids or proposals were solicited;
- (vi) The Contractor made efforts to negotiate with MBEs and/or WBEs as relevant to perform specific subcontracts, or act as suppliers or service providers;
- (vii) Timely written requests for assistance made by the Contractor to Agency's **M/WBE liaison officer** and to **DSBS**;
- (viii) Description of how recommendations made by **DSBS** and Agency were acted upon and an explanation of why action upon such recommendations did not lead to the desired level of participation of MBEs and/or WBEs.

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

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

12. If this Contract is for an indefinite quantity of construction, standard or professional services or is a requirements type contract and the Contractor has submitted an **M/WBE Utilization Plan** and has committed to subcontract work to MBEs and/or WBEs in order to meet the **Participation Goals**, the Contractor will not be deemed in violation of the M/WBE Program requirements for this Contract with regard to any work which was intended to be subcontracted to an MBE and/or WBE to the extent that the Agency has determined that such work is not needed.

13. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, at least once annually during the term of the Contract or Task Order, as applicable, Agency shall review the Contractor's progress toward attainment of its M/WBE Utilization Plan, including but not limited to, by reviewing the percentage of work the Contractor has actually awarded to MBE and/or WBE subcontractors and the payments the Contractor made to such subcontractors.

14. If **Participation Goals** have been established for this Contract or a Task Order issued pursuant to this Contract, Agency shall evaluate and assess the Contractor's performance in meeting those goals, and such evaluation and assessment shall become part of the Contractor's overall contract performance evaluation.

#### **PART B: MISCELLANEOUS**

1. The Contractor shall take notice that, if this solicitation requires the establishment of an **M/WBE Utilization Plan**, the resulting contract may be audited by DSBS to determine compliance with Section 6-129. See §6-129(e)(10). Furthermore, such resulting contract may also be examined by the City's Comptroller to assess compliance with the **M/WBE Utilization Plan**.

2. Pursuant to DSBS rules, construction contracts that include a requirement for an **M/WBE Utilization Plan** shall not be subject to the law governing Locally Based Enterprises set forth in Section 6-108.1 of the Administrative Code of the City of New York.

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

4. Prospective contractors are encouraged to enter into qualified joint venture agreements with MBEs and/or WBEs as defined by Section 6-129(c)(30).

5. By submitting a bid or proposal the Contractor hereby acknowledges its understanding of the M/WBE Program requirements set forth herein and the pertinent provisions of Section 6-129, and any rules promulgated thereunder, and if awarded this Contract, the Contractor hereby agrees to comply with the M/WBE Program requirements of this Contract and pertinent provisions of Section 6-129, and any rules promulgated thereunder, all of which shall be deemed to be material terms of this Contract. The Contractor hereby agrees to make all reasonable, good faith efforts to solicit and obtain the participation of MBEs and/or WBEs to meet the required **Participation Goals**.

#### **ARTICLE II. ENFORCEMENT**

1. If Agency determines that a bidder or proposer, as applicable, has, in relation to this procurement, violated Section 6-129 or the DSBS rules promulgated pursuant to Section 6-129, Agency may disqualify such bidder or proposer, as applicable, from competing for this Contract and the Agency may revoke such bidder's or proposer's prequalification status, if applicable.



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

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

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

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


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

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

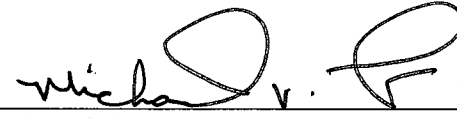
7. The Contractor's record in implementing its **M/WBE** Utilization Plan shall be a factor in the evaluation of its performance. Whenever Agency determines that a Contractor's compliance with an **M/WBE** Utilization Plan has been unsatisfactory, Agency shall, after consultation with the City Chief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

IN WITNESS WHEREOF, the Commissioner, on behalf of the City of New York, and the Contractor, have executed this agreement in quadruplicate, two parts of which are to remain with the Commissioner, another to be filed with the Comptroller of the City, and the fourth to be delivered to the Contractor.

THE CITY OF NEW YORK

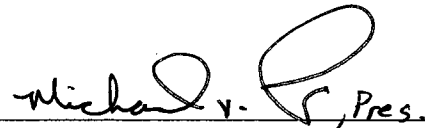
By:   
Deputy Commissioner

CONTRACTOR: MFM Contracting Corp.

By:   
(Member of Firm or Officer of Corporation)

Title: President

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

  
Secretary

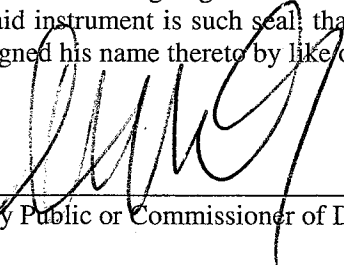
(Seal)

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

State of New York County of Queens ~~Westchester~~ ss:

On this 23rd day of December, 2015, before me personally came Michael V. Petriello to me known who, being by me duly sworn did depose and say that he resides at Purchase, N.Y. 10577 that he is the President of the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.

VICTORIA AYO-VAUGHAN  
Notary Public, State of New York  
Registration #01AY5014042  
Qualified in Queens County  
Commission Expires July 15, 2019

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

ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP

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

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

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

ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

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

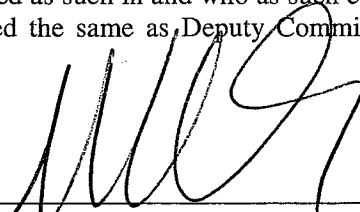
On this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally appeared \_\_\_\_\_ to me known, and known to me to be the person described in and who executed the foregoing instrument; and acknowledged that he executed the same.

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

ACKNOWLEDGEMENT BY COMMISSIONER

State of New York County of Queens ss:

On this 23 day of Dec, 2015 before me personally came Eric Macfarlane to me known, and known to be the Deputy Commissioner of the Department of Design and Construction of The City of New York, the person described as such in and who as such executed the foregoing instrument and acknowledged to me that he executed the same as Deputy Commissioner for the purposes therein mentioned.

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

VICTORIA AYO-VAUGHAN  
Notary Public, State of New York  
Registration #01AY5014042  
Qualified in Queens County  
Commission Expires July 15, 2019

AUTHORITY

MAYOR'S CERTIFICATE NO. CBX  
BUDGET DIRECTOR'S CERTIFICATE NO.

DATED  
DATED

APPROPRIATION  
COMMISSIONER'S CERTIFICATE

In conformity with the provisions of Section 6-101 of the Administrative Code of the City of New York, it is hereby certified that the estimated cost of the work, materials and supplies required by the within Contract, amounting to

EIGHTY MILLION, THIRTEEN THOUSAND,  
EIGHT HUNDRED FIFTY DOLLARS 88/100


Dollars (\$ 80,013,850.88)

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

Various

Department of Design and Construction

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

  
Deputy Commissioner

COMPTROLLER'S CERTIFICATE

The City of New York \_\_\_\_\_

Pursuant to the provisions of Section 6-101 of the Administrative Code of the City of New York, I hereby certify that there remains unapplied and unexpended a balance of the above mentioned fund applicable to this Contract sufficient to pay the estimated expense of executing the same viz:

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

\_\_\_\_\_  
Comptroller

**Performance Bond #2 (Pages 96 to 99): Use if the total contract price is more than \$5 Million.**

Bond No. SU1135529

PERFORMANCE BOND #2 (Page 1)

**PERFORMANCE BOND #2**

**KNOW ALL PERSONS BY THESE PRESENTS:**

That we, \_\_\_\_\_

MFM Contracting Corporation

335 Center Avenue, Mamaroneck, NY 10543

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

Arch Insurance Company and Arch Reinsurance Company

Three Parkway, Suite 1500, Philadelphia, PA 19102

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 \_\_\_\_\_

Eighty Million Thirteen Thousand Eight Hundred Fifty and 00/88

(\$ 80,013,850.88 ) Dollars, lawful money of the United States for the payment of which said sum of money well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the Principal is about to enter, or has entered, into a Contract in writing with the City for Contract No. HMMWTCA7E Reconstruction of Worth Street from Hudson Street to Park Row, Borough of Manhattan.

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

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





**Performance Bond #2 (Pages 96 to 99): Use if the total contract price is more than \$5 Million.**

PERFORMANCE BOND #2 (Page 2)

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

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

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



**Performance Bond #2 (Pages 96 to 99): Use if the total contract price is more than \$5 Million.**

PERFORMANCE BOND #2 (Page 3)

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

\_\_\_\_\_ 17th \_\_\_\_\_ day of \_\_\_\_\_ December \_\_\_\_\_ 20 15 \_\_\_\_\_  
(Seal)

MFM Contracting Corporation \_\_\_\_\_ (L.S.)

Principal

By: Michael V. P \_\_\_\_\_

(Seal)

Surety

Arch Insurance Company

By: Susan Lupski \_\_\_\_\_  
Susan Lupski, Attorney-In-Fact

(Seal)

Surety

Arch Reinsurance Company

By: Scott Gillies \_\_\_\_\_  
Scott Gillies, Attorney-In-Fact

(Seal)

Surety

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

(Seal)

Surety

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

(Seal)

Surety

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

Bond Premium Rate \$14.45/M Sliding Scale

Bond Premium Cost \$620,230.00

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

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

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



**Performance Bond #2 (Pages 96 to 99): Use if the total contract price is more than \$5 Million.**

PERFORMANCE BOND #2 (Page 4)

**ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION**

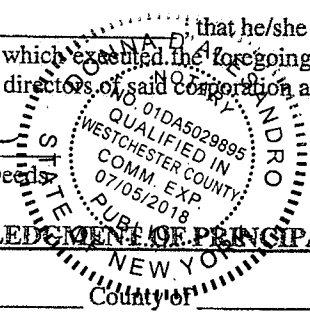
State of New York County of Westchester ss:

On this 21<sup>st</sup> day of December, 2015 before me personally came Michael V. Petrillo,

to me known, who, being by me duly sworn did depose and say that he resides at Purchase NY 10577

that he/she is the PRESIDENT of the corporation described in and which executed the foregoing instrument; that he/she signed his/her name to the foregoing instrument by order of the directors of said corporation as the duly authorized and binding act thereof.

[Signature]  
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.



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

**This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated. Not valid for Mortgage, Note, Loan, Letter of Credit, Bank Deposit, Currency Rate, Interest Rate or Residential Value Guarantees.**

**POWER OF ATTORNEY**

Know All Persons By These Presents:

That the Arch Insurance Company, a corporation organized and existing under the laws of the State of Missouri, having its principal administrative office in Jersey City, New Jersey (hereinafter referred to as the "Company") does hereby appoint:

Camille Maitland, Colette R. Chisholm, Desiree Cardin, George O. Brewster, Gerard S. Macholz, Lee Ferrucci, Mia Woo-Warren, Nelly Renchiwich, Rita Sagistano, Robert T. Pearson, Susan Lupski, Thomas Bean and Vincent A. Walsh of Uniondale, NY (EACH)

its true and lawful Attorney(s)-in-Fact, to make, execute, seal, and deliver from the date of issuance of this power for and on its behalf as surety, and as its act and deed:

Any and all bonds, undertakings, recognizances and other surety obligations, in the penal sum not exceeding Ninety Million Dollars (\$90,000,000.00).

This authority does not permit the same obligation to be split into two or more bonds in order to bring each such bond within the dollar limit of authority as set forth herein.

The execution of such bonds, undertakings, recognizances and other surety obligations in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal administrative office in Jersey City, New Jersey.

This Power of Attorney is executed by authority of resolutions adopted by unanimous consent of the Board of Directors of the Company on September 15, 2011, true and accurate copies of which are hereinafter set forth and are hereby certified to by the undersigned Secretary as being in full force and effect:

"VOTED, That the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, or the Secretary shall have the power and authority to appoint agents and attorneys-in-fact, and to authorize them subject to the limitations set forth in their respective powers of attorney, to execute on behalf of the Company, and attach the seal of the Company thereto, bonds, undertakings, recognizances and other surety obligations obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."

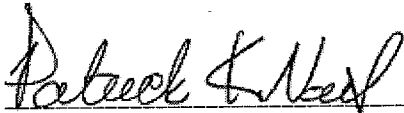
This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the unanimous consent of the Board of Directors of the Company on September 15, 2011:

VOTED, That the signature of the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to the resolution adopted by the Board of Directors on September 15, 2011, and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company.

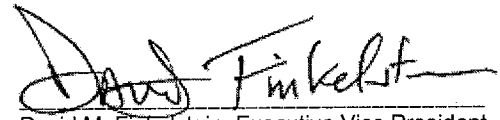
In Testimony Whereof, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this 16<sup>th</sup> day of July, 2015.

Attested and Certified

Arch Insurance Company

  
Patrick K. Nails, Secretary

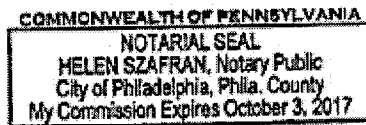


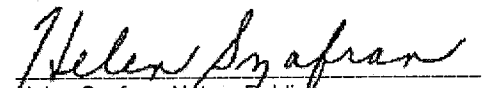
  
David M. Finkelstein, Executive Vice President

STATE OF PENNSYLVANIA SS

COUNTY OF PHILADELPHIA SS

I, Helen Szafran, a Notary Public, do hereby certify that Patrick K. Nails and David M. Finkelstein personally known to me to be the same persons whose names are respectively as Secretary and Executive Vice President of the Arch Insurance Company, a Corporation organized and existing under the laws of the State of Missouri, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.




  
Helen Szafran, Notary Public  
My commission expires 10/03/2017

CERTIFICATION

I, Patrick K. Nails, Secretary of the Arch Insurance Company, do hereby certify that the attached Power of Attorney dated July 16, 2015 on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said David M. Finkelstein, who executed the Power of Attorney as Executive Vice President, was on the date of execution of the attached Power of Attorney the duly elected Executive Vice President of the Arch Insurance Company.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Insurance Company on this \_\_\_\_\_ day of DEC 17 2015, 20\_\_\_\_.

  
Patrick K. Nails, Secretary

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

**PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:**

**Arch Insurance – Surety Division  
3 Parkway, Suite 1500  
Philadelphia, PA 19102**



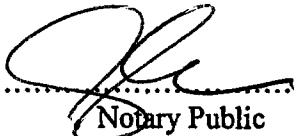


ACKNOWLEDGMENT OF SURETY COMPANY

STATE OF .....New York.....} ss  
COUNTY OF .....Nassau.....}

On this .....DECEMBER 17, 2015....., before me personally came.....SUSAN LUPSKI.....  
to me know, who, being by me duly sworn, did depose and say; that he/she resides in  
.....NASSAU COUNTY....., State of.....NEW YORK....., that he/she is the Attorney-In-Fact of the  
.....ARCH INSURANCE COMPANY.....the corporation described in which  
executed the above instrument; that he/she knows the seal of said corporation; that the  
seal affixed to said instrument is such corporate seal; that is was so affixed by order of  
the Board of Directors of said corporation; and that he/she signed his/her name thereto by  
like order; and the affiant did further depose and say that the Superintendent of Insurance  
of the State of New York, has, pursuant to Section 1111 of the Insurance Law of the State  
of New York, issued to.....ARCH INSURANCE COMPANY.....(Surety) his/her  
certificate of qualification evidencing the qualification of said Company and its  
sufficiency under any law of the State of New York as surety and guarantor, and the  
propriety of accepting and approving it as such; and that such certificate has not been  
revoked.

GRACE ACKERSON  
Notary Public, State of New York  
Nassau County  
Lic. #01AC6111590  
Term Expires June 14, 2016

.....  
  
Notary Public

NY acknowledgment







***This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated. Not valid for Mortgage, Note, Loan, Letter of Credit, Bank Deposit, Currency Rate, Interest Rate or Residential Value Guarantees.***

## **POWER OF ATTORNEY**

Know All Persons By These Presents:

That the Arch Reinsurance Company, a corporation organized and existing under the laws of the State of Nebraska, having its principal administrative office in Morristown, New Jersey (hereinafter referred to as the "Company") does hereby appoint:

David M. Finkelstein, William J. Misero, Matthew S. Haydon, Dennis Stefano, Maria M. Nieves, Brenda S. Faust, Michael Roberts, Meghan McArdle, Jessica L. Grater, Mary A. Cocco, Shannon R. Bowman, Michael R. Mohan, Jeffrey L. Chapman, Craig T. Tagliamonte, Bethany Keller, Michael G. Davis, Laurie Dodd, C. Douglas Fountain, Nancy J. Ellis, Gregory B. Wells, Marc M. Henry, Maria Vargas, Bruce Bergstrom, Marinelly Velazquez, Scott Gillies, Ray Philippon, Michael Dennis, Christina Goldman, Joseph F. Crawford, Anthony S. Bellano, Diane C. Stone and Kathleen Marcinkus, Monica A. Makowiecki, Norman Scott Woodmansee, Robert Michael Fulton, William E. Robinson, Janet M. Harrison

its true and lawful Attorney(s)in-Fact, to make, execute, seal, and deliver from the date of issuance of this power for and on its behalf as surety, and as its act and deed:

Any and all bonds, undertakings, recognizances and other surety obligations.

This authority does not permit the same obligation to be split into two or more bonds in order to bring each such bond within the dollar limit of authority as set forth herein.

The execution of such bonds, undertakings, recognizances and other surety obligations in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal administrative office in Morristown, New Jersey.

This Power of Attorney is executed by authority of resolutions adopted by unanimous consent of the Board of Directors of the Company on June 3, 2014 true and accurate copies of which are hereinafter set forth and are hereby certified to by the undersigned Secretary as being in full force and effect:

"VOTED, That the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, or their appointees designated in writing and filed with the Secretary, or the Secretary shall have the power and authority to appoint agents and attorneys-in-fact, and to authorize them subject to the limitations set forth in their respective powers of attorney, to execute on behalf of the Company, and attach the seal of the Company thereto, bonds, undertakings, recognizances and other surety obligations obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."

This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the unanimous consent of the Board of Directors of the Company on June 3, 2014:

VOTED, That the signature of the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to the resolution adopted by the Board of Directors on June 3, 2014 and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company.

In Testimony Whereof, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this 3rd day of June, 2014.

Attested and Certified

Arch Reinsurance Company

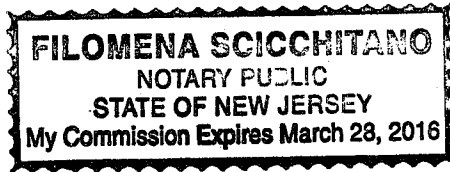


Timothy J. Olson  
Timothy J. Olson, President

Janet Louise Kummert  
Janet Louise Kummert, Corporate Secretary

STATE OF NEW JERSEY SS  
COUNTY OF MORRIS SS

I, Filomena Scicchitano, a Notary Public, do hereby certify that Timothy J. Olson and Janet Louise Kummert personally known to me to be the same persons whose names are respectively as President and Corporate Secretary of the Arch Reinsurance Company, a Corporation organized and existing under the laws of the State of Nebraska, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.



Filomena Scicchitano  
Filomena Scicchitano, Notary Public  
My commission expires March 23, 2016

CERTIFICATION

I, Janet Louise Kummert, Corporate Secretary of the Arch Reinsurance Company, do hereby certify that the attached Power of Attorney dated June 3, 2014 on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said Timothy J. Olson, who executed the Power of Attorney as President, was on the date of execution of the attached Power of Attorney the duly elected President of the Arch Reinsurance Company.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Reinsurance Company on this        day of DEC 17 2015, 20      .

Janet Louise Kummert  
Janet Louise Kummert, Corporate Secretary

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




PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:  
Arch Insurance – Surety Division  
3 Parkway, Suite 1500  
Philadelphia, PA 19102

ACKNOWLEDGMENT OF SURETY COMPANY

STATE OF ..... New York ..... } ss  
COUNTY OF ..... Nassau ..... }

On this ..... DECEMBER 17, 2015 ..... before me personally came..... SCOTT GILLIES  
to me know, who, being by me duly sworn, did depose and say; that he/she resides in  
SUFFOLK COUNTY, State of NEW YORK  
ARCH REINSURANCE COMPANY  
.....the corporation described in which  
executed the above instrument; that he/she knows the seal of said corporation; that the  
seal affixed to said instrument is such corporate seal; that is was so affixed by order of  
the Board of Directors of said corporation; and that he/she signed his/her name thereto by  
like order; and the affiant did further depose and say that the Superintendent of Insurance  
of the State of New York, has, pursuant to Section 1111 of the Insurance Law of the State  
of New York, issued to..... ARCH REINSURANCE COMPANY .....(Surety) his/her  
certificate of qualification evidencing the qualification of said Company and its  
sufficiency under any law of the State of New York as surety and guarantor, and the  
propriety of accepting and approving it as such; and that such certificate has not been  
revoked.

GRACE ACKERSON  
Notary Public, State of New York  
Nassau County  
Lic. #01AC6111590  
Term Expires June 14, 2016

  
.....  
Notary Public

NY acknowledgment









**Payment Bond (Pages 100 to 103): Use for any contract for which a Payment Bond is required.**

Bond No. SU1135529

PAYMENT BOND (Page 1)

PAYMENT BOND

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

MFPM Contracting Corporation

335 Center Avenue, Mamaroneck, NY 10543

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

Arch Insurance Company and Arch Reinsurance Company

Three Parkway, Suite 1500, Philadelphia, PA 19102

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

Eighty Million Thirteen Thousand Eight Hundred Fifty and 88/100

80,013,850.88

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

WHEREAS, the Principal is about to enter, or has entered, into a Contract in writing with the City for Contract No. HMMWTCA7E Reconstruction of Worth Street from Hudson Street to Park Row, Borough of Manhattan.

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

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

(a) Wages and compensation for labor performed and services rendered by all persons engaged in the prosecution of the Work under said Contract, and any amendment or extension thereof or addition thereto, whether such persons be agents servants or employees of the Principal or any such Subcontractor, including all persons so engaged who perform the work of laborers or mechanics at or in the vicinity of the site



**Payment Bond (Pages 100 to 103): Use for any contract for which a Payment Bond is required.**

PAYMENT BOND (Page 2)

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

(b) Materials and supplies (whether incorporated in the permanent structure or not), as well as teams, fuels, oils, implements or machinery furnished, used or consumed by said Principal or any subcontractor at or in the vicinity of the site of the Project in the prosecution of the Work under said Contract and any amendment or extension thereof or addition thereto; then this obligation shall be void, otherwise to remain in full force and effect.

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

(a) The Principal and Surety (Sureties) agree that this bond shall be for the benefit of any materialmen or laborer having a just claim, as well as the City itself.

(b) All persons who have performed labor, rendered services or furnished materials and supplies, as aforesaid, shall have a direct right of action against the Principal and his, its or their successors and assigns, and the Surety (Sureties) herein, or against either or both or any of them and their successors and assigns. Such persons may sue in their own name, and may prosecute the suit to judgment and execution without the necessity of joining with any other persons as party plaintiff.

(c) The Principal and Surety (Sureties) agree that neither of them will hold the City liable for any judgment for costs of otherwise, obtained by either or both of them against a laborer or materialman in a suit brought by either a laborer or materialman under this bond for moneys allegedly due for performing work or furnishing material.

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

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

The Principal, for himself and his successors and assigns, and the Surety (Sureties), for itself and its successors and assigns, do hereby expressly waive any objection that might be interposed as to the right of the City to require a bond containing the foregoing provisions, and they do hereby further expressly waive any defense which they or either of them might interpose to an action brought hereon by any person, firm or corporation, including subcontractors, materialmen and third persons, for work, labor, services, supplies or material performed rendered, or furnished as aforesaid upon the ground that there is no law authorizing the City to require the foregoing provisions to be 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 100 to 103): Use for any contract for which a Payment Bond is required.**

PAYMENT BOND (Page 3)

IN WITNESS WHEREOF, the Principal and the Surety (Sureties) have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereunto affixed and these presents to be signed by their proper officers, this 17th day of December, 2015.

(Seal)

MFM Contracting Corporation (L.S.)

Principal

By: Michael V. [Signature]

(Seal)

Arch Insurance Company

Surety

By: Susan Lupski [Signature]  
Susan Lupski, Attorney In-Fact

(Seal)

Arch Reinsurance Company

Surety

By: Scott Gilfies [Signature]  
Scott Gilfies, Attorney-In-Fact

(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 100 to 103): Use for any contract for which a Payment Bond is required.**

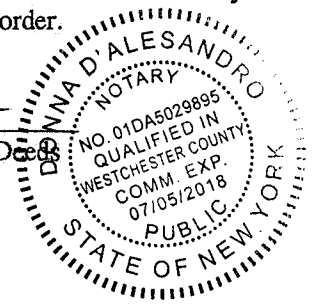
PAYMENT BOND (Page 4)

**ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION**

State of New York County of Westchester ss:

On this 21<sup>st</sup> day of December, 2015, before me personally came Michael V. Petrilko to me known, who, being by me duly sworn did depose and say that he resides at Purchase NY 10577 that he is the President of the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation, and that he signed his name thereto by like order.

Donna Nalband  
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.



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

***This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated. Not valid for Mortgage, Note, Loan, Letter of Credit, Bank Deposit, Currency Rate, Interest Rate or Residential Value Guarantees.***

**POWER OF ATTORNEY**

Know All Persons By These Presents:

That the Arch Insurance Company, a corporation organized and existing under the laws of the State of Missouri, having its principal administrative office in Jersey City, New Jersey (hereinafter referred to as the "Company") does hereby appoint:

Camille Maitland, Colette R. Chisholm, Desiree Cardin, George O. Brewster, Gerard S. Macholz, Lee Ferrucci, Mia Woo-Warren, Nelly Renchiwich, Rita Sagistano, Robert T. Pearson, Susan Lupski, Thomas Bean and Vincent A. Walsh of Uniondale, NY (EACH)

its true and lawful Attorney(s)in-Fact, to make, execute, seal, and deliver from the date of issuance of this power for and on its behalf as surety, and as its act and deed:

Any and all bonds, undertakings, recognizances and other surety obligations, in the penal sum not exceeding Ninety Million Dollars (\$90,000,000.00).

This authority does not permit the same obligation to be split into two or more bonds In order to bring each such bond within the dollar limit of authority as set forth herein.

The execution of such bonds, undertakings, recognizances and other surety obligations in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal administrative office in Jersey City, New Jersey.

This Power of Attorney is executed by authority of resolutions adopted by unanimous consent of the Board of Directors of the Company on September 15, 2011, true and accurate copies of which are hereinafter set forth and are hereby certified to by the undersigned Secretary as being in full force and effect:

"VOTED, That the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, or the Secretary shall have the power and authority to appoint agents and attorneys-in-fact, and to authorize them subject to the limitations set forth in their respective powers of attorney, to execute on behalf of the Company, and attach the seal of the Company thereto, bonds, undertakings, recognizances and other surety obligations obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."

This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the unanimous consent of the Board of Directors of the Company on September 15, 2011:

VOTED, That the signature of the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to the resolution adopted by the Board of Directors on September 15, 2011, and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company.

In Testimony Whereof, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this 16<sup>th</sup> day of July, 2015.

Attested and Certified

Arch Insurance Company

Patrick K. Nails  
Patrick K. Nails, Secretary

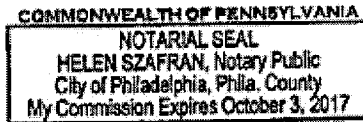


David M. Finkelstein  
David M. Finkelstein, Executive Vice President

STATE OF PENNSYLVANIA SS

COUNTY OF PHILADELPHIA SS

I, Helen Szafran, a Notary Public, do hereby certify that Patrick K. Nails and David M. Finkelstein personally known to me to be the same persons whose names are respectively as Secretary and Executive Vice President of the Arch Insurance Company, a Corporation organized and existing under the laws of the State of Missouri, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.



Helen Szafran  
Helen Szafran, Notary Public  
My commission expires 10/03/2017

CERTIFICATION

I, Patrick K. Nails, Secretary of the Arch Insurance Company, do hereby certify that the attached Power of Attorney dated July 16, 2015 on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said David M. Finkelstein, who executed the Power of Attorney as Executive Vice President, was on the date of execution of the attached Power of Attorney the duly elected Executive Vice President of the Arch Insurance Company.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Insurance Company on this \_\_\_\_\_ day of DEC 17 2015, 20\_\_\_\_.

Patrick K. Nails  
Patrick K. Nails, Secretary

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

**PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:**

Arch Insurance – Surety Division  
3 Parkway, Suite 1500  
Philadelphia, PA 19102




ACKNOWLEDGMENT OF SURETY COMPANY

STATE OF .....New York.....} ss  
COUNTY OF ...Nassau.....}

On this .....DECEMBER 17, 2015....., before me personally came.....SUSAN LUPSKI  
to me know, who, being by me duly sworn, did depose and say; that he/she resides in  
NASSAU COUNTY .....NEW YORK....., that he/she is the Attorney-In-Fact of the  
.....ARCH INSURANCE COMPANY.....the corporation described in which  
executed the above instrument; that he/she knows the seal of said corporation; that the  
seal affixed to said instrument is such corporate seal; that is was so affixed by order of  
the Board of Directors of said corporation; and that he/she signed his/her name thereto by  
like order; and the affiant did further depose and say that the Superintendent of Insurance  
of the State of New York, has, pursuant to Section 1111 of the Insurance Law of the State  
of New York, issued to.....ARCH INSURANCE COMPANY.....(Surety) his/her  
certificate of qualification evidencing the qualification of said Company and its  
sufficiency under any law of the State of New York as surety and guarantor, and the  
propriety of accepting and approving it as such; and that such certificate has not been  
revoked.

GRACE ACKERSON  
Notary Public, State of New York  
Nassau County  
Lic. #01AC6111590  
Term Expires June 14, 2016

  
.....  
Notary Public

NY acknowledgment



ARCH INSURANCE COMPANY  
STATEMENT OF FINANCIAL CONDITION  
DECEMBER 31, 2014

Assets

Cash in Banks	\$ 127,486,649
Bonds owned	2,003,424,640
Stocks	441,536,973
Premiums in course of collection	318,366,265
Accrued interest and other assets	<u>310,044,748</u>
 Total Assets	 <u><u>\$ 3,200,859,275</u></u>

Liabilities

Reserve for losses and adjustment expenses	\$ 1,356,487,805
Reserve for unearned premiums	347,898,150
Ceded reinsurance premiums payable	168,613,930
Amounts withheld or retained by company for account of others	199,971,426
Reserve for taxes, expenses and other liabilities	<u>349,520,028</u>
 Total Liabilities	 2,422,491,339
 Surplus as regards policyholders	 <u>778,367,936</u>
 Total Surplus and Liabilities	 <u><u>\$ 3,200,859,275</u></u>

By:   
Senior Vice President, Chief  
Financial Officer and Treasurer

Attest:   
Senior Vice President,  
General Counsel and Secretary

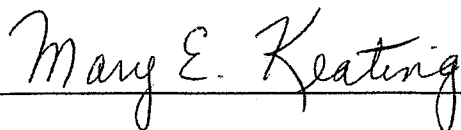
State of New Jersey )  
                                  )       SS  
County of Hudson )

Thomas James Ahern, Senior Vice President, Chief Financial Officer and Treasurer and Patrick Kenneth Nails, Senior Vice President, General Counsel and Secretary being duly sworn, of ARCH INSURANCE COMPANY, Missouri; and that the foregoing is a true and correct statement of financial condition of said company, as of December 31, 2014.

Subscribed and sworn to before me, this 10<sup>th</sup> day of March, 2015

Notary Public

**MARY E. KEATING**  
NOTARY PUBLIC OF NEW JERSEY  
ID # 2449626  
My Commission Expires 8/28/2019

  
\_\_\_\_\_





*This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated. Not valid for Mortgage, Note, Loan, Letter of Credit, Bank Deposit, Currency Rate, Interest Rate or Residential Value Guarantees.*

## POWER OF ATTORNEY

Know All Persons By These Presents:

That the Arch Reinsurance Company, a corporation organized and existing under the laws of the State of Nebraska, having its principal administrative office in Morristown, New Jersey (hereinafter referred to as the "Company") does hereby appoint:

David M. Finkelstein, William J. Misero, Matthew S. Haydon, Dennis Stefano, Maria M. Nieves, Brenda S. Faust, Michael Roberts, Meghan McArdle, Jessica L. Grater, Mary A. Cocco, Shannon R. Bowman, Michael R. Mohan, Jeffrey L. Chapman, Craig T. Tagliamonte, Bethany Keller, Michael G. Davis, Laurie Dodd, C. Douglas Fountain, Nancy J. Ellis, Gregory B. Wells, Marc M. Henry, Maria Vargas, Bruce Bergstrom, Marinelly Velazquez, Scott Gillies, Ray Philippon, Michael Dennis, Christina Goldman, Joseph F. Crawford, Anthony S. Bellano, Diane C. Stone and Kathleen Marcinkus, Monica A. Makowiecki, Norman Scott Woodmansee, Robert Michael Fulton, William E. Robinson, Janet M. Harrison

its true and lawful Attorney(s)in-Fact, to make, execute, seal, and deliver from the date of issuance of this power for and on its behalf as surety, and as its act and deed:

Any and all bonds, undertakings, recognizances and other surety obligations.

This authority does not permit the same obligation to be split into two or more bonds In order to bring each such bond within the dollar limit of authority as set forth herein.

The execution of such bonds, undertakings, recognizances and other surety obligations in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal administrative office in Morristown, New Jersey.

This Power of Attorney is executed by authority of resolutions adopted by unanimous consent of the Board of Directors of the Company on June 3, 2014 true and accurate copies of which are hereinafter set forth and are hereby certified to by the undersigned Secretary as being in full force and effect:

"VOTED, That the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, or their appointees designated in writing and filed with the Secretary, or the Secretary shall have the power and authority to appoint agents and attorneys-in-fact, and to authorize them subject to the limitations set forth in their respective powers of attorney, to execute on behalf of the Company, and attach the seal of the Company thereto, bonds, undertakings, recognizances and other surety obligations obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."

This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the unanimous consent of the Board of Directors of the Company on June 3, 2014:

VOTED, That the signature of the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to the resolution adopted by the Board of Directors on June 3, 2014 and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company.

In Testimony Whereof, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this 3rd day of June, 2014.

Attested and Certified

Arch Reinsurance Company

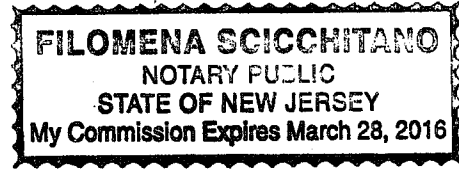


Timothy J. Olson  
Timothy J. Olson, President

Janet Louise Kummert  
Janet Louise Kummert, Corporate Secretary

STATE OF NEW JERSEY SS  
COUNTY OF MORRIS SS

I, Filomena Scicchitano, a Notary Public, do hereby certify that Timothy J. Olson and Janet Louise Kummert personally known to me to be the same persons whose names are respectively as President and Corporate Secretary of the Arch Reinsurance Company, a Corporation organized and existing under the laws of the State of Nebraska, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.



Filomena Scicchitano  
Filomena Scicchitano, Notary Public  
My commission expires March 23, 2016

CERTIFICATION

I, Janet Louise Kummert, Corporate Secretary of the Arch Reinsurance Company, do hereby certify that the attached Power of Attorney dated June 3, 2014 on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said Timothy J. Olson, who executed the Power of Attorney as President, was on the date of execution of the attached Power of Attorney the duly elected President of the Arch Reinsurance Company.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Reinsurance Company on this \_\_\_\_\_ day of DEC 17 2015, 20\_\_\_\_\_.

Janet Louise Kummert  
Janet Louise Kummert, Corporate Secretary

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



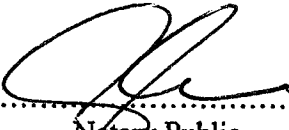
PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:  
Arch Insurance - Surety Division  
3 Parkway, Suite 1500  
Philadelphia, PA 19102

ACKNOWLEDGMENT OF SURETY COMPANY

STATE OF ..... New York ..... } ss  
COUNTY OF ..... Nassau ..... }

On this ..... DECEMBER 17, 2015 ..... before me personally came..... SCOTT GILLIES .....  
to me know, who, being by me duly sworn, did depose and say; that he/she resides in  
SUFFOLK COUNTY, State of NEW YORK ..... that he/she is the Attorney-In-Fact of the  
ARCH REINSURANCE COMPANY ..... the corporation described in which  
executed the above instrument; that he/she knows the seal of said corporation; that the  
seal affixed to said instrument is such corporate seal; that is was so affixed by order of  
the Board of Directors of said corporation; and that he/she signed his/her name thereto by  
like order; and the affiant did further depose and say that the Superintendent of Insurance  
of the State of New York, has, pursuant to Section 1111 of the Insurance Law of the State  
of New York, issued to..... ARCH REINSURANCE COMPANY ..... (Surety) his/her  
certificate of qualification evidencing the qualification of said Company and its  
sufficiency under any law of the State of New York as surety and guarantor, and the  
propriety of accepting and approving it as such; and that such certificate has not been  
revoked.

GRACE ACKERSON  
Notary Public, State of New York  
Nassau County  
Lic. #01AC6111590  
Term Expires June 14, 2016

.....  
  
Notary Public

NY acknowledgment



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STATE OF NEW YORK  
WORKERS' COMPENSATION BOARD

**CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE**

<b>1a. Legal Name &amp; Address of Insured (Use street address only)</b>  MFM Contracting Corp. 335 Center Avenue Mamaroneck, NY 10543  <b>Work Location of Insured (Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)</b>	<b>1b. Business Telephone Number of Insured</b> (914) 777-8292  <b>1c. NYS Unemployment Insurance Employer Registration Number of Insured</b>  <b>1d. Federal Employer Identification Number of Insured or Social Security Number</b> 13-4130805
<b>2. Name and Address of the Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder)</b>  New York City Department of Design & Construction 30-30 Thomson Avenue Long Island City NY 11101	<b>3a. Name of Insurance Carrier</b> Chubb Indemnity Insurance Company  <b>3b. Policy Number of entity listed in box "1a"</b> 4472744403  <b>3c. Policy effective period</b> 08/13/2015-08/13/2016  <b>3d. The Proprietor, Partners or Executive Officers are</b> <input checked="" type="checkbox"/> included. (Only check box if all partners/officers included) <input type="checkbox"/> all excluded or certain partners/officers excluded.

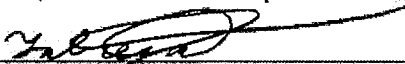
This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. (To use this form, New York (NY) must be listed under **Item 3A** on the **INFORMATION PAGE** of the workers' compensation insurance policy). The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

*The Insurance Carrier will also notify the above certificate holder within 10 days IF a policy is canceled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from the coverage indicated on this Certificate. (These notices may be sent by regular mail.) Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in box "3c", whichever is earlier.*

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

**Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.**

Approved by: Lakki Talreja  
(Print name of authorized representative or licensed agent of insurance carrier)

Approved by:  12/17/2015  
(Signature) (Date)

Title: Account Manager

Telephone Number of authorized representative or licensed agent of insurance carrier: (516) 414-8613

**Please Note: Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are NOT authorized to issue it.**

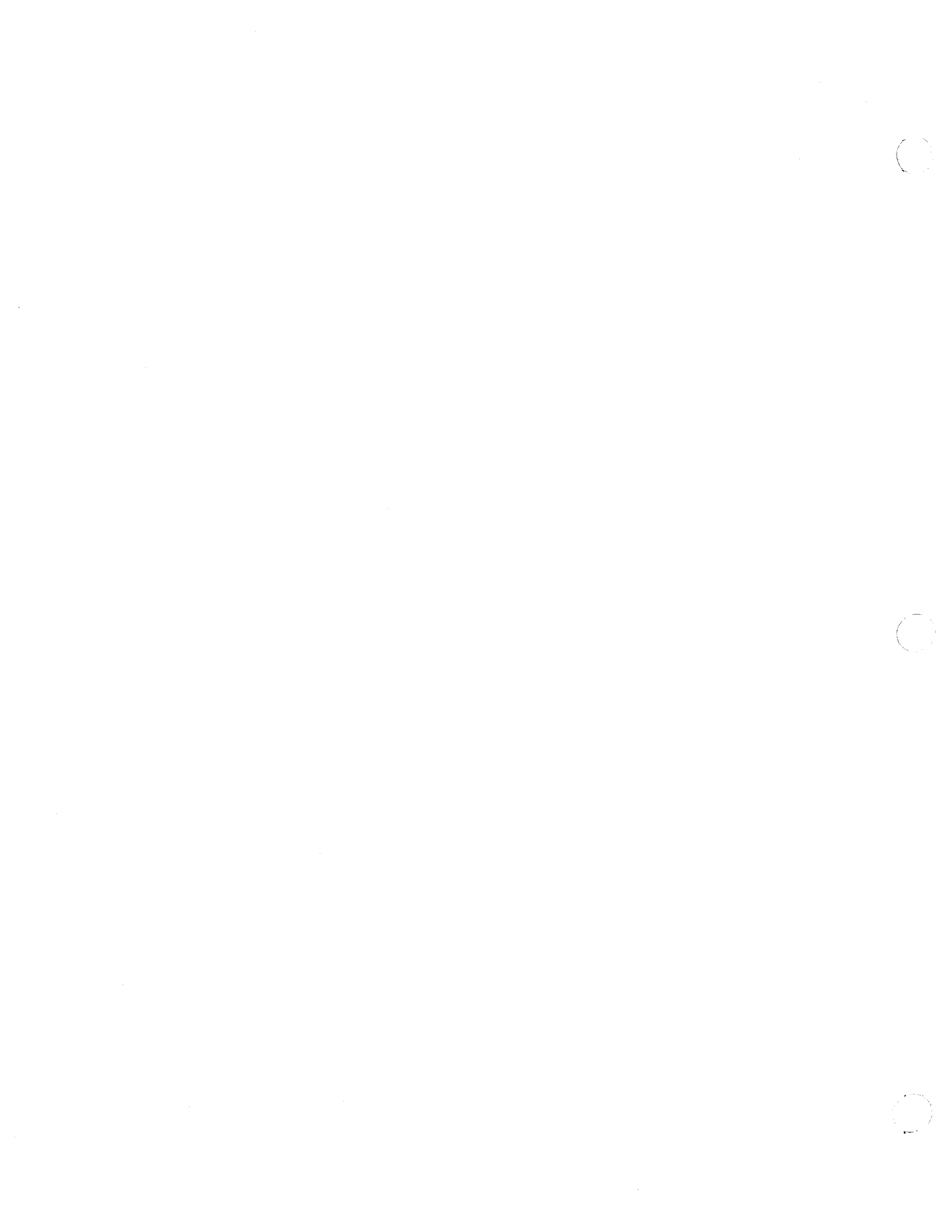


## Workers' Compensation Law

### **Section 57. Restriction on issue of permits and the entering into contracts unless compensation is secured.**

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

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





# EVIDENCE OF PROPERTY INSURANCE

DATE (MM/DD/YYYY)  
12/21/2015

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

AGENCY Alliant Insurance Services, Inc. 333 Earle Ovington Blvd. Uniondale, NY 11553		PHONE (A/C, No, Ext): 516-414-8938	COMPANY Aspen American Insurance Company 590 Madison Ave 7th Fl New York NY 10022	
FAX (A/C, No): 877-308-1070	E-MAIL ADDRESS: msnow@alliant.com			
CODE:	SUB CODE:			
AGENCY CUSTOMER ID #: MFMCNT-01		LOAN NUMBER		POLICY NUMBER IMAACTE15
INSURED MFM Contracting Corp. 335 Center Avenue Mamaroneck, NY 10543		EFFECTIVE DATE 08/13/2015	EXPIRATION DATE 08/13/2016	<input type="checkbox"/> CONTINUED UNTIL TERMINATED IF CHECKED
THIS REPLACES PRIOR EVIDENCE DATED:				

## PROPERTY INFORMATION

LOCATION/DESCRIPTION Engineers Field Office for Project #HMMWTCA7E, Borough Of Manhattan
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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 EVIDENCE OF PROPERTY INSURANCE 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.

## COVERAGE INFORMATION

COVERAGE / PERILS / FORMS	AMOUNT OF INSURANCE	DEDUCTIBLE
Engineers Field Office Business Personal Property	\$40,000 \$25,000	\$2,500 \$2,500

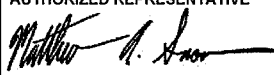
## REMARKS (Including Special Conditions)

Coverage is subject to policy terms, conditions and exclusions.
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## CANCELLATION

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

## ADDITIONAL INTEREST

NAME AND ADDRESS  New York City Department of Design & Construction 30-30 Thomson Avenue Long Island City NY 11101	<input type="checkbox"/>	MORTGAGEE	<input checked="" type="checkbox"/>	ADDITIONAL INSURED
	<input checked="" type="checkbox"/>	LOSS PAYEE	<input type="checkbox"/>	
LOAN #				
AUTHORIZED REPRESENTATIVE 				

C

C

C

**SCHEDULE A  
(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)  
(GENERAL CONDITIONS RELATING TO ARTICLE 22 - INSURANCE)**

**PART III. BROKER'S CERTIFICATION**

Pursuant to Article 22.3.3 of the Contract, every Certificate of Insurance must be accompanied by either the following certification by the broker setting forth the following text and required information and signatures or certified copies of all policies referenced in the Certificate of Insurance.

**CERTIFICATION BY BROKER**

The undersigned insurance broker represents to the City of New York that the attached Certificate of Insurance is accurate in all material respects, and that the described insurance is effective as of the date of this Certification.

Alliant Insurance Services Inc.  
[Name of broker (typewritten)]

333 Earle Ovington Blvd., Suite 700  
Uniondale, NY 11553  
[Address of broker (typewritten)]

Lakki.Talreja@alliant.com  
[Email address of broker (typewritten)]

516 4148613  
[Phone number/Fax number of broker (typewritten)]

  
[Signature of authorized official or broker]

Lakki Talreja, Account Manager  
[Name and title of authorized official (typewritten)]

State of ... New York .....

County of ... Nassau ..... ) ss.:

Sworn to before me this 21st day of December, 2015

  
NOTARY PUBLIC FOR THE STATE OF New York

SARAH BASILE  
NOTARY PUBLIC-STATE OF NEW YORK  
No. 01BA6226789  
Qualified in Nassau County  
My Commission Expires August 16, 2018





SCHEDULE OF WORKMEN, MECHANICS AND LABORERS

The following is a list of classifications for workmen, mechanics and laborers which are anticipated to be employed in the performance of work under this contract, followed by a schedule of the prevailing wage rates and supplemental benefits for all classifications as established by the Comptroller of the City of New York.

Request for interpretation or correction under Subsection A of Section No. 3 in the Information for Bidders includes all requests for clarification of the classification of trades to be employed in the performance of the work under this contract.

In the event that a trade not listed in the classification of trades required to be used at the time of the award of the contract is in fact employed during the performance of this contract, the Contractor shall be required to obtain from the agency the prevailing wage rates and supplementary benefits for the trades used and to complete the performance of this contract at the price at which the contract was awarded.

<u>CODE</u>	<u>CLASSIFICATION</u>
15 42 001	Rigger
15 42 002	Sign Erector
16 11 001	Gardener
16 11 002	Tree Pruner
16 11 003	Tree Remover
16 11 011	Asphalt Raker (Highway & Paving)
16 11 012	Tamper (Highway & Paving)
16 11 013	Curbsetter (Highway & Paving)
16 11 014	Formsetter (Highway & Paving)
16 11 015	Rammerman (Highway & Paving)
16 11 016	Laborer (Highway & Paving)
16 11 017	ALL OTHER TITLES (Highway & Paving)
16 23 001	Laborer
16 23 002	Operating Engineer (Heavy Construction-Maintenance)
16 23 003	Junior Operating Engineer
16 23 004	Junior Operating Engineer
16 23 005	Junior Operating Engineer
16 23 006	Fireman (Heavy Construction)
16 23 007	Oiler (Heavy Construction)
16 23 051	Surveyor-Heavy Construction
16 23 052	Surveyor-Heavy Construction-Instrument Man
16 23 053	Surveyor-Heavy Construction-Rodman
16 23 057	Surveyor-Land Surveying-Party Chief
16 23 058	Surveyor-Land Surveying-Instrument Man
16 23 059	Surveyor-Land Surveying-Rodman

<u>CODE</u>	<u>CLASSIFICATION</u>
16 23 061	Operating Engineer-Road & Heavy Construction
16 23 062	Operating Engineer-Paving
16 23 063	Operating Engineer-Concrete
16 23 071	Teamster-Heavy Equipment Trailer Driver
16 23 072	Teamster-Dump Truck Driver
16 23 073	Teamster-Flat Bed Trailer Driver (3-Axle)
16 23 074	Teamster-Redi-Mix (Sand and Gravel)
16 29 011	Drill Runners
17 11 001	Plumbers
17 21 001	Painter (Brush & Roller)
17 31 001	Electrician
17 41 001	Bricklayer
17 41 002	Mason Tender
17 41 004	Cement Mason
17 42 002	Metallic Lather
17 51 001	Carpenter
17 51 002	Dock Builder
17 71 001	Cement & Concrete Worker
17 91 001	Structural Iron Worker
17 95 001	Barman
17 96 021	Derrickmen & Riggers
17 99 001	Ornamental Iron Worker
17 99 002	Sandblaster
17 99 005	Pointers (Waterproofer)
17 99 011	Welders

Each classification may include trainees depending upon project staffing schedules and as required by the terms of this contract.

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

LABOR LAW §220 PREVAILING WAGE SCHEDULE

Workers, Laborers and Mechanics employed on a public work project must receive not less than the prevailing rate of wage and benefits for the classification of work performed by each upon such public work. Pursuant to Labor Law §220 the Comptroller of the City of New York has promulgated this schedule solely for Workers, Laborers and Mechanics engaged by private contractors on New York City public work contracts.

This schedule is a compilation of separate determinations of the prevailing rate of wage and supplements made by the Comptroller for each trade classification listed herein pursuant to New York State Labor Law section 220 (5). The source of the wage and supplement rates, whether a collective bargaining agreement, survey data or other, is listed at the end of each classification.

Agency Chief Contracting Officers should contact the Bureau of Labor Law's Classification Unit with any questions concerning trade classifications, prevailing rates or prevailing practices with respect to procurement on New York City public works contracts. Contractors are advised to review the Comptroller's Prevailing Wage Schedule before bidding on public works contracts. Contractors with questions concerning trade classifications, prevailing rates or prevailing practices with respect to public works contracts in the procurement stage must contact the contracting agency responsible for the procurement.

Any error as to compensation under the prevailing wage law or other information as to trade classification, made by the contracting agency in the contract documents or in any other communication, will not preclude a finding against the contractor of prevailing wage violation.

Any questions concerning trade classifications, prevailing rates or prevailing practices on New York City public works contracts that have already been awarded may be directed to the Bureau of Labor Law's Classification Unit by calling (212) 669-7974. All callers must have the agency name and contract registration number available when calling with questions on public works contracts. Please direct all other compliance issues to: Bureau of Labor Law, Attn: Wasyl Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 1122, New York, N.Y. 10007; Fax (212) 669-4002.

The appropriate schedule of prevailing wages and benefits must be posted at all public work sites pursuant to Labor Law §220 (3-a) (a).

This schedule is applicable to work performed during the effective period, unless otherwise noted. Changes to this schedule are published on our web site [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov). Contractors must pay the wages and supplements in effect when the worker, laborer, mechanic performs the work. Preliminary schedules for future one-year periods appear in the City Record on or about June 1 each succeeding year. Final schedules appear on or about July 1 in the City Record and on our web site [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov).

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

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

Prevailing rates and ratios for apprentices are attached to this schedule in the Appendix. Pursuant to Labor Law §220 (3-e), only apprentices who are individually registered in a bona fide program to which the employer contractor is a participant, registered with the New York State Department of Labor, may be employed on a public work project. Workers who are not journey persons or not registered apprentices pursuant to Labor Law §220 (3-e) may not be substituted for apprentices and must be paid as journey persons.

Public Work construction, reconstruction, demolition, excavation, rehabilitation, repair, renovation, alteration, or improvement contracts awarded pursuant to a Project Labor Agreement ("PLA") in accordance with Labor Law section 222 may have different labor standards for shift, premium and overtime work. Please refer to the PLA's pre-negotiated labor agreements for wage and benefit rates applicable to work performed outside of the regular workday. More information is available at the Mayor's Office of Contract Services (MOCS) web page at <http://www.nyc.gov/html/mocs/html/vendors/pla.shtml>.

All the provisions of Labor Law section 220 remain applicable to PLA work including, but not limited to, the enforcement of prevailing wage requirements by the Comptroller; however, we will enforce shift, premium, overtime and other non-standard rates as they appear in a project's pre-negotiated labor agreement.

In order to meet their obligation to provide prevailing supplemental benefits to each covered employee, employers must either:

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

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

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

**ASBESTOS HANDLER**

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

**Asbestos Handler**

Effective Period: 7/1/2014 - 6/30/2015

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

Supplemental Benefit Rate per Hour: **\$15.45**

**Overtime**

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

Time and one half the regular rate for Sunday.

Time and one half the regular hourly rate after 40 hours in any work week.

**Overtime Holidays**

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

New Year's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Easter

**Paid Holidays**

None

(Local #78 and Local #12A)

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**BLASTER**

**Blaster**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$45.70**

Supplemental Benefit Rate per Hour: **\$39.69**

**Blaster (Hydraulic)**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$46.49**

Supplemental Benefit Rate per Hour: **\$39.69**

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

**Blaster - Trac Drill Hydraulic**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$41.20  
Supplemental Benefit Rate per Hour: \$39.69

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

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$40.44  
Supplemental Benefit Rate per Hour: \$39.69

**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: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$39.43  
Supplemental Benefit Rate per Hour: \$39.69

**Blaster - Powder Carriers**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$35.66  
Supplemental Benefit Rate per Hour: \$39.69

**Blaster - Hydraulic Trac Drill Chuck Tender**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$34.42  
Supplemental Benefit Rate per Hour: \$39.69

**Blaster - Chuck Tender & Nipper**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$33.69  
Supplemental Benefit Rate per Hour: \$39.69

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

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$20.30  
Supplemental Benefit Rate per Hour: \$39.69

**Overtime Description**

Magazine Keepers:



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

Time and one half for work performed in excess of forty (40) hours per week and for work performed on Saturdays, Sundays and Holidays.

**All Other Employees:**

Time and one-half for the first eight hours of work on Saturday and for Make-up Time. Double time for all hours over eight Monday through Friday (except make-up hours) and for all hours worked on Sunday and Holidays.

**Overtime**

Double time the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

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

New Year's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

None

**Shift Rates**

A single shift shall be 8 hours plus an unpaid lunch, starting at 8:00 A.M (or between 6:00 A.M. and 10:00 A.M. on weekdays). When two (2) shifts are employed, each shift shall be 8 hours plus ½ hour unpaid lunch. When three (3) shifts are employed, each shift will work seven and one-half (7 ½) hours, but will be paid for eight (8) hours, since only one-half (½) hour is allowed for mealtime. When two (2) or more shifts are employed, single time will be paid for each shift. The first 8 hours of any and all work performed Monday through Friday inclusive of any off-shift shall be at the single time rate.

(Local #29)

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**BOILERMAKER**

**Boilermaker**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$50.45**

Supplemental Benefit Rate per Hour: **\$41.31**

Supplemental Note: For time and one half overtime - \$61.37; For double overtime - \$81.43.

**Overtime Description**

For Repair and Maintenance work:

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

Time and one half the regular rate for Saturday.

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

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: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$47.78  
Supplemental Benefit Rate per Hour: \$28.03

### Overtime

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

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  
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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$49.88**

Supplemental Benefit Rate per Hour: **\$44.10**

### 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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$48.35**

Supplemental Benefit Rate per Hour: **\$46.12**

**Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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.

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

(Carpenters District Council)

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## **CEMENT & CONCRETE WORKER**

### **Cement & Concrete Worker**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$42.38**

Supplemental Benefit Rate per Hour: **\$26.17**

Supplemental Note: **\$28.92 on Saturdays; \$31.67 on Sundays & Holidays**

### **Overtime Description**

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

### **Overtime**

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

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

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

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**

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

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$38.88**

Supplemental Benefit Rate per Hour: **\$39.80**

Supplemental Note: For time and one half overtime - \$49.05; For double overtime - \$58.30

### **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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$35.71**

Supplemental Benefit Rate per Hour: **\$21.69**

### **Core Driller Helper**

Effective Period: 7/1/2014 - 6/30/2015

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

Supplemental Benefit Rate per Hour: **\$21.69**

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

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

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$25.74

Supplemental Benefit Rate per Hour: \$21.69

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

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$22.88

Supplemental Benefit Rate per Hour: \$21.69

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

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$20.02

Supplemental Benefit Rate per Hour: \$21.69

**Overtime Description**

Time and one half the regular rate for work on a holiday plus Holiday pay when worked.

**Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

**Paid Holidays**

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

**Shift Rates**

The shift day shall be the continuous eight and one-half (8½) hours from 6:00 A.M. to 2:30 P.M. and from 2:30 P.M. to 11:00 P.M., including one-half (½) hour of employees regular rate of pay for lunch. When two (2) or more shifts are employed, single time shall be paid for each shift, but those employees employed on a shift other than from 8:00 A.M. to 5:00 P.M. shall, in addition, receive seventy-five cents (\$0.75) per hour differential for each hour worked. When three (3) shifts are needed, each shift shall work seven and one-half (7 ½) hours paid for eight (8) hours of labor and be permitted one-half (½) hour for mealtime.

(Carpenters District Council)

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

**DERRICKPERSON AND RIGGER**

**Derrick Person & Rigger**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$42.25

Supplemental Benefit Rate per Hour: \$47.81

Supplemental Note: The above supplemental rate applies for work performed in Manhattan, Bronx, Brooklyn and Queens. \$49.23 - For work performed in Staten Island.

**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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$61.30

Supplemental Benefit Rate per Hour: \$46.12

**Diver Tender (Marine)**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$43.45

Supplemental Benefit Rate per Hour: \$46.12



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

### Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

### 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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$48.35

Supplemental Benefit Rate per Hour: \$46.12

### Overtime

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

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

### Overtime Holidays

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

New Year's Day

President's Day

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

Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Presidential Election Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

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

(Carpenters District Council)

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**DRIVER: TRUCK (TEAMSTER)**

**Driver - Dump Truck**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$38.86**

Supplemental Benefit Rate per Hour: **\$40.44**

Supplemental Note: Over 40 hours worked: time and one half rate \$16.94, double time rate \$22.59

**Driver - Tractor Trailer**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$38.88**

Supplemental Benefit Rate per Hour: **\$41.70**

Supplemental Note: For over 40 hours worked: at time and one half - \$15.90; at double time - \$21.21

**Driver - Euclid & Turnapull Operator**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$39.44**

Supplemental Benefit Rate per Hour: **\$41.70**

Supplemental Note: Over 40 hours worked: time and one half rate \$15.90, double time rate \$21.21

**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.

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  
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 (Sand & Gravel)

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$36.05

Supplemental Benefit Rate per Hour: \$38.60

Supplemental Note: Over 40 hours worked: time and one half rate \$13.53, double time rate \$18.04

### 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

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

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

New Year's Day  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

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

(Local #282)

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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: 7/1/2014 - 5/12/2015  
Wage Rate per Hour: **\$53.00**  
Supplemental Benefit Rate per Hour: **\$47.54**

Effective Period: 5/13/2015 - 6/30/2015  
Wage Rate per Hour: **\$54.00**  
Supplemental Benefit Rate per Hour: **\$50.03**

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

Effective Period: 7/1/2014 - 5/12/2015  
Wage Rate per Hour: **\$79.50**  
Supplemental Benefit Rate per Hour: **\$50.86**

Effective Period: 5/13/2015 - 6/30/2015  
Wage Rate per Hour: **\$81.00**  
Supplemental Benefit Rate per Hour: **\$53.41**

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

**Electrician "A" (Day Shift)**

Effective Period: 7/1/2014 - 5/12/2015

Wage Rate per Hour: \$53.00

Supplemental Benefit Rate per Hour: \$47.54

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: \$54.00

Supplemental Benefit Rate per Hour: \$50.03

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

Effective Period: 7/1/2014 - 5/12/2015

Wage Rate per Hour: \$79.50

Supplemental Benefit Rate per Hour: \$50.86

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: \$81.00

Supplemental Benefit Rate per Hour: \$53.41

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

Effective Period: 7/1/2014 - 5/12/2015

Wage Rate per Hour: \$62.19

Supplemental Benefit Rate per Hour: \$54.07

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: \$63.36

Supplemental Benefit Rate per Hour: \$56.94

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

Effective Period: 7/1/2014 - 5/12/2015

Wage Rate per Hour: \$93.29

Supplemental Benefit Rate per Hour: \$57.97

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: \$95.04

Supplemental Benefit Rate per Hour: \$60.91

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

Effective Period: 7/1/2014 - 5/12/2015

Wage Rate per Hour: \$69.66

Supplemental Benefit Rate per Hour: \$59.59

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: \$70.97

Supplemental Benefit Rate per Hour: \$62.78

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

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

Effective Period: 7/1/2014 - 5/12/2015

Wage Rate per Hour: **\$104.49**

Supplemental Benefit Rate per Hour: **\$63.96**

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: **\$106.46**

Supplemental Benefit Rate per Hour: **\$67.23**

**Overtime**

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

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

**Overtime Holidays**

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Paid Holidays**

None

**Shift Rates**

When so elected by the Employer, one or more shifts of at least five days duration may be scheduled as follows:

Day Shift: 8:00 am to 4:30 pm, Swing Shift 4:30 pm to 12:30 am, Graveyard Shift: 12:30 am to 8:00 am.

For multiple shifts of temporary light and/or power, the temporary light and/or power employee shall be paid for 8 hours at the straight time rate. For three or less workers performing 8 hours temporary light and/or power the supplemental benefit rate is \$23.63. Effective 5/13/2015 - \$24.39.

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

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

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Effective Period: 7/1/2014 - 5/12/2015

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

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: **\$27.50**

Supplemental Benefit Rate per Hour: **\$20.82**

First and Second Year "M" Wage Rate Per Hour - Hired on or before 5/10/07: \$26.80

First and Second Year "M" Supplemental Rate- Hired on or before 5/10/07: \$20.46

First and Second Year "M" Wage Rate Per Hour - Hired after 5/10/07: \$23.00

First and Second Year "M" Supplemental Rate- Hired after 5/10/07: \$18.56

### **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: 7/1/2014 - 5/12/2015

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

Supplemental Benefit Rate per Hour: **\$22.01**

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

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: **\$41.25**

Supplemental Benefit Rate per Hour: **\$22.54**

First and Second Year "M" Wage Rate Per Hour - Hired on or before 5/10/07: \$40.20

First and Second Year "M" Supplemental Rate- Hired on or before 5/10/07: \$22.14

First and Second Year "M" Wage Rate Per Hour - Hired after 5/10/07: \$34.50

First and Second Year "M" Supplemental Rate- Hired after 5/10/07: \$20.00

### **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

abor Day

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

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: 7/1/2014 - 6/30/2015

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



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

**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: 7/1/2014 - 5/19/2015  
Wage Rate per Hour: **\$53.00**  
Supplemental Benefit Rate per Hour: **\$49.34**

Effective Period: 5/20/2015 - 6/30/2015  
Wage Rate per Hour: **\$54.00**  
Supplemental Benefit Rate per Hour: **\$51.86**

**Electrician - Electro Pole Foundation Installer**

Effective Period: 7/1/2014 - 5/19/2015  
Wage Rate per Hour: **\$40.18**  
Supplemental Benefit Rate per Hour: **\$37.73**

Effective Period: 5/20/2015 - 6/30/2015  
Wage Rate per Hour: **\$40.93**  
Supplemental Benefit Rate per Hour: **\$39.46**

**Electrician - Electro Pole Maintainer**

Effective Period: 7/1/2014 - 5/19/2015  
Wage Rate per Hour: **\$34.40**  
Supplemental Benefit Rate per Hour: **\$34.00**

Effective Period: 5/20/2015 - 6/30/2015  
Wage Rate per Hour: **\$35.05**  
Supplemental Benefit Rate per Hour: **\$35.51**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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### 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: 7/1/2014 - 3/16/2015

Wage Rate per Hour: **\$58.23**

Supplemental Benefit Rate per Hour: **\$29.47**

Effective Period: 3/17/2015 - 6/30/2015

Wage Rate per Hour: **\$59.55**

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

### 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

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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: 7/1/2014 - 3/16/2015

Wage Rate per Hour: \$46.00

Supplemental Benefit Rate per Hour: \$28.78

Effective Period: 3/17/2015 - 6/30/2015

Wage Rate per Hour: \$46.92

Supplemental Benefit Rate per Hour: \$30.91

**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

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

### 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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$59.24**

Supplemental Benefit Rate per Hour: **\$31.93**

Supplemental Note: \$57.46 on overtime

Shift Wage Rate: **\$94.78**

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§220 PREVAILING WAGE SCHEDULE

**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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$39.10**

Supplemental Benefit Rate per Hour: **\$31.93**

Supplemental Note: \$57.46 on overtime

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Shift Wage Rate: \$62.56

**Engineer - Heavy Construction Maintenance Engineer IV**

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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, Guniting Machines, Battery of Compressors, Crawler Cranes, two-person Trenching Machines.

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$53.43

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Supplemental Benefit Rate per Hour: **\$31.93**  
Supplemental Note: \$57.46 on overtime  
Shift Wage Rate: **\$85.49**

**Engineer - Steel Erection Oiler II**

On a Crawler Crane

Effective Period: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$54.04**

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Supplemental Benefit Rate per Hour: **\$31.93**  
Supplemental Note: \$57.46 on overtime

**Engineer - Building Work Maintenance Engineers II**

On Pumps, Generators, Mixers and Heaters

Effective Period: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
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, Gunitite Machines, Compressors (three or more in Battery).

Effective Period: 7/1/2014 - 6/30/2015  
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



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

Columbus Day  
Veteran's Day  
Thanksgiving Day  
Christmas Day

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

### Shift Rates

Off Shift: double time the regular hourly rate.

(Local #15)

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## ENGINEER - CITY SURVEYOR AND CONSULTANT

### Party Chief

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$35.55

Supplemental Benefit Rate per Hour: \$17.65

### Instrument Person

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$29.41

Supplemental Benefit Rate per Hour: \$17.65

### Rodperson

Effective Period: 7/1/2014 - 6/30/2015

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

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

**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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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

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

(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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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

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

(Operating Engineer Local #15-D)

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**ENGINEER - FIELD (STEEL ERECTION)**

**Field Engineer - Steel Erection Party Chief**

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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

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

(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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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**

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

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

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$69.23**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: **\$51.75** overtime hours

Shift Wage Rate: **\$110.77**

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

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

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$62.53**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: **\$51.75** overtime hours

Shift Wage Rate: **\$100.05**

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

Elevators (manually operated as personnel hoist).

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$57.46**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: **\$51.75** overtime hours

Shift Wage Rate: **\$91.94**

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

Compressors (Portable 3 or more in battery), Driving of Truck Mounted Compressors, Well-point Pumps, Tugger Machines Well Point Pumps, Churn Drill.

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$61.53**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: **\$51.75** overtime hours

Shift Wage Rate: **\$98.45**

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

**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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$41.44**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: \$51.75 overtime hours

Shift Wage Rate: **\$66.30**

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

Concrete Breaking Machines, Hoists (Single Drum), Load Masters, Locomotives (over ten tons) and Dinkies over ten tons, Hydraulic Crane-Second Engineer.

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$65.76**



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  
Shift Wage Rate: **\$105.22**

**Operating Engineer - Paving II**

Asphalt Roller

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$64.04**  
Supplemental Benefit Rate per Hour: **\$28.60**  
Supplemental Note: \$51.75 overtime hours  
Shift Wage Rate: **\$102.46**

**Operating Engineer - Paving III**

Asphalt Plants

Effective Period: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$56.16**  
Supplemental Benefit Rate per Hour: **\$28.60**  
Supplemental Note: \$51.75 overtime hours

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

Three Drum Derricks

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$70.50**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: **\$51.75** overtime hours

Shift Wage Rate: **\$112.80**

**Operating Engineer - Steel Erection III**

Compressors, Welding Machines.

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$57.82**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: **\$51.75** overtime hours

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$65.83**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: \$51.75 overtime hours

**Operating Engineer - Building Work IV**

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$63.58**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: \$51.75 overtime hours

**Operating Engineer - Building Work VII**

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

**Rack & Pinion and House Cars**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$50.53**

Supplemental Benefit Rate per Hour: **\$28.60**

Supplemental Note: \$51.75 overtime hours

For New House Car projects started after 7/1/11 only: Wage Rate per Hour \$40.31

**Overtime Description**

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

For House Cars and Rack & Pinion only: Overtime paid at time and one-half for all hours in excess of eight hours in a day, Saturday, Sunday and Holidays worked.

**Overtime**

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

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

**Paid Holidays**

New Year's Day

Lincoln's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

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

**Shift Rates**

For Steel Erection Only: Shifts may be worked at the single time rate at other than the regular working hours (8:00 A.M. to 4:30 P.M.) on the following work ONLY: Heavy construction jobs on work below the street level, over railroad tracks and on building jobs.

(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**

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

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$49.88**

Supplemental Benefit Rate per Hour: **\$44.10**

### 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

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: 7/1/2014 - 10/31/2014

Wage Rate per Hour: **\$42.50**

Supplemental Benefit Rate per Hour: **\$35.09**

Supplemental Note: Supplemental Benefit Overtime Rate: **\$43.59**

Effective Period: 11/1/2014 - 6/30/2015

Wage Rate per Hour: **\$42.85**

Supplemental Benefit Rate per Hour: **\$35.59**

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

Supplemental Note: Supplemental Benefit Overtime Rate: \$44.09

### Overtime Description

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

### Overtime

Double time the regular rate after a 7 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

### Overtime Holidays

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### 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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$23.60

Supplemental Benefit Rate per Hour: \$19.04

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.

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$56.98

Supplemental Benefit Rate per Hour: \$34.81

**Overtime Description**

Double time shall be paid for supplemental benefits during overtime work.

8th hour paid at time and one half.

**Overtime**

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

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

New Year's Day

Martin Luther King Jr. Day

President's Day

Memorial Day

Independence Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

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

Labor Day

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

## **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 will be Tier A House Wreckers (i.e. 1st, 2nd, 11th, 14th etc). Other House Wreckers may be Tier B House Wreckers.

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$34.51**

Supplemental Benefit Rate per Hour: **\$25.59**

### **House Wrecker - Tier B**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$24.02**

Supplemental Benefit Rate per Hour: **\$19.12**

## **Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

## **Overtime Holidays**

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

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day



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

**Paid Holidays**

None

(Mason Tenders District Council)

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**IRON WORKER - ORNAMENTAL**

**Iron Worker - Ornamental**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$42.70

Supplemental Benefit Rate per Hour: \$45.77

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

## **IRON WORKER - STRUCTURAL**

### **Iron Worker - Structural**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$47.75

Supplemental Benefit Rate per Hour: \$65.35

Supplemental Note: Supplemental benefits are to be paid at the applicable overtime rate when overtime is in effect..

### **Overtime Description**

Monday through Friday- the first eight hours are paid at straight time, the 9th and 10th hours are paid at time and one-half the regular rate, all additional weekday overtime is paid at double the regular rate. Saturdays- the first eight hours are paid at time and one-half the regular rate, double time thereafter. Sunday-all shifts are paid at double time.

### **Overtime**

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

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

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

New Year's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### **Paid Holidays**

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

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

### **Shift Rates**

Monday through Friday - First Shift: First eight hours are paid at straight time, the 9th & 10th hours are paid at time and a half, double time paid thereafter. Second and third Shifts: First eight hours are paid at time and one-half, double time thereafter. Saturdays: All shifts, first eight hours paid at time and one-half, double time thereafter: Sunday all shifts are paid at double time.

(Local #40 & #361)

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## **LABORER**

**(Foundation, Concrete, Excavating, Street Pipe Layer and Common)**

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

**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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$39.85**

Supplemental Benefit Rate per Hour: **\$34.88**

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

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)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$25.75**  
Supplemental Benefit Rate per Hour: **\$13.80**

**Landscaper (3 - 6 years experience)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$24.75**  
Supplemental Benefit Rate per Hour: **\$13.80**

**Landscaper (up to 3 years experience)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$22.25**  
Supplemental Benefit Rate per Hour: **\$13.80**

**Groundperson**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$22.25**  
Supplemental Benefit Rate per Hour: **\$13.80**

**Tree Remover / Pruner**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$30.75**  
Supplemental Benefit Rate per Hour: **\$13.80**

**Landscaper Sprayer (Pesticide Applicator)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$20.75**  
Supplemental Benefit Rate per Hour: **\$13.80**

**Watering - Plant Maintainer**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$15.75**  
Supplemental Benefit Rate per Hour: **\$13.80**

**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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**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**

**Marble Setter**

Effective Period: 7/1/2014 - 12/31/2014

Wage Rate per Hour: **\$50.85**

Supplemental Benefit Rate per Hour: **\$34.21**

Effective Period: 1/1/2015 - 6/30/2015

Wage Rate per Hour: **\$51.15**

Supplemental Benefit Rate per Hour: **\$34.87**

**Marble Finisher**

Effective Period: 7/1/2014 - 12/31/2014

Wage Rate per Hour: **\$39.99**

Supplemental Benefit Rate per Hour: **\$33.34**

Effective Period: 1/1/2015 - 6/30/2015

Wage Rate per Hour: **\$40.26**

Supplemental Benefit Rate per Hour: **\$33.90**

**Marble Polisher**

Effective Period: 7/1/2014 - 12/31/2014

Wage Rate per Hour: **\$35.96**

Supplemental Benefit Rate per Hour: **\$25.92**

Effective Period: 1/1/2015 - 6/30/2015

Wage Rate per Hour: **\$36.25**

Supplemental Benefit Rate per Hour: **\$26.28**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

### 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

### Mason Tender

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$36.05

Supplemental Benefit Rate per Hour: \$26.74

### 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$34.99

Supplemental Benefit Rate per Hour: \$21.10

**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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$24.18

Supplemental Benefit Rate per Hour: \$15.42

**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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$42.03**

Supplemental Benefit Rate per Hour: **\$41.07**

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**



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$48.44**

Supplemental Benefit Rate per Hour: **\$50.52**

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

### Paid Holidays

1/2 day on Christmas Eve if work is performed in the A.M.

1/2 day on New Year's Eve if work is performed in the A.M.

### Shift Rates

The first shift shall receive the straight time rate of pay. The second shift receives the straight time rate of pay plus fifteen (15%) per cent. Members of the second shift shall be allowed one half hour to eat, with this time being included in the hours of the workday established. There must be a first shift to work a second shift. All additional hours worked shall be paid at the time and one-half rate of pay plus fifteen (15%) per cent for weekday hours.

(Local #740)

## **MOSAIC MECHANIC**

### **Mosaic Mechanic - Mosaic & Terrazzo Mechanic**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$45.23**

Supplemental Benefit Rate per Hour: **\$36.59**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$47.56 per hour.

### **Mosaic Mechanic - Mosaic & Terrazzo Finisher**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$43.63**

Supplemental Benefit Rate per Hour: **\$36.57**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$47.54 per hour.

### **Mosaic Mechanic - Machine Operator Grinder**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$43.63**

Supplemental Benefit Rate per Hour: **\$36.57**

Supplemental Note: Supplemental benefits for overtime to be paid at the rate of \$47.54 per hour.

## **Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

## **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

Washington's Birthday

Good Friday

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

## **Paid Holidays**

None

(Local #7)

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## **PAINTER**

### **Painter - Brush & Roller**

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$36.15**

Supplemental Benefit Rate per Hour: **\$9.66**

### **Journey person**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2014 - 6/30/2015

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)

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## PAINTER - STRIPER

### Striper (paint)

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$34.00**

Supplemental Benefit Rate per Hour: **\$12.60**

Supplemental Note: Overtime Supplemental Benefit rate - \$8.35 New Hire Rate (0-3 months) - \$0.00

### Lineperson (thermoplastic)

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$38.00**

Supplemental Benefit Rate per Hour: **\$12.60**

Supplemental Note: Overtime Supplemental Benefit rate - \$8.35; 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.

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  
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: 7/1/2014 - 9/30/2014

Wage Rate per Hour: **\$47.00**

Supplemental Benefit Rate per Hour: **\$33.58**

Effective Period: 10/1/2014 - 6/30/2015

Wage Rate per Hour: **\$48.75**

Supplemental Benefit Rate per Hour: **\$34.58**

### **Painter - Power Tool**

Effective Period: 7/1/2014 - 9/30/2014

Wage Rate per Hour: **\$53.00**

Supplemental Benefit Rate per Hour: **\$33.58**

Effective Period: 10/1/2014 - 6/30/2015

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: **\$54.75**

Supplemental Benefit Rate per Hour: **\$34.58**

### Overtime Description

Supplemental Benefits shall be paid for each hour worked, up to forty (40) hours per week for the period of May 1st to November 15th or up to fifty (50) hours per week for the period of November 16th to April 30th.

### Overtime

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

Regular hourly rates plus a ten per cent (10%) differential

(Local #806)

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## PAPERHANGER

### Paperhanger

Effective Period: 7/1/2014 - 6/30/2015

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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$44.19**

Supplemental Benefit Rate per Hour: **\$35.15**

**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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$40.32**

Supplemental Benefit Rate per Hour: **\$35.15**

**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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$45.24**

Supplemental Benefit Rate per Hour: **\$35.15**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Production Paver & Roadbuilder - Raker**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$44.73

Supplemental Benefit Rate per Hour: \$35.15

**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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$41.44

Supplemental Benefit Rate per Hour: \$35.15

**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 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.

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 15% 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)



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**PLASTERER**

**Plasterer**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$42.43

Supplemental Benefit Rate per Hour: \$27.95

**Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

Martin Luther King Jr. Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Presidential Election Day

Thanksgiving Day

Christmas Day

**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: 7/1/2014 - 6/30/2015

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Wage Rate per Hour: \$35.53

Supplemental Benefit Rate per Hour: \$26.31

### Overtime

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Presidential Election Day

Thanksgiving Day

Christmas Day

### Paid Holidays

None

### Shift Rates

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$65.27

Supplemental Benefit Rate per Hour: \$25.78

Supplemental Note: Overtime supplemental benefit rate per hour: \$40.78

### Plumber - Temporary Services

Temporary Services - When there are no Plumbers on the job site, there may be three shifts designed to cover the entire twenty-four hour period, including weekends if necessary, at the following rate straight time.

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$52.24

Supplemental Benefit Rate per Hour: \$20.20

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

### **Overtime Description**

Double time the regular rate after a 7 hour day - unless for new construction site work where the plumbing contract price is \$1.5 million or less, the hours of labor can be 8 hours per day at the employers option. On Alteration jobs when other mechanical trades at the site are working an eighth hour at straight time, then the plumber shall also work an eighth hour at straight time.

### **Overtime**

Double time the regular time rate for Saturday.  
Double time the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

### **Shift Rates**

Shift work, when directly specified in public agency or authority documents where plumbing contract is \$8 million or less, will be permitted. 30% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shifts Monday to Friday. 50% shift premium shall be paid for wages and fringe benefits for 4:00 pm and midnight shift work performed on weekends. For shift work on holidays, double time wages and fringe benefits shall be paid.

(Plumbers Local #1)

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## **PLUMBER (MECHANICAL EQUIPMENT AND SERVICE)**

(Mechanical Equipment and Service work shall include any repair and/or replacement of the present plumbing system.)

### **Plumber**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$38.27**

Supplemental Benefit Rate per Hour: **\$12.84**

### **Overtime**

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Time and one half the regular rate for Sunday.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

(Plumbers Local # 1)

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**PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME  
CONSTRUCTION)**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$45.19

Supplemental Benefit Rate per Hour: \$18.79

**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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

(Plumbers Local #1)

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**PLUMBER: PUMP & TANK**  
**Oil Trades (Installation and Maintenance)**

**Plumber - Pump & Tank**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$62.83**

Supplemental Benefit Rate per Hour: **\$21.37**

**Overtime**

Time and one half the regular rate after an 8 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

**Overtime Holidays**

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**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$47.41**

Supplemental Benefit Rate per Hour: **\$24.40**

### 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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$40.70**

Supplemental Benefit Rate per Hour: **\$28.67**

### 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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$47.41

Supplemental Benefit Rate per Hour: \$24.40

**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**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$46.21**

Supplemental Benefit Rate per Hour: **\$43.89**

Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

### **Sheet Metal Worker - Fan Maintenance**

(The temporary operation of fans or blowers in new or existing buildings for heating and/or ventilation, and/or air conditioning prior to the completion of the project.)

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$36.97**

Supplemental Benefit Rate per Hour: **\$43.89**

### **Sheet Metal Worker - Duct Cleaner**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$12.90**

Supplemental Benefit Rate per Hour: **\$8.07**

### **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



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**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.

Effective Period: 7/1/2014 - 6/30/2015

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**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

None

(Local #28)

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## **SHIPYARD WORKER**

### **Shipyard Mechanic - First Class**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$23.83**

Supplemental Benefit Rate per Hour: **\$2.87**

### **Shipyard Mechanic - Second Class**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$15.44**

Supplemental Benefit Rate per Hour: **\$2.54**

### **Shipyard Laborer - First Class**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$19.28**

Supplemental Benefit Rate per Hour: **\$2.69**

### **Shipyard Laborer - Second Class**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$12.36**

Supplemental Benefit Rate per Hour: **\$2.43**

### **Shipyard Dockhand - First Class**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$22.68**

Supplemental Benefit Rate per Hour: **\$2.82**

### **Shipyard Dockhand - Second Class**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$14.22**

Supplemental Benefit Rate per Hour: **\$2.50**

### **Overtime Description**

Work performed on holiday is paid double time the regular hourly wage rate plus holiday pay.

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.  
Time and one half the regular hourly rate after 40 hours in any work week.

**Paid Holidays**

New Year's Day  
Martin Luther King Jr. Day  
President's Day  
Good Friday  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

Based on Survey Data

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**SIGN ERECTOR**  
**(Sheet Metal, Plastic, Electric, and Neon)**

**Sign Erector**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$44.20**  
Supplemental Benefit Rate per Hour: **\$44.10**

**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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

## 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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$53.25

Supplemental Benefit Rate per Hour: \$51.04

Supplemental Note: Overtime supplemental benefit rate: \$101.34

### Overtime

Double time the regular rate after a 7 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

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.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$53.25

Supplemental Benefit Rate per Hour: \$51.04

Supplemental Note: Overtime supplemental benefit rate: \$101.34

### Overtime

Double time the regular rate after an 8 hour day.

Double time the regular time rate for Saturday.

Double time the regular rate for Sunday.

### Overtime Holidays

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

### Paid Holidays

None

### 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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$38.30

Supplemental Benefit Rate per Hour: \$12.76

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Refrigeration and Air Conditioner Service Person V**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$31.47  
Supplemental Benefit Rate per Hour: \$11.55

**Refrigeration and Air Conditioner Service Person IV**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$26.07  
Supplemental Benefit Rate per Hour: \$10.52

**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: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$22.38  
Supplemental Benefit Rate per Hour: \$9.76

**Refrigeration and Air Conditioner Service Person II**

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$18.56  
Supplemental Benefit Rate per Hour: \$9.06

**Refrigeration and Air Conditioner Service Person I**

Filter changing and maintenance thereof, oil and greasing, tower and coil cleaning, scraping and painting, general housekeeping, taking of water samples.

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$13.57  
Supplemental Benefit Rate per Hour: \$8.30

**Overtime**

Time and one half the regular rate after an 8 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).  
New Year's Day  
Independence Day  
Labor Day  
Veteran's Day

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$46.56**

Supplemental Benefit Rate per Hour: **\$36.40**

### **Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

### **Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
Washington's Birthday  
Good Friday  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day  
Christmas Day

### **Paid Holidays**

.1/2 day on Christmas Eve if work is performed in the A.M.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

## Shift Rates

For all work outside the regular workday (8:00 A.M. to 3:30 P.M. Monday through Friday), the pay shall be straight time plus a ten percent (10%) differential.

(Bricklayers District Council)

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## TAPER

### Drywall Taper

Effective Period: 7/1/2014 - 12/30/2014

Wage Rate per Hour: **\$45.32**

Supplemental Benefit Rate per Hour: **\$22.66**

Effective Period: 12/31/2014 - 6/30/2015

Wage Rate per Hour: **\$45.82**

Supplemental Benefit Rate per Hour: **\$22.66**

## 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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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

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**TELECOMMUNICATION WORKER  
(Voice Installation Only)**

**Telecommunication Worker**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$39.18**

Supplemental Benefit Rate per Hour: **\$13.19**

Supplemental Note: The above rate applies for Manhattan, Bronx, Brooklyn, Queens. \$12.64 for Staten Island only.

**Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Time and one half the regular rate for Sunday.

**Overtime Holidays**

Time and one half the regular rate for work on the following holiday(s).

New Year's Day

Lincoln's Birthday

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

Veteran's Day

Thanksgiving Day

Christmas Day

**Paid Holidays**

New Year's Day

Lincoln's Birthday

Washington's Birthday

Memorial Day

Independence Day

Labor Day

Columbus Day

Election Day

Veteran's Day

Thanksgiving Day

Christmas Day

Employees have the option of observing either Martin Luther King's Birthday or the day after Thanksgiving instead of Lincoln's Birthday

**Shift Rates**

For any workday that starts before 8A.M. or ends after 6P.M. there is a 10% differential for the applicable worker's hourly rate.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**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: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$38.80  
Supplemental Benefit Rate per Hour: \$28.03

**Overtime**

Time and one half the regular rate after a 7 hour day.  
Time and one half the regular rate for Saturday.  
Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Good Friday  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Veteran's Day  
Thanksgiving Day  
Day after Thanksgiving  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

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**TILE LAYER - SETTER**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Tile Layer - Setter**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$49.88**

Supplemental Benefit Rate per Hour: **\$32.36**

**Overtime**

Time and one half the regular rate after a 7 hour day.

Time and one half the regular rate for Saturday.

Double time the regular rate for Sunday.

**Overtime Holidays**

Double time the regular rate for work on the following holiday(s).

New Year's Day

President's Day

Good Friday

Memorial Day

Independence Day

Labor Day

Columbus Day

Veteran's Day

Thanksgiving Day

Day after Thanksgiving

Christmas Day

**Shift Rates**

Off shift work day (work performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

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**TIMBERPERSON**

**Timberperson**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$44.33**

Supplemental Benefit Rate per Hour: **\$45.39**

**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**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Double time the regular rate for work on the following holiday(s).

New Year's Day  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Presidential Election Day  
Thanksgiving Day  
Christmas Day

**Paid Holidays**

None

**Shift Rates**

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: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$54.20  
Supplemental Benefit Rate per Hour: \$48.20

**Tunnel Workers (Compressed Air Rates)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$52.31  
Supplemental Benefit Rate per Hour: \$46.59

**Top Nipper (Compressed Air Rates)**

Effective Period: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$50.42  
Supplemental Benefit Rate per Hour: \$44.91

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

**Bottom Bell & Top Bell Signal Person: Shaft Person (Compressed Air Rates)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$50.42  
Supplemental Benefit Rate per Hour: \$44.92

**Changehouse Attendant: Powder Watchperson (Compressed Air Rates)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$43.94  
Supplemental Benefit Rate per Hour: \$42.55

**Blasters (Free Air Rates)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$51.72  
Supplemental Benefit Rate per Hour: \$46.03

**Tunnel Workers (Free Air Rates)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$49.48  
Supplemental Benefit Rate per Hour: \$44.06

**All Others (Free Air Rates)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$45.73  
Supplemental Benefit Rate per Hour: \$40.75

**Microtunneling (Free Air Rates)**

Effective Period: 7/1/2014 - 6/30/2015  
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

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 PREVAILING WAGE SCHEDULE

Lincoln's Birthday  
President's Day  
Memorial Day  
Independence Day  
Labor Day  
Columbus Day  
Election Day  
Veteran's Day  
Thanksgiving Day  
Christmas Day

(Local #147)

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**WELDER  
TO BE PAID AT THE RATE OF THE JOURNEYPERSON IN THE TRADE  
PERFORMING THE WORK.**

**OFFICE OF THE COMPTROLLER**

**CITY OF NEW YORK**

**220 APPRENTICESHIP PREVAILING WAGE SCHEDULE**

**APPENDIX**

Pursuant to Labor Law §220 (3-e), only apprentices who are individually registered in a bona fide program to which the employer contractor is a participant and registered with the New York State Department of Labor, may be employed on a public work project.

Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the journey person wage rate for the classification of work he actually performed.

Apprentice ratios are established to ensure the proper safety, training and supervision of apprentices. A ratio establishes the number of journey workers required for each apprentice in a program and on a job site. Ratios are interpreted as follows: in the case of a 1:1, 1:4 ratio, there must be one journey worker for the first apprentice, and four additional journey workers for each subsequent apprentice.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**ASBESTOS HANDLER**

(Ratio of Apprentice Journeyman: 1 to 1, 1 to 3)

**Asbestos Handler (First 1000 Hours)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 78% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$15.45

**Asbestos Handler (Second 1000 Hours)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$15.45

**Asbestos Handler (Third 1000 Hours)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 83% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$15.45

**Asbestos Handler (Fourth 1000 Hours)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 89% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$15.45

(Local #78)

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**BOILERMAKER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

**Boilermaker (First Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$29.74

**Boilermaker (Second Year: 1st Six Months)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$31.40

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**Boilermaker (Second Year: 2nd Six Months)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$33.05

**Boilermaker (Third Year: 1st Six Months)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$34.69

**Boilermaker (Third Year: 2nd Six Months)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 85% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$36.34

**Boilermaker (Fourth Year: 1st Six Months)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 90% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$38.00

**Boilermaker (Fourth Year: 2nd Six Months)**

Effective Period: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$17.10

**Bricklayer (Second 750 Hours)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 60% of Journeyperson's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Supplemental Benefit Rate Per Hour: \$17.10

**Bricklayer (Third 750 Hours)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 70% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$17.10

**Bricklayer (Fourth 750 Hours)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$17.10

**Bricklayer (Fifth 750 Hours)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 90% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$17.10

**Bricklayer (Sixth 750 Hours)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 95% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$17.10

(Bricklayer District Council)

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**CARPENTER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Carpenter (First Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$30.25

**Carpenter (Second Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$30.25

**Carpenter (Third Year)**

Effective Period: 7/1/2014 - 6/30/2015

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$30.25

**Carpenter (Fourth Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$30.25

(Carpenters District Council)

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**CEMENT MASON**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

**Cement Mason (First Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's Rate

**Cement Mason (Second Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's Rate

**Cement Mason (Third Year)**

Effective Period: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Benefit Rate Per Hour: \$18.04

**Cement & Concrete Worker (501 - 1000 hours)**

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Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$18.87

**Cement & Concrete Worker (1001 - 2000 hours)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$24.25

**Cement & Concrete Worker (2001 - 4000 hours)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 80% of Journeyman'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 4)**

**Derrickperson & Rigger (stone) - First Year**

Effective Period: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 90% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: 75% of Journeyman's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

(Local #197)

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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: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$31.26

**Dockbuilder/Pile Driver (Second Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$31.26

**Dockbuilder/Pile Driver (Third Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$31.26

**Dockbuilder/Pile Driver (Fourth Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Benefit Rate Per Hour: \$31.26

(Carpenters District Council)

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**ELECTRICIAN**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

**Electrician (First Term: 0-6 Months)**

Effective Period: 7/1/2014 - 5/12/2015  
Wage Rate per Hour: \$12.50  
Supplemental Benefit Rate per Hour: \$11.10  
Overtime Supplemental Rate Per Hour: \$11.93

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: \$13.00

Supplemental Benefit Rate per Hour: \$11.61

Overtime Supplemental Rate Per Hour: \$12.47

**Electrician (First Term: 7-12 Months)**

Effective Period: 7/1/2014 - 5/12/2015

Wage Rate per Hour: \$13.50

Supplemental Benefit Rate per Hour: \$11.62

Overtime Supplemental Rate Per Hour: \$12.51

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: \$14.00

Supplemental Benefit Rate per Hour: \$12.12

Overtime Supplemental Rate Per Hour: \$13.04

**Electrician (Second Term: 0-6 Months)**

Effective Period: 7/1/2014 - 5/12/2015

Wage Rate per Hour: \$14.50

Supplemental Benefit Rate per Hour: \$12.13

Overtime Supplemental Rate Per Hour: \$13.08

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: \$15.00

Supplemental Benefit Rate per Hour: \$12.63

Overtime Supplemental Rate Per Hour: \$13.62

**Electrician (Second Term: 7-12 Months)**

Effective Period: 7/1/2014 - 5/12/2015

Wage Rate per Hour: \$15.50

Supplemental Benefit Rate per Hour: \$12.64

Overtime Supplemental Rate Per Hour: \$13.66

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: \$16.00

Supplemental Benefit Rate per Hour: \$13.14

Overtime Supplemental Rate Per Hour: \$14.19

**Electrician (Third Term: 0-6 Months)**

Effective Period: 7/1/2014 - 5/12/2015

Wage Rate per Hour: \$16.50

Supplemental Benefit Rate per Hour: \$13.15

Overtime Supplemental Rate Per Hour: \$14.23

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: \$17.00

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$13.65  
Overtime Supplemental Rate Per Hour: \$14.77

**Electrician (Third Term: 7-12 Months)**

Effective Period: 7/1/2014 - 5/12/2015  
Wage Rate per Hour: \$17.50  
Supplemental Benefit Rate per Hour: \$13.65  
Overtime Supplemental Rate Per Hour: \$14.81

Effective Period: 5/13/2015 - 6/30/2015  
Wage Rate per Hour: \$18.00  
Supplemental Benefit Rate per Hour: \$14.16  
Overtime Supplemental Rate Per Hour: \$15.34

**Electrician (Fourth Term: 0-6 Months)**

Effective Period: 7/1/2014 - 5/12/2015  
Wage Rate per Hour: \$18.50  
Supplemental Benefit Rate per Hour: \$14.16  
Overtime Supplemental Rate Per Hour: \$15.38

Effective Period: 5/13/2015 - 6/30/2015  
Wage Rate per Hour: \$19.00  
Supplemental Benefit Rate per Hour: \$14.67  
Overtime Supplemental Rate Per Hour: \$15.92

**Electrician (Fourth Term: 7-12 Months)**

Effective Period: 7/1/2014 - 5/12/2015  
Wage Rate per Hour: \$20.50  
Supplemental Benefit Rate per Hour: \$15.18  
Overtime Supplemental Rate Per Hour: \$16.53

Effective Period: 5/13/2015 - 6/30/2015  
Wage Rate per Hour: \$21.00  
Supplemental Benefit Rate per Hour: \$15.68  
Overtime Supplemental Rate Per Hour: \$17.07

**Electrician (Fifth Term: 0-12 Months - Hired on or after 5/10/07)**

Effective Period: 7/1/2014 - 5/12/2015  
Wage Rate per Hour: \$22.50  
Supplemental Benefit Rate per Hour: \$18.06  
Overtime Supplemental Rate Per Hour: \$19.47

Effective Period: 5/13/2015 - 6/30/2015  
Wage Rate per Hour: \$23.00  
Supplemental Benefit Rate per Hour: \$18.56  
Overtime Supplemental Rate Per Hour: \$20.00



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Electrician (Fifth Term: 13-18 Months - Hired on or after 5/10/07)**

Effective Period: 7/1/2014 - 5/12/2015

Wage Rate per Hour: \$27.00

Supplemental Benefit Rate per Hour: \$20.32

Overtime Supplemental Rate Per Hour: \$22.01

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: \$27.50

Supplemental Benefit Rate per Hour: \$20.82

Overtime Supplemental Rate Per Hour: \$22.54

**Electrician (Fifth Term: 0-18 Months - Hired before 5/10/07)**

Effective Period: 7/1/2014 - 5/12/2015

Wage Rate per Hour: \$26.30

Supplemental Benefit Rate per Hour: \$19.96

Overtime Supplemental Rate Per Hour: \$21.61

Effective Period: 5/13/2015 - 6/30/2015

Wage Rate per Hour: \$26.80

Supplemental Benefit Rate per Hour: \$20.46

Overtime Supplemental Rate Per Hour: \$22.14

**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: 7/1/2014 - 3/16/2015

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$25.46

Effective Period: 3/17/2015 - 6/30/2015

Wage Rate Per Hour: 50% of Journeyperson's rate

Supplemental Rate Per Hour: \$26.94

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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**Elevator (Constructor) - Second Year**

Effective Period: 7/1/2014 - 3/16/2015  
Wage Rate Per Hour: 55% of Journeyman's rate  
Supplemental Rate Per Hour: \$25.86

Effective Period: 3/17/2015 - 6/30/2015  
Wage Rate Per Hour: 55% of Journeyman's rate  
Supplemental Rate Per Hour: \$27.35

**Elevator (Constructor) - Third Year**

Effective Period: 7/1/2014 - 3/16/2015  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Rate Per Hour: \$26.66

Effective Period: 3/17/2015 - 6/30/2015  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Rate Per Hour: \$28.17

**Elevator (Constructor) - Fourth Year**

Effective Period: 7/1/2014 - 3/16/2015  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Rate Per Hour: \$27.46

Effective Period: 3/17/2015 - 6/30/2015  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Rate Per Hour: \$29.00

(Local #1)

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**ELEVATOR REPAIR & MAINTENANCE  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)**

**Elevator Service/Modernization Mechanic (First Year)**

Effective Period: 7/1/2014 - 3/16/2015  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Benefit Per Hour: \$24.85

Effective Period: 3/17/2015 - 6/30/2015  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Benefit Per Hour: \$26.87

**Elevator Service/Modernization Mechanic (Second Year)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Effective Period: 7/1/2014 - 3/16/2015  
Wage Rate Per Hour: 55% of Journeyman's rate  
Supplemental Benefit Per Hour: \$25.24

Effective Period: 3/17/2015 - 6/30/2015  
Wage Rate Per Hour: 55% of Journeyman's rate  
Supplemental Benefit Per Hour: \$27.27

**Elevator Service/Modernization Mechanic (Third Year)**

Effective Period: 7/1/2014 - 3/16/2015  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Per Hour: \$26.02

Effective Period: 3/17/2015 - 6/30/2015  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Benefit Per Hour: \$28.08

**Elevator Service/Modernization Mechanic (Fourth Year)**

Effective Period: 7/1/2014 - 3/16/2015  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Benefit Per Hour: \$26.81

Effective Period: 3/17/2015 - 6/30/2015  
Wage Rate Per Hour: 75% of Journeyman's rate  
Supplemental Benefit Per Hour: \$28.89

(Local #1)

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**ENGINEER**  
**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 5)**

**Engineer - First Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$22.49  
Supplemental Benefit Rate per Hour: \$20.68

**Engineer - Second Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$28.11  
Supplemental Benefit Rate per Hour: \$20.68

**Engineer - Third Year**

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Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$20.92  
Supplemental Benefit Rate per Hour: \$20.68

**Engineer - Fourth Year**

Effective Period: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour 40% of Journeyman's Rate  
Supplemental Benefit Per Hour: \$18.60

**Operating Engineer - Second Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 50% of Journeyman's Rate  
Supplemental Benefit Per Hour: \$18.60

**Operating Engineer - Third Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 60% of Journeyman's Rate  
Supplemental Benefit Per Hour: \$18.60

(Local #14)

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**FLOOR COVERER**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Floor Coverer (First Year)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Rate Per Hour: \$30.25

**Floor Coverer (Second Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$30.25

**Floor Coverer (Third Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 65% of Journeyman's rate  
Supplemental Rate Per Hour: \$30.25

**Floor Coverer (Fourth Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Rate Per Hour: \$30.25

(Carpenters District Council)

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**GLAZIER**  
**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)**

**Glazier (First Year)**

Effective Period: 7/1/2014 - 10/31/2014  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Rate Per Hour: \$12.97

Effective Period: 11/1/2014 - 6/30/2015  
Wage Rate Per Hour: 40% of Journeyman's rate  
Supplemental Rate Per Hour: \$13.12

**Glazier (Second Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: \$22.25

**Glazier (Third Year)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
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Effective Period: 7/1/2014 - 10/31/2014  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$24.75

Effective Period: 11/1/2014 - 6/30/2015  
Wage Rate Per Hour: 60% of Journeyman's rate  
Supplemental Rate Per Hour: \$25.10

**Glazier (Fourth Year)**

Effective Period: 7/1/2014 - 10/31/2014  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Rate Per Hour: \$29.87

Effective Period: 11/1/2014 - 6/30/2015  
Wage Rate Per Hour: 80% of Journeyman's rate  
Supplemental Rate Per Hour: \$30.02

(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: 7/1/2014 - 6/30/2015  
Wage and Supplemental Rate Per Hour: 40% of Journeyman's rate

**Heat & Frost Insulator (Second Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage and Supplemental Rate Per Hour: 60% of Journeyman's rate

**Heat & Frost Insulator (Third Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage and Supplemental Rate Per Hour: 70% of Journeyman's rate

**Heat & Frost Insulator (Fourth Year)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage and Supplemental Rate Per Hour: 80% of Journeyman's rate

(Local #12)

**HOUSE WRECKER  
(TOTAL DEMOLITION)  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)**

**House Wrecker - First Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$20.52**  
Supplemental Benefit Rate per Hour: **\$16.60**

**House Wrecker - Second Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$21.67**  
Supplemental Benefit Rate per Hour: **\$16.60**

**House Wrecker - Third Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$23.27**  
Supplemental Benefit Rate per Hour: **\$16.60**

**House Wrecker - Fourth Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$25.83**  
Supplemental Benefit Rate per Hour: **\$16.60**

(Mason Tenders District Council)

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**IRON WORKER - ORNAMENTAL  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)**

**Iron Worker (Ornamental) - 1st Ten Months**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 50% of Journeyman's rate  
Supplemental Rate Per Hour: **\$35.15**

**Iron Worker (Ornamental) - 11 -16 Months**

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Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$36.21

**Iron Worker (Ornamental) - 17 - 22 Months**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$37.27

**Iron Worker (Ornamental) - 23 - 28 Months**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$39.40

**Iron Worker (Ornamental) - 29 - 36 Months**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$41.52

(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: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$24.98  
Supplemental Benefit Rate per Hour: \$45.53

**Iron Worker (Structural) - 7- 18 Months**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$25.58  
Supplemental Benefit Rate per Hour: \$45.53

**Iron Worker (Structural) - 19 - 36 months**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$26.18  
Supplemental Benefit Rate per Hour: \$45.53



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

(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: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 50% of Journeyman's rate

Supplemental Rate Per Hour: \$34.88

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Second 1000 hours**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 60% of Journeyman's rate

Supplemental Rate Per Hour: \$34.88

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Third 1000 hours**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 75% of Journeyman's rate

Supplemental Rate Per Hour: \$34.88

**Laborer (Foundation, Concrete, Excavating, Street Pipe Layer & Common) - Fourth 1000 hours**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 90% of Journeyman's rate

Supplemental Rate Per Hour: \$34.88

(Local #731)

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**MARBLE MECHANICS**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Cutters & Setters - First 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

**Cutters & Setters - Third 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

**Cutters & Setters - Fourth 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

**Cutters & Setters - Fifth 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

**Cutters & Setters - Sixth 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

**Polishers & Finishers - First 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

**Polishers & Finishers - Third 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

**Polishers & Finishers - Fourth 750 Hours**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2014 - 6/30/2015  
Wage and Supplemental Rate Per Hour: 90% of Journeyman'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: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$20.99  
Supplemental Benefit Rate per Hour: \$17.86

**Mason Tender - Second Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$22.14  
Supplemental Benefit Rate per Hour: \$17.86

**Mason Tender - Third Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$23.84  
Supplemental Benefit Rate per Hour: \$17.86

**Mason Tender - Fourth Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$26.50  
Supplemental Benefit Rate per Hour: \$17.86

(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)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$28.11  
Supplemental Benefit Rate per Hour: \$22.79

**Metallic Lather (Second Year - Called Prior to 6/29/11)**

Effective Period: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
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: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$26.64

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$32.84

**Millwright (Second Year)**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$31.49

Supplemental Benefit Rate per Hour: \$36.18

**Millwright (Third Year)**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$36.33

Supplemental Benefit Rate per Hour: \$40.66

**Millwright (Fourth Year)**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$46.02

Supplemental Benefit Rate per Hour: \$46.24

(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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$26.61

Supplemental Benefit Rate per Hour: \$16.50

**Paver and Roadbuilder - Second Year (Minimum 1000 hours)**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$28.22

Supplemental Benefit Rate per Hour: \$16.50

(Local #1010)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**PAINTER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)

**Painter - Brush & Roller - First Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$15.80

Supplemental Benefit Rate per Hour: \$11.88

**Painter - Brush & Roller - Second Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$19.75

Supplemental Benefit Rate per Hour: \$15.73

**Painter - Brush & Roller - Third Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$23.70

Supplemental Benefit Rate per Hour: \$18.64

**Painter - Brush & Roller - Fourth Year**

Effective Period: 7/1/2014 - 6/30/2015

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 Journeyman: 1 to 1, 1 to 3)

**Painters - Structural Steel (First Year)**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 40% of Journeyman's rate

**Painters - Structural Steel (Second Year)**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 60% of Journeyman's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Painters - Structural Steel (Third Year)**

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 40% of Journeyperson's rate

Supplemental Rate Per Hour: \$15.76

**Plasterer - First Year: 2nd Six Months**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 45% of Journeyperson's rate

Supplemental Rate Per Hour: \$16.24

**Plasterer - Second Year: 1st Six Months**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 55% of Journeyperson's rate

Supplemental Rate Per Hour: \$18.21

**Plasterer - Second Year: 2nd Six Months**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 60% of Journeyperson's rate

Supplemental Rate Per Hour: \$19.29

**Plasterer - Third Year: 1st Six Months**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: \$21.46

**Plasterer - Third Year: 2nd Six Months**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 75% of Journeyperson's rate

Supplemental Rate Per Hour: \$22.54

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

(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: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$14.00**

Supplemental Benefit Rate per Hour: **\$0.71**

**Plumber - First Year: 2nd Six Months**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$14.00**

Supplemental Benefit Rate per Hour: **\$2.96**

**Plumber - Second Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$23.87**

Supplemental Benefit Rate per Hour: **\$11.46**

**Plumber - Third Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$25.97**

Supplemental Benefit Rate per Hour: **\$11.46**

**Plumber - Fourth Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$28.82**

Supplemental Benefit Rate per Hour: **\$11.46**

**Plumber - Fifth Year: 1st Six Months**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$30.22**

Supplemental Benefit Rate per Hour: **\$11.46**

**Plumber - Fifth Year: 2nd Six Months**



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$42.29  
Supplemental Benefit Rate per Hour: \$11.46

(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: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$25.01  
Supplemental Benefit Rate per Hour: \$4.75

**Pointer - Waterproofer, Caulker Mechanic - Second Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$27.25  
Supplemental Benefit Rate per Hour: \$9.70

**Pointer - Waterproofer, Caulker Mechanic - Third Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$32.24  
Supplemental Benefit Rate per Hour: \$12.45

**Pointer - Waterproofer, Caulker Mechanic - Fourth Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: \$38.66  
Supplemental Benefit Rate per Hour: \$12.45

(Bricklayer District Council)

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**ROOFER**

(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 2)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Roofer - First Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 35% of Journeyperson's Rate

**Roofer - Second Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 50% of Journeyperson's Rate

**Roofer - Third Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's Rate

**Roofer - Fourth Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 75% of Journeyperson's Rate

(Local #8)

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**SHEET METAL WORKER**

(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

**Sheet Metal Worker (0-6 Months)**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 25% of Journeyperson's rate

Supplemental Rate Per Hour: \$6.15

**Sheet Metal Worker (7-18 Months)**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 35% of Journeyperson's rate

Supplemental Rate Per Hour: \$16.21

**Sheet Metal Worker (19-30 Months)**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 45% of Journeyperson's rate

Supplemental Rate Per Hour: \$22.23

**Sheet Metal Worker (31-36 Months)**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$26.16

**Sheet Metal Worker (37-42 Months)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$28.13

**Sheet Metal Worker (43-48 Months)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$32.09

**Sheet Metal Worker (49-54 Months)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$34.07

**Sheet Metal Worker (55-60 Months)**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$36.03

(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: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 35% of Journeyperson's rate  
Supplemental Rate Per Hour: \$5.96

**Sign Erector - First Year: 2nd Six Months**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Rate Per Hour: \$6.75

**Sign Erector - Second Year: 1st Six Months**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 45% of Journeyperson's rate  
Supplemental Rate Per Hour: \$7.55

**Sign Erector - Second Year: 2nd Six Months**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$8.34

**Sign Erector - Third Year: 1st Six Months**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 55% of Journeyperson's rate  
Supplemental Rate Per Hour: \$9.13

**Sign Erector - Third Year: 2nd Six Months**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 60% of Journeyperson's rate  
Supplemental Rate Per Hour: \$9.92

**Sign Erector - Fourth Year: 1st Six Months**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$10.72

**Sign Erector - Fourth Year: 2nd Six Months**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 70% of Journeyperson's rate  
Supplemental Rate Per Hour: \$11.51

**Sign Erector - Fifth Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 75% of Journeyperson's rate  
Supplemental Rate Per Hour: \$12.30

**Sign Erector - Sixth Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$12.30

(Local #137)

## **STEAMFITTER**

**(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 3)**

### **Steamfitter - First Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate and Supplemental Per Hour: 40% of Journeyman's rate

### **Steamfitter - Second Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate and Supplemental Rate Per Hour: 50% of Journeyman's rate.

### **Steamfitter - Third Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate and Supplemental Rate per Hour: 65% of Journeyman's rate.

### **Steamfitter - Fourth Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate and Supplemental Rate Per Hour: 80% of Journeyman's rate.

### **Steamfitter - Fifth Year**

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

### **Stone Mason - Setters - Second 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 60% of Journeyman's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

Supplemental Rate Per Hour: 50% of Journeyperson's rate

**Stone Mason - Setters - Third 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 70% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

**Stone Mason - Setters - Fourth 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: 50% of Journeyperson's rate

**Stone Mason - Setters - Fifth 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

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: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

**Drywall Taper - Second Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

**Drywall Taper - Third Year**

Effective Period: 7/1/2014 - 6/30/2015

Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

(Local #1974)

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**TILE LAYER - SETTER**  
(Ratio of Apprentice to Journeyman: 1 to 1, 1 to 4)

**Tile Layer - Setter - First 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015  
Wage and Supplemental Rate Per Hour: 50% of Journeyman's rate

**Tile Layer - Setter - Second 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015  
Wage and Supplemental Rate Per Hour: 55% of Journeyman's rate

**Tile Layer - Setter - Third 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015  
Wage and Supplemental Rate Per Hour: 65% of Journeyman's rate

**Tile Layer - Setter - Fourth 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015  
Wage and Supplemental Rate Per Hour: 75% of Journeyman's rate

**Tile Layer - Setter - Fifth 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015  
Wage and Supplemental Rate Per Hour: 85% of Journeyman's rate

**Tile Layer - Setter - Sixth 750 Hours**

Effective Period: 7/1/2014 - 6/30/2015  
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)

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§220 APPRENTICESHIP PREVAILING WAGE SCHEDULE

**Timberperson - First Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 40% of Journeyperson's rate  
Supplemental Rate Per Hour: \$30.89

**Timberperson - Second Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 50% of Journeyperson's rate  
Supplemental Rate Per Hour: \$30.89

**Timberperson - Third Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 65% of Journeyperson's rate  
Supplemental Rate Per Hour: \$30.89

**Timberperson - Fourth Year**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate Per Hour: 80% of Journeyperson's rate  
Supplemental Rate Per Hour: \$30.89

(Local #1536)



OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

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**NYC ADMINISTRATIVE CODE § 6-109 SCHEDULE OF "LIVING WAGES"**

Contractors who provide the following services to the City of New York must post a copy of this Living Wage Schedule at their work site(s) as required by New York City Administrative Code § 6-109:

- Building Services,
- Day Care Services,
- Food Services,
- Head Start Services,
- Homecare Services,
- Services to Persons with Cerebral Palsy, and
- Temporary Services.

In accordance with NYC Administrative Code § 6-109, the Comptroller of the City of New York promulgated this schedule of living wages for the above services on contracts for non-emergency work in excess of the small purchase limit set by the Procurement Policy Board; contracting agencies must annex this schedule to such contracts.

This schedule is a compilation of separate determinations of the prevailing rate of wage and supplements made by the Comptroller for each trade classification listed herein pursuant to New York City Administrative Code section 6-109. The source of the wage and supplement rates, whether a collective bargaining agreement, survey data or other, is listed at the end of each classification.

A city service contractor or subcontractor that provides homecare services, day care services, head start services or services to persons with cerebral palsy must pay its covered employees that directly render such services in performance of the city service contract or subcontract no less than the living wage and must provide its employees health benefits (supplemental benefits) or must supplement their hourly wage rate by an amount no less than the health benefits supplement rate. This requirement applies for each hour that the employee works performing the city service contract or subcontract.

A city service contractor or subcontractor that provides building services, food services or temporary services must pay its employees that are engaged in performing the city service contract or subcontract no less than the living wage or the prevailing wage, whichever is greater. Where the living wage is greater than the prevailing wage, the city service contractor or subcontractor must either provide its employees health benefits or must supplement their hourly wage rate by an amount no less than the health benefits supplement rate. Where the prevailing wage is greater than the living wage, the city service contractor or subcontractor must provide its employees the prevailing wage and supplements. These requirements apply for each hour that the employee works performing the city service contract or subcontract.

The appropriate schedule of living wages must be posted at all work sites pursuant to NYC Administrative Code 6-109.

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

The schedule is applicable for work performed during the effective period, unless otherwise noted. You will be notified of any changes to this schedule by addenda published on our web site [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov). Schedules for future one-year periods will be published annually in the City Record on or about July 1<sup>st</sup> of each succeeding year and on our web site [www.comptroller.nyc.gov](http://www.comptroller.nyc.gov).

The living wage rate and the health benefit supplement rate are known through June 30 of each year and those rates are listed in this schedule.

The living wage rates listed in this schedule may not include all hourly wage calculations for overtime, shift differential, Holiday, Saturday, Sunday or other premium time work. Similarly, this schedule does not set forth every living wage practice with which employers must comply.

Some of the rates in this schedule are based on collective bargaining agreements. These agreements are available for inspection by appointment. Requests for appointments may be made by calling (212) 669-4443, Monday through Friday between the hours of 9 a.m. and 5 p.m.

Answers to questions concerning prevailing wage practices may be obtained from the Classification Unit by calling (212) 669-7974. Please direct all other compliance issues to; Bureau of Labor Law, Attn: Wasyl Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 1122, New York, N.Y. 10007; Fax (212) 669-4002.

Contractors are solely responsible for maintaining original payroll records, which delineate, among other things, the hours each employee worked within a given classification. Contractors using rates and/or classifications not promulgated by the Comptroller do so at their own risk. Additionally, prior to bid, an agency's chief contracting officer must contact the Bureau of Labor Law to obtain a wage determination for a work classification not published in this schedule.

The information listed below is intended to assist you in meeting your living wage and prevailing wage obligation. Contractors are advised to review the Comptroller's Living Wage Schedule prior to submitting a bid for City work. Any wage rate error made by the contracting agency in the contract documents will not preclude a finding against the contractor for an underpayment of the applicable living wage or the applicable prevailing wage.

This schedule sets forth the living wage and benefit rates required to be annexed to and form part of the contract specifications for work covered by New York City Administrative Code § 6-109. Contractors performing such work are required to pay not less than the rates specified in this schedule for the applicable trade or occupation.

**Benefits are paid for EACH HOUR WORKED unless otherwise noted.**

Wasyl Kinach, P.E.  
Director of Classifications  
Bureau of Labor Law

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

**BUILDING CLEANER AND MAINTAINER (OFFICE)**

For the above building service classification, see the Labor Law Section 230 Schedule.

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**BUILDING CLEANER AND MAINTAINER (RESIDENTIAL)**

For the above building service classification, see the Labor Law Section 230 Schedule.

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**CLEANER (PARKING GARAGE)**

For the above building service classification, see the Labor Law Section 230 Schedule.

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**DAY CARE SERVICES**

**Day Care Services**

'Day Care Services' means provision of day care services through the city's center-based day care program administered under contract with the city's Administration for Children's Services. No other day care programs shall be covered, including family-based day care programs administered by city-contracted day care centers.

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$10.00**

Supplemental Benefit Rate per Hour: **\$1.50**

(NYC Administrative Code §6-109)

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**FOOD SERVICE EMPLOYEES**

**Cook**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$16.35**

Supplemental Benefit Rate per Hour: **\$1.63**

**Cafeteria Attendant**

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$10.41**  
Supplemental Benefit Rate per Hour: **\$1.63**

**Counter Attendant**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$11.00**  
Supplemental Benefit Rate per Hour: **\$1.63**

**Kitchen Helper / Dishwasher**

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$9.99**  
Supplemental Benefit Rate per Hour: **\$1.63**

**Overtime**

Time and one half the regular hourly rate after 40 hours in any work week.

(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics)

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**GARDENER**

For the above building service classification, see the Labor Law Section 230 Schedule.

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**HEAD START SERVICES**

**Head Start Services**

'Head Start Services' means provision of head start services through the city's center-based head start program administered under contract with the city's Administration for Children's Services. No other head start programs shall be covered.

Effective Period: 7/1/2014 - 6/30/2015  
Wage Rate per Hour: **\$10.00**  
Supplemental Benefit Rate per Hour: **\$1.50**

(NYC Administrative Code §6-109)

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OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

## HEMOCARE SERVICES

### Home Care Services

'Homecare Services' means the provision of homecare services under the city's Medicaid Personal Care/Home Attendant or Housekeeping Programs, including but not limited to the In-Home Services for the Elderly Programs administered by the Department for the Aging.

For homecare services provided under the Personal Care Services program, the wage and supplemental benefit rate above shall apply only as long as the state and federal government maintain their combined aggregate proportionate share of funding and approved rates for homecare services in effect as of the date of the enactment of this section.

For contractors or subcontractors providing homecare services, the supplemental benefit rate may be waived by the terms of a bona fide collective bargaining agreement with respect to employees who have never worked a minimum of eighty (80) hours per month for two consecutive months for that covered employer, but such provision may not be waived for any employee once a minimum of eighty (80) hours for two consecutive months has been achieved.

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$10.00

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

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## SECURITY GUARD (ARMED)

For the above building service classification, see the Labor Law Section 230 Schedule.

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## SECURITY GUARD (UNARMED)

For the above building service classification, see the Labor Law Section 230 Schedule.

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## SERVICES TO PERSONS WITH CEREBRAL PALSY

### Services To Person With Cerebral Palsy

'Services to Persons with Cerebral Palsy' means provision of services which enable persons with cerebral palsy and related disabilities to lead independent and productive lives through an agency that provides health care, education, employment, housing and technology resources to such persons under contract with the city or the department of education.

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$10.00

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: \$1.50

(NYC Administrative Code §6-109)

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## TEMPORARY OFFICE SERVICES

### Administrative Assistant

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$33.29

Supplemental Benefit Rate per Hour: None

### Cashier

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$11.50

Supplemental Benefit Rate per Hour: None

### Clerk (various)

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$14.82

Supplemental Benefit Rate per Hour: None

### Computer Assistant

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$19.94

Supplemental Benefit Rate per Hour: None

### Data Entry Operator

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$16.44

Supplemental Benefit Rate per Hour: None

### Receptionist

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$15.03

Supplemental Benefit Rate per Hour: None

### Secretary (various)

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: \$19.31

OFFICE OF THE COMPTROLLER, CITY OF NEW YORK  
§6-109 PREVAILING WAGE SCHEDULE

Supplemental Benefit Rate per Hour: None

**Word Processor**

Effective Period: 7/1/2014 - 6/30/2015

Wage Rate per Hour: **\$18.49**

Supplemental Benefit Rate per Hour: None

**Overtime**

Time and one half the regular hourly rate after 40 hours in any work week.

(Based on data from NYS Department of Labor Occupational Employment Statistics and US Department of Labor Bureau of Labor Statistics or NYC Administrative Code §6-109)

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**WINDOW CLEANER**

For the above building service classification, see the Labor Law Section 230 Schedule.





Leonard A. Mancusi  
SENIOR ASSISTANT COMPTROLLER

THE CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
1 CENTRE STREET ROOM 1120  
NEW YORK, N.Y. 10007-2341

TELEPHONE: (212) 669-3622  
FAX NUMBER: (212) 669-8499

ALAN G. HEVESI  
COMPTROLLER

**MEMORANDUM**

November 6, 2000

To Agency Chief Contracting Officers

From: Leonard A. Mancusi *Leonard A. Mancusi*

Re: Security at Construction Sites

Prior to the enactment of Administrative Code §6-109, security guards on construction sites were not subject to prevailing wages. Security guards under the New York State labor law are covered under §230 which provides that prevailing wages are to be paid for security guards in existing buildings. §6-109 of the Administrative Code which was enacted in 1996 closed this loophole by including all security guards working pursuant to a city contract as a prevailing wage trade.

Although some construction contract boilerplate language has been amended to include §6-109, sub-contractors performing security services have advised us that they were not aware of this provision and, since traditionally, security guards were not a covered trade on construction sites, and they were not advised by a prime contractor that they would have to pay prevailing wages, they have not been doing so.

To avoid the possibility of issuing stop payments against prime contractors for the failure of their security service sub-contractors to pay

*prevailing wages, we suggest that you write to all your existing security guard sub-contractors and their primes and in the future, upon approval of a security guard sub-contractor, advise the contractors of their obligation to pay prevailing wages under §6-109 of the Administrative Code.*

*As always, your cooperation is appreciated.*

**LAM:er**  
**ACCO.SECURITY AT SITES**

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NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION

**INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

**VOLUME 2 OF 3**

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
AND TRAFFIC SIGNAL WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

MFM Contracting Corp  
95015B00086001/9502015HWDD281 <sup>Contractor.</sup>

Dated December 23, 2015

APPROVED AS TO FORM  
CERTIFIED AS TO LEGAL AUTHORITY

[Signature]

Acting Corporation Counsel

[Signature] 4/8/14

Dated April 8, 2014



**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE**

30-30 THOMSON AVENUE  
LONG ISLAND CITY, NEW YORK 11101-3045  
TELEPHONE (718) 391-1000  
WEBSITE [www.nyc.gov/buildnyc](http://www.nyc.gov/buildnyc)

**VOLUME 3 OF 3**

**SCHEDULE A  
ADDENDA NOS. 1 TO 6**

FOR FURNISHING ALL LABOR AND MATERIALS NECESSARY AND REQUIRED FOR:

**PROJECT ID: HWMWTCA7E**

**RECONSTRUCTION OF WORTH STREET**

**FROM HUDSON STREET TO PARK ROW**

**INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK**

**Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK**

FOR THE DEPARTMENT OF TRANSPORTATION  
PREPARED BY  
*IN-HOUSE DESIGN*

**NOVEMBER 28, 2014**

NYS DOT PIN X759.19.321  
Fed. Aid Project No. \_\_\_\_\_

Bid Opening 11:00 A.M. on \_\_\_\_\_  
Location 1st Floor Bid Room, 30-30 Thomson Ave., Long Island City, N.Y. 11101



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## SPECIFICATIONS AND STANDARDS OF NEW YORK CITY

The following New York City Department of Transportation (NYCDOT) reference documents are available on-line at:

[http://www.nyc.gov/html/ddc/html/pubs/pubs\\_infrastdts.shtml](http://www.nyc.gov/html/ddc/html/pubs/pubs_infrastdts.shtml) or for purchase between 9:00 A.M. and 3:00 P.M. at 55 Water St., Ground Floor, NYC, N.Y. 10041. Contact: Ms Vivian Valdez, Tel. (212) 839-9434

1. NYCDOT Standard Highway Specifications, November 1, 2010
2. NYCDOT Standard Highway Details of Construction, July 1, 2010
3. NYCDOT Division of Street Lighting Specifications
4. NYCDOT Division of Street Lighting Standard Drawings
5. NYCDOT Standard Specifications for Traffic Signals
6. NYCDOT Standard Drawings for Traffic Signals

The following reference documents for New York City Department of Environmental Protection (NYCDEP) are available on-line at:

[http://www.nyc.gov/html/ddc/html/pubs/pubs\\_infrastdts.shtml](http://www.nyc.gov/html/ddc/html/pubs/pubs_infrastdts.shtml) or for pick up between 8:00 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, 3rd Floor, Division of Infrastructure, Long Island City, N.Y. 11101. Contact: Mr. Waqar Ahmad, Tel. (718) 391-2056

1. NYCDEP Standard Sewer and Water Main Specifications, July 1, 2014
2. NYCDEP Instructions for Concrete Specifications, Jan. 92
3. NYCDEP General Specification 11-Concrete, November 1991
4. NYCDEP Sewer Design Standards, (September 2007) Revised January 2009

The following reference documents for New York City Department of Environmental Protection (NYCDEP) are available on-line at:

[http://www.nyc.gov/html/ddc/html/pubs/pubs\\_infrastdts.shtml](http://www.nyc.gov/html/ddc/html/pubs/pubs_infrastdts.shtml) or for pick up between 8:00 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, 3rd Floor, Division of Infrastructure, Long Island City, N.Y. 11101. Contact: Mr. Robert Kuhlmann, Tel. (718) 391-2145

1. NYCDEP Water Main Standard Drawings
2. Specifications for Trunk Main Work, dated July 2014
3. Standards for Green Infrastructure, latest version, available only on-line at: [http://www.nyc.gov/html/dep/pdf/green\\_infrastructure/bioswales-standard-designs.pdf](http://www.nyc.gov/html/dep/pdf/green_infrastructure/bioswales-standard-designs.pdf)

Water main work material specifications are available at the Department of Environmental Protection, 59-17 Junction Boulevard, 3rd Floor Low-Rise Building, Flushing, N.Y. 11373-5108.

Contact: Mr. Tarlock Sahansra, P.E., Tel. (718) 595-5302  
E-mail: TSAHANSRA@DEP.NYC.GOV

Standard Specifications and Drawings for Fire Department Communications facilities of New York City are available at 87 Union Street, Engineering Office, Brooklyn, N.Y. 11231-1416.

Contact: Mr. Ed Durkin, Tel. (718) 624-3752

Tree Planting Standards of the City of New York Parks & Recreation are available at the following Department of Parks & Recreation website:

<http://www.nycgovparks.org/pagefiles/53/Tree-Planting-Standards.pdf>

## SPECIFICATIONS AND STANDARDS OF PRIVATE UTILITIES

The Following reference document for Private Utility Work is available for pick up between 8:30 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, First Floor Bid Procurement Room, L.I.C., N.Y. 11101.

1. JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN Issued: August 1, 2005.

(NO TEXT ON THIS PAGE)



**SCHEDULE A****(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT  
(INCLUDING GENERAL CONDITIONS RELATED TO ARTICLE 22 – INSURANCE)****PART I. REQUIRED INFORMATION**

<p align="center"><b><u>INFORMATION FOR BIDDERS SECTION 26</u></b> <b><u>BID SECURITY</u></b></p> <p>The <b>Contractor</b> shall obtain a bid security in the amount indicated to the right.</p>	<p>See Attachment 1 (page A-1 of the Bid Booklet).</p>
<p align="center"><b><u>INFORMATION FOR BIDDERS SECTION 26</u></b> <b><u>PERFORMANCE AND PAYMENT BONDS</u></b></p> <p>The <b>Contractor</b> shall obtain performance and payment bonds in the amount indicated to the right.</p>	<p>See Attachment 1 (page A-1 of the Bid Booklet).</p>
<p align="center"><b><u>CONTRACT ARTICLE 14</u></b> <b><u>DATE FOR SUBSTANTIAL COMPLETION</u></b></p> <p>The <b>Contractor</b> shall substantially complete the <b>Work</b> in the number of calendar days indicated to the right.</p>	<p>The number of consecutive calendar days shall be designated as “N” on page C-4 of the Bid Booklet.</p>
<p align="center"><b><u>CONTRACT ARTICLE 15</u></b> <b><u>LIQUIDATED DAMAGES</u></b></p> <p>If the <b>Contractor</b> fails to substantially complete the <b>Work</b> within the time fixed for substantial completion plus authorized time extensions or if the <b>Contractor</b>, in the sole determination of the <b>Commissioner</b>, has abandoned the <b>Work</b>, the <b>Contractor</b> shall pay to the <b>City</b> the amount indicated to the right.</p>	<p>\$ <u>10,000.00</u> for each consecutive calendar day over substantial completion time “N”, excluding punch list and tree planting work.</p>
<p align="center"><b><u>CONTRACT ARTICLE 17.</u></b> <b><u>SUB-CONTRACTOR</u></b></p> <p>The <b>Contractor</b> shall not make subcontracts totaling an amount more than the percentage of the total <b>Contract</b> price indicated to the right.</p>	<p>Not to exceed <u>50</u> % of the <b>Contract</b> price</p>
<p align="center"><b><u>CONTRACT ARTICLE 21.</u></b> <b><u>RETAINAGE</u></b></p> <p>The <b>Commissioner</b> shall deduct and retain until the substantial completion of the <b>Work</b> the percent value of the <b>Work</b> indicated to the right.</p>	<p><u>0</u> % of the value of the <b>Work</b></p>

<p align="center"><b><u>CONTRACT ARTICLE 22.</u></b></p> <p align="center"><b><u>(Per Directions Below)</u></b></p>	<p>See pages SA-4 through SA-10</p>
<p align="center"><b><u>CONTRACT ARTICLE 24.</u></b> <b><u>DEPOSIT GUARANTEE</u></b></p> <p>As security for the faithful performance of its obligations, the <b>Contractor</b>, upon filing its requisition for payment on <b>Substantial Completion</b>, shall deposit with the <b>Commissioner</b> a sum equal to the percentage of the <b>Contract</b> price indicated to the right.</p>	<p>1% of <b>Contract</b> price</p>
<p align="center"><b><u>CONTRACT ARTICLE 24.</u></b> <b><u>PERIOD OF GUARANTEE</u></b></p> <p>Periods of maintenance and guarantee other than the period set forth in Article 24.1 are indicated to the right.</p>	<p>Twelve (12) Months, excluding Trees Twenty-four (24) Months for Tree Planting</p>
<p align="center"><b><u>CONTRACT ARTICLE 74.</u></b> <b><u>STATEMENT OF WORK</u></b></p> <p>The <b>Contractor</b> shall furnish all labor and materials and perform all <b>Work</b> in strict accordance with the <b>Contract Drawings, Specifications, and all Addenda</b> thereto.</p>	<p>See Contract Article 74</p>
<p align="center"><b><u>CONTRACT ARTICLE 75.</u></b> <b><u>COMPENSATION TO BE PAID TO CONTRACTOR</u></b></p> <p>The <b>City</b> shall pay and the <b>Contractor</b> shall accept in full consideration for the performance of the <b>Contract</b>, subject to additions and deductions as provided in Contract Article 75, this said sum being the amount at which the <b>Contract</b> was awarded to the <b>Contractor</b> at a public letting thereof, based upon the <b>Contractor's</b> bid for the <b>Contract</b>.</p>	<p>See Contract Article 75</p>
<p align="center"><b><u>CONTRACT ARTICLE 78.</u></b> <b><u>PARTICIPATION BY MINORITY-OWNED AND</u></b> <b><u>WOMEN-OWNED BUSINESS ENTERPRISES IN CITY</u></b> <b><u>PROCUREMENT</u></b></p>	<p>See M/WBE Utilization Plan in the Bid Booklet</p>

<p align="center"><b><u>STANDARD HIGHWAY SPECIFICATIONS</u></b>  <b><u>SECTION 6.40</u></b>  <b><u>LIQUIDATED DAMAGES FOR</u></b>  <b><u>ENGINEER'S FIELD OFFICE</u></b></p> <p>If the Contractor fails to satisfactorily provide the field office and all equipment specified in <b>Section 6.40 - Engineer's Field Office</b>, and/or if a cited deficiency exceed seventy two (72) hours after notice from the Engineer in writing, or is permitted to recur, liquidated damages will be assessed in the amount specified herein for each subsequent calendar day or part thereof that a cited deficiency resulting in nonpayment, as described in <b>Section 6.40.5</b>, is not corrected.</p>	<p>\$ <u>250.00</u> for each calendar day of deficiency</p>
<p align="center"><b><u>STANDARD HIGHWAY SPECIFICATIONS</u></b>  <b><u>SECTION 6.70</u></b>  <b><u>LIQUIDATED DAMAGES FOR</u></b>  <b><u>MAINTENANCE AND PROTECTION OF TRAFFIC</u></b></p>	<p>\$ <u>250.00</u> for each instance of failure to comply with the Maintenance and Protection of Traffic requirements within three (3) hours after written notice from the Engineer</p> <p>\$ <u>500.00</u> for each and every hour of failing to open the entire width of roadway to traffic the morning following a night/weekend work operation</p>
<p align="center"><b><u>STANDARD HIGHWAY SPECIFICATIONS</u></b>  <b><u>SECTION 7.13</u></b>  <b><u>LIQUIDATED DAMAGES FOR</u></b>  <b><u>MAINTENANCE OF SITE</u></b></p> <p>If the Contractor fails to comply, within three (3) consecutive hours after written notice from the Engineer, with the requirements of <b>Section 7.13 - Maintenance of Site</b>, the Contractor shall pay to the City of New York, until such notice has been complied with or rescinded, the sum specified above per calendar day, for each instance of such failure, as liquidated damages and not as a penalty, for such default.</p>	<p>\$ <u>250.00</u> for each calendar day, for each occurrence</p>

**(GENERAL CONDITIONS RELATING TO ARTICLE 22 – INSURANCE)**

**PART II. TYPES OF INSURANCE, MINIMUM LIMITS AND SPECIAL CONDITIONS**

**Note:** All certificate(s) of insurance submitted pursuant to Contract Article 22.3. 3 must be accompanied by a Certification by Broker consistent with Part III below and include the following information:

- For each insurance policy, the name and NAIC number of issuing company, number of policy, and effective dates;
- Policy limits consistent with the requirements listed below;
- Additional insureds or loss payees consistent with the requirements listed below; and
- The number assigned to the Contract by the City (in the “Description of Operations” field).

Insurance indicated by a blackened box (■) or by X in a □ to left will be required under this contract

Types of Insurance (per Article 22 in its entirety, including listed paragraph)	Minimum Limits and Special Conditions
<p>■ Commercial General Liability      Art. 22.1.1</p>	<p>The minimum limits shall be \$ <u>3,000,000</u> per occurrence and \$ <u>6,000,000</u> per project aggregate applicable to this <b>Contract</b>.</p> <p>Additional Insureds:</p> <ol style="list-style-type: none"> <li>1. City of New York, including its officials and employees, with coverage at least as broad as ISO Form CG 20 10 and CG 20 37,</li> <li>2. All person(s) or organization(s), if any, that Article 22.1.1(b) of the <b>Contract</b> requires to be named as Additional Insured(s), with coverage at least as broad as ISO Form CG 20 26. The Additional Insured endorsement shall either specify the entity’s name, if known, or the entity’s title (e.g., Project Manager),</li> <li>3. New York State, including its officials and employees,</li> <li>4. FHWA, including its officials and employees,</li> <li>5. The New York City Transit Authority (NYCTA), Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), Staten Island Rapid Transit Operation Authority (SIRTOA), Metropolitan Transportation Authority (MTA), its subsidiaries and affiliated companies. The Contractor shall furnish two (2) certificates of insurance to and the policy shall be endorsed to provide thirty (30) days advance notice to the Director, Risk Management, MTA Risk and Insurance Management Standards, Enforcement and Claims Unit, 2 Broadway, 21<sup>st</sup> Floor, New York, NY 10004, of any material change and/or cancellation, and</li> <li>6. Consolidated Edison, Empire City Subway and Time Warner Cable of NYC.</li> </ol>

<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Workers' Compensation Art. 22.1.2</li> <li><input checked="" type="checkbox"/> Disability Benefits Insurance Art. 22.1.2</li> <li><input checked="" type="checkbox"/> Employers' Liability Art. 22.1.2</li> <li><input type="checkbox"/> Jones Act Art. 22.1.3</li> <li><input type="checkbox"/> U.S. Longshoremen's and Harbor Workers Compensation Act Art. 22.1.3</li> </ul>	<p>Workers' Compensation, Employers' Liability, and Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction.</p> <p><b>Note:</b> The following forms are acceptable: (1) New York State Workers' Compensation Board Form No. C-105.2, (2) State Insurance Fund Form No. U-26.3, (3) New York State Workers' Compensation Board Form No. DB-120.1 and (4) Request for WC/DB Exemption Form No. CE-200. The City will not accept an ACORD form as proof of Workers' Compensation or Disability Insurance.</p> <p>Jones Act and U.S. Longshoremen's and Harbor Workers' Compensation Act: Statutory per U.S. Law.</p> <p><b>Additional Requirements:</b></p> <p>(1) NYCT "OUTSIDE CONTRACT" INSURANCE REQUIREMENTS: Workers' Compensation Insurance (including Employer's Liability Insurance) with limits of not less than \$2,000,000, which limit may be met by a combination of primary and excess insurance meeting the statutory limits of New York State.</p> <p>(2) Two (2) certificates of such insurance shall be furnished to the Director, Risk Management, MTA Risk and Insurance Management Standards, Enforcement and Claims Unit, 2 Broadway, 21<sup>st</sup> Floor, New York, NY 10004.</p>
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<input type="checkbox"/> Builders' Risk	Art. 22.1.4	<p>100 % of total value of <b>Work</b></p> <p><b>Contractor</b> the Named Insured; the <b>City</b> both an Additional Insured and one of the loss payees as its interests may appear.</p> <p>If the <b>Work</b> does not involve construction of a new building or gut renovation work, the <b>Contractor</b> may provide an installation floater in lieu of Builders Risk insurance.</p> <p>Note: Builders Risk Insurance may terminate upon <b>Substantial Completion</b> of the <b>Work</b> in its entirety.</p>
<input checked="" type="checkbox"/> Commercial Auto Liability	Art. 22.1.5	<p>\$ <u>2,000,000</u> per accident combined single limit</p> <p>If vehicles are used for transporting hazardous materials, the <b>Contractor</b> shall provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90</p> <p>Additional Insureds:</p> <ul style="list-style-type: none"><li>(1) City of New York, including its officials and employees, and</li><li>(2) The New York City Transit Authority (NYCTA), Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), Staten Island Rapid Transit Operation Authority (SIRTOA), Metropolitan Transportation Authority (MTA), its subsidiaries and affiliated companies.</li><li>(3) New York State, including its officials and employees,</li><li>(4) FHWA, including its officials and employees.</li></ul>

<input type="checkbox"/> Contractors Pollution Liability      Art. 22.1.6	\$ _____ per occurrence \$ _____ aggregate  Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
<input type="checkbox"/> Marine Protection and Indemnity      Art. 22.1.7(a)	\$ _____ each occurrence \$ _____ aggregate  Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
<input type="checkbox"/> Hull and Machinery Insurance      Art. 22.1.7(b)	\$ _____ per occurrence \$ _____ aggregate  Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
<input type="checkbox"/> Marine Pollution Liability      Art. 22.1.7(c)	\$ _____ per occurrence \$ _____ aggregate  Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____

[OTHER]

Art. 22.1.8

■ Railroad Protection Liability Policy

(ISO-RIMA or equivalent form) approved by Permitter covering the work to be performed at the designated site and affording protection for damages arising out of bodily injury or death, physical damage to or destruction of property, including damage to the Insured's own property and conforming to the following:

- Policy Endorsement CG 28 31 - Pollution Exclusion Amendment is required to be endorsed onto the policy when environmental-related work and/or exposures exist.
- Indicate the Name and address of the Contractor to perform the work, the Contract # and the name of the railroad property where the work is being performed and the Agency Permit.
- Evidence of Railroad Protective Liability Insurance, must be provided in the form of the Original Policy. A detailed Insurance Binder (ACORD or Manuscript Form) will be accepted pending issuance of the Original Policy, which must be provided within 30 days of the Binder Approval.

\$ 2,000,000 per occurrence

\$ 6,000,000 annual aggregate

Named Insureds:

1. New York City Transit Authority (NYCTA), the Manhattan and Bronx Surface Transit Operation Authority (MaBSTOA), the Staten Island Rapid Transit Operation Authority (SIRTOA), MTA Capital Construction Co., the Metropolitan Transportation Authority (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner) and all other indemnified parties.



<p>[OTHER]</p> <p><input type="checkbox"/> Professional Liability</p> <p>A. The Contractor's Professional Engineer shall maintain and submit evidence of Professional Liability Insurance in the minimum amount of \$1,000,000 per claim. The policy or policies shall include an endorsement to cover the liability assumed by the Contractor under this Contract arising out of the negligent performance of professional services or caused by an error, omission or negligent act of the Contractor's Professional Engineer or anyone employed by the Contractor's Professional Engineer.</p> <p>B. Claims-made policies will be accepted for Professional Liability Insurance. All such policies shall have an extended reporting period option or automatic coverage of not less than two (2) years. If available as an option, the Contractor's Professional Engineer shall purchase extended reporting period coverage effective on cancellation or termination of such insurance unless a new policy is secured with a retroactive date, including at least the last policy year.</p>	<p>Art. 22.1.8</p>
<p>[OTHER]</p> <p><input checked="" type="checkbox"/> Engineer's Field Office</p> <p><b>Section 6.40, Standard Highway Specifications</b></p>	<p>Art. 22.1.8</p> <p>Fire insurance, extended coverage and vandalism, malicious mischief and burglary, and theft insurance coverage in the amount of <u>\$40,000</u></p>
<p>[OTHER]</p> <p><input type="checkbox"/> The Following Additional Insurance Must Be Provided:</p> <p><b>Umbrella/Excess Liability Insurance</b> - The Contractor shall provide Umbrella/Excess Liability Insurance in the minimum amount of \$10,000,000 per Occurrence and \$10,000,000 in Aggregate. The policy terms and condition should be at least as broad as the underlying policies. The underlying policies should comply with the insurance provision as outlined by the contract. Defense cost should be in addition to the limit of liability. The City of New York, including its officials and employees, should be included as additional insured as respects to the noted project.</p>	<p>Art. 22.1.8</p>



**SCHEDULE A**

**(GENERAL CONDITIONS TO CONSTRUCTION CONTRACT)**

**PART IV. ADDRESS OF COMMISSIONER**

Wherever reference is made in Article 7 or Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents shall be sent to the address set forth below or, in the absence of such address, to the **Commissioner's** address as provided elsewhere in this **Contract**.

\_\_\_\_\_  
DDC Director, Insurance Risk Manager

\_\_\_\_\_  
30 – 30 Thomson Avenue, 4th Floor (IDCNY Building)

\_\_\_\_\_  
Long Island City, NY 11101

\_\_\_\_\_

(NO TEXT ON THIS PAGE)

ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 1

DATED: February 24, 2014

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

The New York City Department of Transportation Standard Highway Specifications, dated November 1, 2010, (which include, but are not limited to, "General Conditions", "Basic Materials of Construction", "Combined Materials of Construction", "Construction Methods", "Inspection and Testing of Materials, Adjustments for Deficiencies, and Maintenance", and "Supplemental Construction Methods"), as modified by addenda issued prior to the opening of bids, shall apply to and become a part of the contract.

All references contained herein are to the New York City Department of Transportation, Standard Highway Specifications, dated November 1, 2010. The said Specifications are hereby revised. Included hereunder are the following REVISIONS:

1. Amendments to Standard Highway Specifications, Volume I
2. Amendments to Standard Highway Specifications, Volume II, including Section 7.88 (Revised) and new Sections 6.44 PO and 6.52 CG.
3. New Sections
4. Special Provisions

1. AMENDMENTS TO STANDARD HIGHWAY SPECIFICATIONS, VOLUME I

The following amendments to the Contract Requirements shall become a part of and apply to the contract:

**[Added 12-09-2010]**

1. Refer to Page 15, **Subsection 1.06.23.(C) CONFORMANCE WITH FEDERAL, STATE AND CITY AGENCIES;**

Add the following new paragraphs:

"The Contractor is notified that all vehicles that are owned, leased or operated by the Contractor or its subcontractors and used in connection with the Project shall comply with the following requirement:

Every truck, tractor, and tractor-trailer or semitrailer combination, having a gross vehicle weight rating of twenty-six thousand pounds or more, and a conventional cab configuration in which more than half of the engine length is forward of the foremost point of the windshield base, and the steering wheel hub is in the forward quarter of the vehicle length shall be equipped with a convex mirror on the front of such vehicle or combination of vehicles. Such convex mirror shall be adjusted so as to enable the operator of such vehicle or combination of vehicles to see all points on an imaginary horizontal line which is three feet above the road, is one foot directly forward from the midpoint of the front of such vehicle or combination of vehicles, and extends the full width of the front of such vehicle or combination of vehicles.

Any vehicle that does not comply with this provision may be prohibited from entering the Project site and/or supplying equipment or materials to the Project. The Contractor shall not be entitled to any damages as a result of such prohibition."

**[Added 01-09-2011]**

2. Refer to Page 240, **Subsection 4.16.5.(B) STUMP REMOVAL;**  
Delete **Subsection 4.16.5.(B) STUMP REMOVAL,** in its entirety;  
Substitute the following revised **Subsection 4.16.5.(B) :**

**"(B) STUMP REMOVAL**

1. Tree stumps designated to be removed and their roots shall be completely excavated to a minimum depth of three (3) feet below the existing grade. A portable stump cutter may be required in some locations. It may be necessary to remove concrete, asphalt, pavers, and/or other types of material surrounding the base of the stump. All excess debris, including chips from tree stumps, shall be removed and disposed of by the Contractor, away from the site prior to backfilling and the area shall be restored by completion of the workday, to the satisfaction of the Engineer. The disposal of tree stumps by burning in open fires will not be permitted.

2. All voids and excavations left after the removal of the stump and roots shall be backfilled to grade with clean earth fill. Fill shall be placed and compacted to a minimum of 95 percent of Standard Proctor Maximum Density by acceptable methods to the satisfaction of the Engineer. Where paving blocks exist, they are to be reset to the existing grade as directed.

3. Maximum safety and care must be used by Contractor during stump removal. The Contractor shall carefully protect against damage all existing trees, plants, curbs, sidewalks and utilities and other features to remain. The Contractor is responsible for locating and protecting underground utilities from damage during stump removal procedures. During stump grinding operations, plywood must be used to protect adjacent vehicles, real property, and pedestrians. If, when removing stumps, existing sidewalks or curbs are disturbed, the Contractor shall restore and/or reset these sidewalks and curbs, at no additional cost to the City. Restoration work shall be done to match the existing, to the satisfaction of the Engineer. All damaged trees, curbs, sidewalks, real property, vehicles and utilities must be addressed within three (3) days."

**[Added 04-18-2011]**

3. Refer to Pages 218 and 219, **Subsection 4.13.4.(H) PIGMENT**;  
Delete the first three (3) paragraphs on page 219:  
Substitute the following revised three (3) paragraphs:

"Where the color of the concrete is required to simulate the color of dark gray bluestone, the concrete shall be integrally pigmented to produce a gray color equivalent to: Davis Colors No. 884-3%; Lansco Color No. 437 "Strong Black" 5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; L.M. Scofield "Cool Black No. 4"; Bayferrox Limestone 330, 2 lbs. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified.

Where the color of the concrete is required to simulate the color of light to medium gray granite, the concrete shall be integrally pigmented to produce a gray color equal to: Davis Colors No. 884-1%; Lansco Color No. 437 "Strong Black" 2.5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; L.M. Scofield "Cool Black No. 1"; Bayferrox Silver 330, 1 lb. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified.

Where the sidewalk is designated to have a saw cut joint finish the color of the concrete shall be integrally pigmented to produce a gray color equivalent to L.M. Scofield "Landmarks Grey" K-157-4; L.M. Scofield "Cool Black No. 4"; Davis Colors No. 884-3%; Lansco Color No. 437 "Strong Black" 5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; Bayferrox NYC Landmark Commission Gray, 3.5 lbs. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified."

**[Added 07-01-2011]**

4. Refer to Page 14, **Subsection 1.06.23.(A) PERMITS**;  
Delete line (b) under the first paragraph;  
Substitute the following text:

"(b) Any planned work requiring a DOT Construction Permit that may potentially be within 100 feet of a bridge structure will be placed on a Bridge Hold. If any proposed work is within 100 feet of a bridge structure, permittees must submit a scaled drawing showing the work and exact location, along with the following:

- Plan layout of the project area.
- The scope of work.
- The contractor's means and methods.
- Indicate if work will be done of the bridge itself or its abutments, and the type of work.

If the work is more than 100 feet away from the bridge structure, permittees may send a certification by e-mail stating so. Either response must be sent to the Division of Bridges at [bridgeshold@dot.nyc.gov](mailto:bridgeshold@dot.nyc.gov) for review and release prior to commencing work. Emergency work will not be placed on hold and shall proceed in accordance with the New York City Highway Rules, section 2-11 (g);

- (c) Permits from the Department of Sanitation for use of City landfills;"

**[Added 07-27-2011]**

5. Refer to Page 37, **Subsection 1.06.46.(A) 6. Sign Graphics;**  
Delete article "a." beginning with the words "All visual components of the sign are in an Adobe \*.pdf file, . . ." and ending with the words ". . . DDC to the Contractor (on a CD or via E-mail) for printing.", in its entirety;  
Substitute the following revised article "a":

"a. All visual components of the sign are in an Adobe \*.pdf file, which is provided by the Commissioner's representative. The file is not to be altered for composition, type font or image from the version provided by DDC. The Commissioner's representative shall provide a complete file with data and image. The digital file shall be provided by DDC to the Contractor (on a CD or via E-mail) for printing."

**[Added 09-27-2012]**

6. Refer to Page 36, **Subsection 1.06.46. Project Sign;**  
Delete the words "Unless otherwise specified in the Special Provisions of the contract, the following shall apply:";  
Substitute the following revised text:

"The Contractor is notified that he shall be required to furnish, install, maintain, and remove, when directed, Construction Project Information Signs (CPIS) as per Sec. 2-02(c)(4) and (5) of the NYC DOT Highway Rule and the cost shall be deemed included under all scheduled items of the contract. In addition, unless otherwise specified in the Special Provisions of the contract, the following Project Sign shall also apply:"

**[Added 04-08-2013]**

7. Refer to Page 200, **Subsection 4.11.2.(B), first paragraph, sixth line;**  
Delete the word "porcelain,".
8. Refer to Page 201, **Subsection 4.11.3.(B) FILL AND BACKFILL, second and third paragraphs;**  
Delete the second and third paragraphs under Subsection 4.11.3.(B), in their entirety;  
Substitute the following revised two paragraphs:

"Glass or Recycled Porcelain Aggregate (RPA) from recycling facilities that meets the requirements of **Subsection 4.11.3.(E)** for Glass and **Subsection 4.11.3.(F)** for RPA shall be considered suitable material for mixing with fill provided the Contractor maintains the gradations specified herein. However, glass shall not be placed in contact with synthetic liners, geogrids, geotextiles or other geosynthetics.

Glass and/or RPA incorporated into fill shall be thoroughly mixed with other suitable material so that glass, RPA or combination of both constitutes no more than 30 percent by volume anywhere in the fill as visually determined by the Engineer."



9. Refer to Page 202, **Subsection 4.11.3.(E) GLASS;**  
Add the following new **Subsection 4.11.3.(F) RECYCLED PORCELAIN  
AGGREGATE (RPA) :**

“(F) RECYCLED PORCELAIN AGGREGATE (RPA)

All porcelain to be used as RPA shall be crushed by a New York City Department of Environmental Protection (NYCDEP) approved recycling facility to a maximum particle size of 3/8 inch and graded to meet the gradation specified above for use in either fill, backfill or select fill, as may be required. RPA from any other source will not be permitted. The NYCDEP approved recycling facility will also certify that the RPA being furnished is free from organic material and other unsuitable material.

Should the Contractor desire to use RPA in his fill or backfill material, he shall contact Mr. Vasy Kravchuk at NYCDEP (Tel. No. 718-595-7512) to determine the availability of RPA and from which recycling facility it can be obtained.

The Contractor shall be required to make arrangement with the recycling plant, at least two (2) weeks in advance of when he would need the material, to schedule the time, date and quantity available for pickup. The Contractor shall be required to furnish the recycling facility with a complete list of his trucks involved in transporting the material, which shall include the name of the registered owner (Contractor), Consumer Affairs or DOS Permit numbers, body license plate number, and truck volume. This information must be supplied to the facility prior to the start of picking up the RPA.

Weight ticket receipt slips given by the recycling facility to each truck driver picking up RPA shall be collected by the Contractor and given to the Engineer upon delivering fill or backfill material to the site that contains RPA, and the Contractor agrees and warrants that in obtaining the RPA that such material has originated only from a NYCDEP approved recycling plant and it has not been mixed with porcelain material from any other source.

The Contractor shall be required to transport said material from the approved recycling facility to his yard for storage and mixing with his fill material; however, there is not guarantee that the material will actually be available.

The Contractor is advised that there is no guarantee that RPA will in fact be available for his use from a NYCDEP approved recycling plant and he shall make no claim against the City for loss of anticipated profits should the material not be available upon request by the Contractor.

All excess RPA not used in the fill or backfill shall remain the property of the DDC Contractor.

The Contractor must comply with all rules and regulations of the Department of Transportation and the Department of Environmental Protections governing the use of RPA in its fill and backfill material.”

10. Refer to Pages 218 and 219, **Subsection 4.13.4.(H) PIGMENTING,**  
**first four paragraphs;**

Delete the first four paragraphs under Subsection 4.13.4.(H), in  
their entirety;

Substitute the following revised four paragraphs:

“Where pigmenting is specified, the concrete sidewalks shall be pigmented with an admixture complying with the requirements of **Section 2.19** and the following requirements:

‘Commercial Gray’: In commercial districts C4–4 through C4–7, C5 and C6, as defined in the Zoning Resolution of the City of New York, and in areas under the jurisdiction of the Lower Manhattan Development Corporation the color of the concrete shall be integrally pigmented to produce a gray color equivalent to L.M. Scofield ‘Landmarks Grey’ K-157-4; L.M. Scofield ‘Cool Black No. 4’; Davis Colors No. 884-3%; Lansco Color No. 437 ‘Strong Black’ 5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; Bayferrox NYC Landmark Commission Gray, 3.5 lbs. per 94 lbs. Light Grey Portland Cement; or an approved equivalent, unless otherwise specified.

'Bluestone': Where the color of the concrete is required to simulate the color of dark gray bluestone, the concrete shall be integrally pigmented to produce a gray color equivalent to: Davis Colors No. 884-3%; Lansco Color No. 437 'Strong Black' 5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; L.M. Scofield 'Cool Black No. 4'; Bayferrox Limestone 330, 2 lbs. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified.

'Granite': Where the color of the concrete is required to simulate the color of light to medium gray granite, the concrete shall be integrally pigmented to produce a gray color equal to: Davis Colors No. 884-1%; Lansco Color No. 437 'Strong Black' 2.5 lbs. per 94 lbs. Light Grey Portland Cement and 3 parts sand; L.M. Scofield 'Cool Black No. 1'; Bayferrox Silver 330, 1 lb. per 94 lbs. Light Gray Portland Cement; or an approved equivalent, unless otherwise specified."

**[Added 05-24-2013]**

11. Refer to Page 14, **Subsection 1.06.23. (A) PERMITS**, first paragraph as modified by Article 4 on page A1-1b;  
Add the following new text:

"(d) All necessary permits from the Department of Environmental Protection which may include, but are not limited to, permits for use of City water."

12. Refer to Page 14, **Subsection 1.06.23. (A) PERMITS**, second paragraph;  
Add the following as the third paragraph:

"No fee permits for use of City water necessary to complete roadway pavement reconstruction project in conjunction with installation of sewers and/or water mains, will be issued by the Department of Environmental Protection. However, for all other type projects (such as installation of sidewalks, installation of pedestrian ramps, pavement milling, resurfacing, rehabilitation of retaining walls, and bridge reconstruction type projects) the Contractor will be required to obtain the water use permit at its own cost."

**[Added 08-05-2013]**

13. Refer to page 116, second paragraph up from the bottom of the page, first line;  
Change the words "Concrete of Type IA and IIA shall have..." to read "Concrete of Type IA, IIA and IIIA shall have..."

**[Added 09-04-2013]**

14. Refer to page 100, **Subsection 3.01.3. (C) 1. (c)** ;  
Delete the last two lines of text beginning with the words "The proportion of reclaimed asphalt pavement permitted within each mix...";  
Substitute the following sentence: "The proportion of reclaimed asphalt pavement permitted within each mix shall be not less than 30 percent for the top and bottom courses as per Local Law #71 of 2011."

15. Refer to page 110, **Subsection 3.05.2. (A)**, **Table 3.05-I**;  
Insert the following text at the bottom of **Table 3.05-I**:

"Note: The above proportions shown for non-High-Early mixes shall be modified by pozzolan substitutes as per **Subsection 3.05.4.**"

16. Refer to page 112, **Subsection 3.05.3.(C)**, second paragraph;  
Delete the second paragraph in its entirety;  
Substitute the following paragraph:

"Water shall be potable and drawn from municipal water mains."

17. Refer to page 113, first line of text, beginning with the words  
"condition making up one (1) cubic yard of concrete.";  
Insert the following sentence between the words "condition making up one  
(1) cubic yard of concrete." and "The range of water-cement ratio within which the ...":

"The calculated yield of the mix shall be within  $\pm$  2% of the Theoretical (1) cubic yard."

18. Refer to Page 113, second paragraph beginning with the words "The  
Contractor may substitute Portland cement . . .";  
Delete the second paragraph under **Subsection 3.05.4.**, in its  
entirety;  
Substitute the following revised paragraph:

"With the exception of high-early strength concrete, the Contractor shall be required to substitute Portland cement with pozzolans (Fly Ash or GGBFS) such that the maximum amount of Portland cement per cubic yard of concrete does not exceed 400 pounds, and with the use of an approved non-corrosive, non-chloride admixture as required to obtain a minimum compressive strength of 3,000 psi in seven (7) days. For high-early strength concrete the Contractor may substitute Portland cement with pozzolans (Fly Ash or GGBFS), pound for pound, up to 20% (or up to 25% for tidal/sea water spray areas) of the weight of cement specified for any concrete mixture provided the Contractor can obtain a minimum compressive strength of 3,000 p.s.i. in three (3) days. The Contractor, immediately following but not later than eight weeks after the date of the Contractor's Notice to Proceed, shall file with the Engineer, Age-Strength data of the job mix he proposes to use for the various ambient temperatures anticipated during the period of concrete placement. This data shall be presented in both tabular and graphical form for those various ambient temperatures with a maximum setting period of seven (7) days for Class B-32 concrete or seventy-two (72) hours for High-Early Strength Concrete."

19. Refer to Page 115, **TABLE 3.05-III - INGREDIENT MATERIALS**;  
Change in the third row, second column, the type of Portland  
Cement from "Type III\*" to read "Type II or Type III\*"

20. Refer to page 132, **Subsection 3.06.3.(D)**;  
Change the words "Water shall be drawn from mains owned by The City of New York." to  
read "Water shall be potable and drawn from municipal water mains."

21. Refer to page 133, **Subsection 3.07.3.(D)**;  
Change the words "Water shall be drawn from mains owned by or supplying water to The  
City of New York." to read "Water shall be potable and drawn from municipal water  
mains."

22. Refer to page 134, **Subsection 3.08.4.(D)**;  
Change the words "Water shall be drawn from mains owned by or supplying water to The  
City of New York." to read "Water shall be potable and drawn from municipal water  
mains."

23. Refer to Page 166, **Subsection 4.05.2. (A)** ;  
Delete **Subsection 4.05.2. (A)**, in their entirety;  
Substitute the following revised **Subsection 4.05.2. (A)** :

“(A) Concrete Pavement shall be of the following types:

- Type 1--Non-reinforced
- Type 2--Reinforced (Unpigmented or pigmented if specified)
- Type 3--High Early Strength Reinforced (Unpigmented or pigmented if specified)

Type 2 and Type 3 pavements shall consist of a concrete surface course, which shall be unpigmented or pigmented if specified, laid on a concrete base course, which may or may not be pigmented at the Contractor's option, while the base course is still plastic, of the thickness shown on the Contract Drawings, with reinforcement placed between the surface and base courses.”

24. Refer to Page 166, **Subsection 4.05.3. (A)** ;  
Insert the following new **Subsection 4.05.3. (A1)** :

“(A1) PIGMENTING

Where pigmenting is specified, the surface course of the concrete bus pad shall be pigmented with an admixture complying with Section 2.19 and the following requirements:

Where the color of the concrete is required to simulate the red color of the Red Bus Lane Pavement Overlay (Item 6.44 POR in Section 6.44 PO), the surface course concrete shall be integrally pigmented to produce a red color equivalent to Scofield's quarry red.

Except for the use of an air-entraining agent complying with ASTM Designation C 260 and water reducing admixtures complying with ASTM Designation C 494 used in combination with the Pigment Admixture as per the pigment manufacturer's instruction, no other admixtures (including, but not limited to, calcium chloride) shall be used unless stated in writing by the manufacturer of the Pigment Admixture to be of no consequence to the colorfastness of the concrete mixture and is approved by the Engineer.

All pigmented concrete at different locations shall be identical, unless otherwise directed. Variations in color/tint/hue will not be acceptable. Therefore, the same brand and type of cement and the same source and type of aggregate shall be used throughout the project.

Prior to the mix design being made, the cement intended for use shall be checked to determine that its lightness/darkness is similar to the cement used in the original approved sample. The Pigmented Admixture shall be added in the standard proportion specified by the manufacturer.”

25. Refer to Page 170, **Subsection 4.05.5. (A) GENERAL** ;  
Insert the following two new paragraphs:

“For pigmented concrete, the Contractor shall within eight weeks of the notice to proceed, submit the name of its proposed roadway installer upon which his bid is based, along with their respective work history experience in placing pigmented concrete. The installer shall have documented experience in working with pigmented concrete.

Prior to making any field samples and the placing of any pigmented concrete, the Contractor, its concrete supplier, installer, cement producer, laboratory, the pigmented admixture's representative, and the Engineer shall meet and agree on the specifications and methods of handling the pigmented concrete.”

26. Refer to Page 183, **Subsection 4.05.9. PRICES TO COVER**, 4<sup>th</sup> line;  
Insert in the fourth line, the words "pigment when specified" between the  
words "specifications, including, but not limited to," and "furnishing and installing ...":

27. Refer to Page 183, **Subsection 4.05.9. PRICES TO COVER**;  
Insert the following two new Items to the list of Item Nos. at the  
bottom of **Subsection 4.05.9**:

"4.05 ACP REINFORCED CONCETE PAVEMENT (BUS STOPS)(PIGMENTED) C.Y.

4.05 AXP HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT  
(BUS STOPS)(PIGMENTED) C.Y."

2. AMENDMENTS TO STANDARD HIGHWAY SPECIFICATIONS, VOLUME II

[Added 01-25-2012]

1. Refer to Pages 365 and 366, **Subsection 6.40.2.(C)(c)(1) Personal Computer(s) - Workstation Configuration;**

Delete the text under **Subsections (a), (b), (c), (d), (h), (i), and (m)**, in their entirety;

Substitute the following revised text:

- “(a) Make and Model: Dell; HP; Gateway; Acer; or, an approved equivalent. (Note: an approved equivalent requires written approval of the Assistant Commissioner of ITS.)
- (b) Processor: i5-2400 (6MB Cache, 3.1GHz) or faster computer - Single Processor.
- (c) System Ram: Minimum of 4GB (Gigabytes) Dual Channel DDR3 SDRAM at 1333MHz – 2 DIMMSs
- (d) Hard Disk Drive(s): 500 GB (Gigabytes) Serial ATA (7200RPM) w/DataBurst Cache, or larger.”
- “(h) Video Display Card: HD Graphics (VGA, HDMI) with a minimum of 64 MB of RAM.
- (i) Monitor: 22" W, 23.0 Inch VIS, Widescreen, VGA/DVI LCD Monitor.”
- “(m) Software Requirements: Microsoft Windows 7 Professional SP1, 64 bit; Microsoft Office Professional 2010; Microsoft Project 2010; Adobe Acrobat reader; Anti-Virus software package with 2 year updates subscription; and, either Auto Cad 2012 LT or Microsoft Visio 2010 Standard Edition, as directed by the Engineer.”

~~2. Refer to Page 366, **Subsection 6.40.2.(C)(c)(2)(b)** ;  
Delete the text under **Subsection (b)**, which begins with the words  
“(b) One (1) 600 DPI HP Laser Jet . . .”, in its entirety;  
Substitute the following revised text:~~

~~“(b) **One (1) 600 DPI HP Color Laser Jet all-in-one Printer/Scanner/Copier/Fax (twelve (12) pages per minute or faster) with one (1) Extra Paper Tray (Legal Size) networked to all office computers.**”~~

3. Refer to Page 367, **Subsection 6.40.3. SPECIFIC REQUIREMENTS FOR ENGINEERS FIELD OFFICE (TYPE A, B, C, CU, D OR DU)**, first paragraph;  
Delete the text in the first paragraph of **Subsection 6.40.3.**, in its entirety;  
Substitute the following revised text:

**6.40.3. SPECIFIC REQUIREMENTS FOR ENGINEER'S FIELD OFFICE (TYPE A, B, C, CU, D, OR DU).** In addition to the general requirements, each type of Field Office shall have the minimum floor area indicated in Table 6.40-I calculated based on usable area only, excluding any loss factors. Loss factors are defined as those areas such as lobby, sidewalk window ledge, elevator shafts and stairways. The Contractor shall provide and maintain furnishings for each type of Field Office in the quantity specified in Table 6.40-I. The furnishings shall be new or used equipment satisfactory to the Engineer:

4. Refer to Page 368, TABLE 6.40-I, ADDITIONAL REQUIREMENTS SPECIFIC REQUIREMENTS;  
Delete the requirements for a Photocopy Machine shown in the 15th row of TABLE 6.40-I, in its entirety;  
Substitute the following revised requirements:

Photocopying Machine – Stand-alone, heavy duty, electric, dry-process color photocopying type with a minimum production rate of 70 pages per minute and an adequate supply of copy paper, toner, etc. The machine shall be capable of duplex copying paper sizes of 8-1/2 x 11 inches, 8-1/2 x 14 inches and 11 x 17 inches, and have separate trays for each paper size. It shall have a document feeder, collator, stapler, and the capability to reduce/enlarge copies between each paper size. The supply of each size copy paper, toner, etc. shall be replenished and the machines shall be maintained for the duration of the contract by the Contractor as required by the Engineer. Make and model can be Minolta, Canon, IBM, Epson, or an approved equivalent, and shall be networked to the office computers.	1	1	1	1	1	1
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5. Refer to Page 368, TABLE 6.40-I, ADDITIONAL REQUIREMENTS SPECIFIC REQUIREMENTS;  
Insert the following two additional requirements:

Heavy duty commercial grade diamond cut shredder with automatic start. The shredder shall be able to receive 8-1/2 inch wide paper and shred a minimum of 15 sheets simultaneously along with CDs and staples.	1	1	1	1	1	1
Projector – 1080p LCD with a min. of 2200 ANSI Lumens, 1920 x 1080, 16:9, 40,000:1 contrast ratio, HDMI, VGA, USB, and a 10 feet diagonal, 16:9 Projection Screen.	-	-	1	1	1	1

6. Refer to Page 496, Subsection **7.20.4. METHODS**, last paragraph beginning with the words "When directed by the Engineer, due to the original conditions . . .";  
Add the following sentence to the end of the last paragraph under **Subsection 7.20.4:**

"However, if the owner at his own expense supplies the replacement frame and doors or hatch covers the Contractor shall install the replacement frame and doors or hatch covers under this Item 7.20, as a basement access reset, in lieu of the steel safety closure plate."

**[Added 07-16-2012]**

7. Refer to Page 365, Subsection **6.40.2.(C)(c)(1) "Personal Computer(s) - Workstation Configuration"**;  
 Delete the text under **Subsections (g) and (k)**, in their entirety;  
Substitute the following revised text:

- (g) I/O Ports: Must have at least one (1) Serial Port, one (1) Parallel Port, and three (3) USB Ports.
- (k) Network Interface: Integrated 10/100/1000 Ethernet card."

8. Refer to Page 366, Subsection **6.40.2.(C)(c)(2) "All field offices requiring computers shall be provided with the following:"**;  
 Delete the text under **Subsection (a)**, in its entirety;  
Substitute the following revised text:

- "(a) One (1) broad-band internet service account. Wideband Internet connectivity at a minimum throughput of 15 Mbps download and 5 Mbps upload is required at each field office location with 1-5 staffers. For larger field offices see table below for minimum required upload speeds. Telephone service should be bundled together with Internet connectivity. Because of throughput requirements Verizon FIOS is the preferred connectivity provider where available.

Office Personnel #	Upload Speeds (Minimum)
1 - 5	5 Mbps
6 - 10	10 Mbps
11 - 15	15 Mbps
16 - 20 ...	20 Mbps

This account will be active for the life of the project. The e-mail name for the account shall be the DDC Field Office/project Id (e.g. FLD K HWK666 McGuinness@earthlink.com)."



**[Added 08-09-2012]**

9. Refer to Page 366, **Subsection 6.40.2.(C)(c)(2)(b)**, as amended by Article 2 on page A1-2 of this Addendum;  
Delete the text under **Subsection (b)**, in its entirety;  
Substitute the following words: **"(b) (No Text)."**

10. Refer to Page 368, TABLE 6.40-I, ADDITIONAL REQUIREMENTS SPECIFIC REQUIREMENTS;  
Delete the requirements for a Photocopy Machine shown in the 15th row of TABLE 6.40-I, as modified by Article 4 on page A1-2a of this Addendum, in its entirety;  
Substitute the following revised requirements:

Photocopying Machine – Stand-alone, heavy duty, electric, dry-process color photocopying type with color scan and send capability via e-mail, a minimum production rate of 70 pages per minute and an adequate supply of copy paper, toner, etc. The machine shall be capable of duplex copying paper sizes of 8-1/2 x 11 inches, 8-1/2 x 14 inches and 11 x 17 inches, and have separate trays for each paper size. It shall have a document feeder, collator, stapler, and the capability to reduce/enlarge copies between each paper size. The supply of each size copy paper, toner, etc. shall be replenished and the machines shall be maintained for the duration of the contract by the Contractor as required by the Engineer. Make and model can be Minolta, Canon, IBM, Epson, or an approved equivalent, and shall be networked to the office computers.	1	1	1	1	1	1
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**[Added 11-26-2012]**

11. Refer to Pages 504 through 508, **SECTION 7.88 – Rodent and Waterbug Pest Control**;  
Delete **Section 7.88**, in its entirety;  
Substitute SECTION 7.88 (Revised), as contained on the following pages A1-2d through A1-2i.

**[Added 02-08-2013]**

12. (NO TEXT)

## **SECTION 7.88 (Revised)**

### **Rodent and Waterbug Pest Control**

**7.88.1. DESCRIPTION.** The Contractor shall provide all labor, materials, plant and equipment, and incidentals required to survey and monitor rodent activity and control any infestation or outbreak of rodents and waterbugs (American cockroaches) within the project limit.

**7.88.2. MATERIALS.** All materials shall be approved by the New York State Department of Environmental Conservation and comply with the New York City Health Code for the intended usage.

Rodenticide weatherproof bait blocks shall be multiple dose anticoagulants such as Chlorophacinone or Dephacinone, or single feed rodenticides such as ContraMeal, ContracBait block, Quintox pellets or TalonG pellets, or an approved equivalent.

Tamper proof bait station boxes shall be designed to exclude other mammals and shall be used with poisoned bait to attract rats. Information on "tamper proof bait station boxes" is available from the NYC Bureau of Regulatory & Environmental Health Services, Pest Control Office (718-956-7103/4).

Live traps shall be of proper dimensions for trapping rats and shall not be used with poisoned bait.

Insecticide bait shall be a residual type such as phenol methyl carbamate (2%) bait or an approved equivalent.

#### **(A) SUBMITTALS**

Prior to commencement of construction activities the Contractor shall submit to the Engineer manufacturer's installation instructions for all materials required for rodent and waterbug pest control work and product data which shall include illustrations, catalog data, product characteristics, typical use, performance, and limitation criteria of all rodent and waterbug pest control materials required.

**7.88.3. PERSONNEL.** The Contractor shall employ two independent licensed exterminators: one to engage in survey and monitoring work to establish the level of infestation of rodents and insects and provide recommendations for specific Integrated Pest Management (IPM) actions, and one to execute the rodent and waterbug pest control work to deal with such infestations. All pest control personnel employed by each exterminator company must be supervised by an exterminator licensed in categories 7A & 8. The Contractor shall submit the names and license credentials of the two exterminator companies to the Engineer for approval prior to the commencement of any work under this section.

**7.88.4. METHODS.** Application and dosage of all materials shall be done in strict compliance with the manufacturer's recommendations. All surveying, monitoring, baiting, and/or live trapping work shall be performed in the presence of the Engineer, without which no payment will be made under this Section.

(A) GENERAL

The Contractor's construction activity is expected to disturb any established rodent and/or waterbug population that may exist within the project limits, possibly causing their dispersion. The Contractor shall take all appropriate action to eliminate and/or control these populations within the construction corridor: the construction corridor shall be defined as being the full width of streets under the contract and intersecting streets up to the limits of construction, from property line to property line, excluding buildings and under sidewalk building vaults.

Under the Maintenance of Site requirements for the contract, any unsanitary conditions, such as uncollected garbage or debris, resulting from the Contractor's activities which will provide food and shelter to the resident rodent population shall be corrected by the Contractor immediately after notification of such condition by the Engineer. Non-compliance shall be subject to the application of the "Nonconformance" provisions of the Item for Maintenance of Site, and no payment will be made for any additional application of rodenticide or insecticide needed to control resultant infestations.

(B) SURVEY AND MONITORING WORK

(1) Prior to Construction - The Contractor's designated survey and monitoring exterminator shall execute a survey of the project area and estimate the level of rodent (Norway rat, House mouse) infestation and the waterbug population within the construction corridor. An appropriate sample of utility manholes (sewer, electrical, telephone, etc.) and catch basins should be opened and surveyed to the satisfaction of the Engineer. Contractor shall maintain all survey records in the manner described in 7.88.6., Records and Reports.

(2) During Construction - The Contractor shall monitor the rodent activity through trapping (snap, glue traps or live traps), fecal count methods, and inspection of the conditions of all installed baits every week during construction activity or as otherwise directed by the Engineer. Contractor shall maintain all monitoring records in the manner described in 7.88.6., Records and Reports.

(C) RODENT CONTROL WORK

(1) Wetlands, Woodlands and Areas Within Seventy-five (75') feet of a Stream. In wetlands, woodlands and areas adjacent to a stream, special precautions must be taken to protect water quality and to ensure the safety of other wildlife. To prevent poisoned bait from entering streams, no poisoned bait shall be used in areas within seventy-five (75') feet of either streambank. Live traps must be used in these seventy-five (75') feet buffer zone areas and within wetland and woodland areas.

(2) Outside Wetland Areas, Woodland Areas and Beyond Seventy-five (75') feet of a Stream. In areas outside the seventy-five foot zone of protection adjacent to streams, and areas outside wetlands and woodlands, tamper proof bait stations with poisoned bait shall be established during the period of construction and any consumed or decomposed bait shall be replenished as directed.

Rodent control shall be achieved in two stages as follows:

Stage I. At least one month prior to initiation of the construction work, and periodically thereafter, live traps and/or rodenticide bait, as directed above, shall be placed at locations [e.g., burrows, utility manholes (sewer, electrical, phone, etc.), and catch basins] that are inaccessible to pets, human beings, children and other non-target species, particularly wildlife (e.g., birds) in the construction corridor. Locations of initial bait placement and quantities of bait shall be determined by the survey and monitoring exterminator's written report of his survey and monitoring results, or as otherwise directed by the Engineer.

Stage II. During Construction - Infested sites as determined by the survey and monitoring exterminator's monitoring report shall be baited and/or rebaited, and live traps shall be collected and replaced, the rates and quantities of which shall be determined by the written monitoring reports submitted weekly or as otherwise directed by the Engineer in consultation with the City's Office of Pest Control.

The baiting exterminator shall be responsible for collecting and disposing of all trapped and poisoned rodents found in live traps and tamper proof bait stations. The baiting exterminator shall also be responsible for posting and maintaining signs announcing the baiting of each particular location.

The Contractor, under his maintenance of site operations, shall be responsible for the immediate collection and disposal of any visible rodent remains found on streets or sidewalk within the project limits. Any visible remains shall be placed into double plastic bags. No more than five (5) carcasses shall be placed into each bag. Each bag shall be a minimum of 3 mils thick, black plastic. No additional payment will be made for this work.

It is anticipated that public complaints will be addressed to the Engineer's Field Office. The Contractor, where directed by the Engineer, shall take appropriate Integrated Pest Management (IPM) actions, such as baiting, trapping, proofing, etc., to remedy the source of a complaint within the next six (6) hours of normal working time, which is defined herein, for the purposes of this section, as 7 A.M. to 6 P.M. on Mondays through Saturdays.

(D) WATERBUG (AMERICAN COCKROACH) CONTROL

Infested sites (e.g., sewers) shall be baited at least 2 times per month with insecticides, or as directed by the Engineer in consultation with the exterminator monitoring the work and the City's Office of Pest Control.

**7.88.5. EDUCATION & TRAINING.** The Contractor shall post notices in all Construction Bulletin Boards advising workers, employees, and residents to call the Engineer's Field Office to report rodent and waterbug infestations. The Contractor shall provide and distribute literature pertaining to IPM techniques of rodent control to affected businesses and superintendents of nearby residential buildings to ensure their participation in maintaining their establishments free of unsanitary conditions, harborage removal and rodent proofing.

Prior to application of any chemicals, the Contractor shall furnish copies or sample labels for each pesticide, antidote information, and Material Data Safety Sheets (MSDS) for each chemical used.

**7.88.6. RECORDS AND REPORTS.**

**(A) GENERAL**

The Contractor shall be responsible for assigning within the construction corridor an identifying number to each manhole, catch basin, and other location where bait and/or live trap placement and/or waterbug control work is proposed by the survey and monitoring exterminator. The Contractor shall then provide that list of locations and corresponding reference numbers along with a drawing showing the locations, as a reference for the exterminator(s) performing the work, to indicate locations of bait placement and waterbug control work and rodent and waterbug activity (droppings, bait consumed, dead rodents, etc.).

**(B) SURVEY AND MONITORING WORK**

(1) Prior to Construction – Contractor shall submit to the Engineer, for approval, a written survey report including proposed IPM procedures, including specific materials, quantities, locations, methods, and time schedule for the implementation of the exterminating work. The written report shall also include a survey with a drawing (provided by the Contractor) marked with locations indicating all signs of rodent (Norway rat, House mouse) infestation and waterbug activity discovered during the execution of the survey indicating that rodent and waterbug pest control work is necessary.

(2) During Construction - Based on monitoring results, Contractor shall submit to the Engineer a weekly written monitoring report identifying all locations and conditions of installed bait and/or other rodent control work. The monitoring report shall also include any other recommended IPM techniques, such as baiting, trapping, proofing, etc., proposed for rodent and waterbug pest control.

The survey and monitoring exterminator shall keep a record of all rodent and waterbug infestation surveys s/he has conducted. The Contractor shall be required to submit a copy of all survey and monitoring reports to the Engineer each week, prior to payment.

**(C) RODENT AND WATERBUG CONTROL WORK**

The baiting exterminator shall maintain records of all locations baited along with the type and quantity of rodenticide and insecticide bait used. These records will be kept by the City Inspector. A weekly report shall be prepared, signed and certified by the approved licensed exterminator, and such reports shall be submitted to the Engineer each week, prior to payment.

**7.88.7. NONCONFORMANCE.** If the Contractor fails to perform as directed to control the rodent and/or waterbug population at any location within the project limits for a period of more than one week, the Engineer will correct the adverse conditions by any means he deems appropriate, including but not limited to, the use of "outside services" and shall deduct the cost of the corrective work from any monies due to the Contractor. The deducted cost of this work shall be in addition to the non-payment for rodent and waterbug pest control.

**7.88.8. MEASUREMENT.**

**(A) RODENT INFESTATION SURVEY AND MONITORING**

The quantity to be measured for payment under Item No. 7.88 AA, RODENT INFESTATION SURVEY AND MONITORING, shall be a Lump Sum measurement.

**(B) RODENT BAIT STATIONS**

The quantity to be measured for payment under Item No. 7.88 AB, RODENT BAIT STATIONS, shall be the number of tamper-proof rodent bait station boxes and/or live traps satisfactorily installed or reinstalled after inspection within the construction corridor, as approved by the Engineer. However, the initial baiting, and subsequent rebaiting as may be required, of any bait station will be paid for under Item 7.88 AC.

**(C) BAITING OF RODENT BAIT STATIONS**

The quantity to be measured for payment under Item No. 7.88 AC, BAITING OF RODENT BAIT STATIONS, shall be the number of tamper-proof rodent bait station boxes, utility manholes, catch basins, or other locations approved by the Engineer, satisfactorily baited or rebaited to replenish consumed or decomposed bait within the construction corridor, as approved by the Engineer.

**(D) WATERBUG BAIT APPLICATION**

The quantity to be measured for payment under Item No. 7.88 AD, WATERBUG BAIT APPLICATIONS, shall be the number of blocks satisfactorily treated with insecticide bait within the construction corridor, as approved by the Engineer. A block shall be defined as the area of street, measured between property lines, from intersection to intersection. Each rebaiting of any block shall be considered as a new block for measurement purposes.

**7.88.9. PRICES TO COVER.**

**(A) RODENT INFESTATION SURVEY AND MONITORING**

Payment will be made at the lump sum price bid for RODENT INFESTATION SURVEY AND MONITORING which shall include the cost of furnishing all the labor, materials, plant, equipment (traps, etc.), insurance, and other incidentals required, including but not limited to providing all required maintenance of traffic equipment, to perform a rodent infestation survey of the project area and then monitor the site each week for rodent activity, all in accordance with the specifications and the directions of the Engineer.

Ten (10%) percent of the lump sum price bid will be paid when the initial survey of the project area has been completed and the written survey report has been submitted to the satisfaction of the Engineer. The remainder will be paid in proportion to the percentage of contract completion.

(B) RODENT BAIT STATIONS

The Contract price bid for RODENT BAIT STATIONS shall be a unit price per each tamper proof bait station box and/ or live trap installed or reinstalled after inspection and shall cover the cost of furnishing all labor, materials, plant, equipment (bait stations, etc.), insurance, and other incidentals, including but not limited to providing all required maintenance of traffic equipment, required to control the rodent population found within the project limits in accordance with the specifications and the directions of the Engineer.

In addition to the payment for Rodent Bait Stations installed or reinstalled under this Item 7.88 AB, the Contractor will also be paid for each baiting or rebaiting, when required, of each bait station, under Item No. 7.88 AC.

(C) BAITING OF RODENT BAIT STATIONS

The Contract price bid for BAITING OF RODENT BAIT STATIONS shall be a unit price per each bait station, utility manhole, catch basin or other location approved by the Engineer satisfactorily baited or rebaited, when required, and shall cover the cost of furnishing all labor, materials, plant, equipment (bait), insurance, and other incidentals, in accordance with the specifications and directions of the Engineer. Installation or resetting of the bait station will be paid for under Item 7.88 AB.

(D) WATERBUG BAIT APPLICATION

The Contract price bid for WATERBUG BAIT APPLICATION shall be a unit price per block treated by the exterminator and shall include the cost of furnishing all the labor, materials, plant, equipment (bait, etc.), insurance, and other incidentals, including but not limited to providing all required maintenance of traffic equipment, necessary to control the waterbug population found within the project limits for the duration of the contract in accordance with the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
7.88 AA	RODENT INFESTATION SURVEY AND MONITORING	L.S.
7.88 AB	RODENT BAIT STATIONS	EACH
7.88 AC	BAITING OF RODENT BAIT STATIONS	EACH
7.88 AD	WATERBUG BAIT APPLICATION	BLOCK

**[Added 05-24-2013]**

13. Refer to Page 366, **Subsection 6.40.2.(C)(c)(1)(m) Software Requirements**, as modified by Article 1 on page A1-2;  
Delete the text under **Subsection (m)**, in its entirety;  
Substitute the following revised text:

“(m) **Software Requirements:** Microsoft Windows 7 Professional SP1, 32 bit; Microsoft Office Professional 2010; Microsoft Project 2010; Adobe Acrobat reader; Anti-Virus software package with 2 year updates subscription; and, either Auto Cad LT or Microsoft Visio Standard Edition, as directed by the Engineer.”

**[Added 09-04-2013]**

14. Refer to Page 384, the end of **Section 6.44 - White and Yellow Thermoplastic ReflectORIZED Pavement Markings**;  
Insert new **SECTION 6.44 PO**, after **Section 6.44**, as contained on the following pages A1-2k through A1-2m.

**[Added 02-10-2014]**

15. Refer to Pages 393 and 394, **SECTION 6.52 - Uniformed Full-Time Flagperson**;  
Delete **Section 6.52** on pages 393 and 394, but do not delete examples on pages 395 and 396;  
Substitute **SECTION 6.52 CG**, as contained on the following pages A1-2n and A1-2o.



**SECTION 6.44 PO**  
**Lane Pavement Overlay**

**6.44PO.1. DESCRIPTION.** This section describes the furnishing and application of an approved Green Asphalt Pavement Color Scheme along designated bicycle lanes and Brick-Red Asphalt Pavement Color Scheme matching Quest's StreetBondCL Terracotta color along designated Select Bus Service (SBS) lanes, as indicated in the Contract Drawings or as directed by the Engineer.

**6.44PO.2. REFERENCES.**

- A. ASTM D-4541 Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Tester.
- B. ASTM D-4060 Test Method for Abrasion Resistance of Organic Coatings by the Taber Abrasion.
- C. ASTM D-522-93A Standard Test Method for Mandrel Bend Test of Attached Organic Coatings.
- D. ASTM G-155 QUV Accelerated Weathering Environment. Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials.
- E. ASTM D-2486 MEK rub test for chemical resistance.
- F. ASTM D-570 Standard Test Method for water absorption of plastics.
- G. ASTM E-303 British Pendulum test for friction.
- H. EPA 24 ASTM D3960-05 Volatile Organic Compounds.

**6.44PO.3. SUBMITTALS.**

- A. A copy of the current year accreditation certificate available from the Contractor or subcontractor who will be performing this work, or written verification from the coating supplier that the Contractor or subcontractor is qualified to perform this Work.
- B. Written and published specification for the application of the selected asphalt pavement coating.
- C. Confirmation of coating color.
- D. Proof of coating performance through a Certificate of Analysis or equivalent document as provided by the Contractor or the coating supplier.

**6.44PO.4. MATERIALS.**

The following table outlines minimum performance properties of a typical asphalt pavement coating.

Characteristic	Test Specification	Measured result
Durability: Taber Abrasion resistance	ASTM D-4060 7 day cure, H-10 wheel (wet test)	< 5.0 g/1000
Water sensitivity	ASTM D-570 Water absorption after 9 days: Remaining absorption after 1 hour of recovery:	< 10% < 1.0%
Color stability	ASTM G-155 QUV 2,000 hours (CIE units)	New York City Bike Lane Green $\Delta E < 1.5$
Color stability	ASTM G-155 QUV 2,000 hours (CIE units)	Brick color $\Delta E < 1.5$

Flexibility: Mandrel Bend	ASTM D-522-93A Flexibility as measured by Mandrel bend 0.5mm thick sample passes 10 mm at 21°C 0.5mm thick sample passes 125mm at -18°C	
Chemical resistance	ASTM D-2486 Modified MEK scrubs 16 dry mils, number of scrubs until 50% substrate exposed	>5000
Adhesion to Asphalt	ASTM D-4541	Substrate Failure
Friction Wet	ASTM E-303 British Pendulum Tester	>55
Environmental Sensitivity	EPA 24 ASTM D-3960-05 Volatile Organic Compounds	VOC < 150

These properties shall be evidenced by Certificates of Analysis produced by an independent qualified testing facility.

Green Bicycle and Red Bus Lane Pavement Overlays furnished by the following manufacturers, or approved equivalent, are acceptable for use in this contract:

Ennis Paint, Inc.  
1509 S. Kaufman Street  
Ennis, TX 75119

Integrated Pavement Concepts, Inc.  
102-17957 55th Avenue  
Surrey, BC Canada V3S 6C4

Crafco, Inc.  
420 N. Roosevelt Avenue  
Chandler, AZ 85226

**6.44PO.5. METHODS.** The asphalt pavement coating system shall be applied to the pavement in accordance with the manufacturer's specification. In its hardened state the color shall be as specified, and as approved by the Engineer. The material shall present a marking whose color and chemical resistance will not degrade under normal exposure to calcium chloride, sodium chloride or automotive oils and fuels. Color pigments used shall remain stable under exposure to ultra violet light. A minimum of four (4) layers of coating material shall be applied to the pavement surface.

The Contractor shall be required to use the proper equipment in the application of the asphalt pavement coating, as per the recommendation of the coating supplier, and as approved by the Engineer.

Asphalt pavement must be stable, well compacted and generally in excellent condition for the application of the asphalt pavement coating to be successful. The Engineer shall make the final determination as to the suitability of the existing asphalt pavement.

The asphalt pavement surface shall be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue.

The asphalt pavement coating shall only be applied in the correct environmental conditions as instructed by the coating supplier, and as approved by the Engineer.

Refer to the instructions provided by the coating supplier regarding when the painted lane may be opened to traffic. Wait time is typically a function of the dry rate of the coating, and climate conditions.

The Engineer may, at his discretion, require the Contractor to remove all extraneous marks on the pavement made by the agents or employees of the Contractor, or made by others due to improper control or protection of the work area by the Contractor, his agents or employees. Any installation which, in the opinion of the Engineer, is not acceptable, whether by reason of poor workmanship, poor appearance, poor performance, poor materials, improper width or improper alignment, shall be reworked by the Contractor at no cost to the City. The Contractor shall replace rejected installation as directed by the Engineer, within fifteen (15) days after receiving written notification of the rejection of such completed work.

**6.44PO.6. MEASUREMENT.** The quantities to be measured for payment shall be the number of square yards of Lane Pavement Overlay, of each color, placed as specified to the satisfaction of the Engineer.

**6.44PO.7. PRICES TO COVER.** The unit prices bid per square yard of Green Bicycle Lane Pavement Overlay and Red Bus Lane Pavement Overlay shall cover the cost of all labor, materials, plant, equipment, insurance, and necessary incidentals required including, but not limited to, testing, cleaning, preparation of surfaces, and application of the lane pavement overlay materials, all in accordance with the contract plans and specifications, and as directed by the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.44 POG	GREEN BICYCLE LANE PAVEMENT OVERLAY	S.Y.
6.44 POR	RED BUS LANE PAVEMENT OVERLAY	S.Y.

## **SECTION 6.52 CG**

### **Crossing Guard**

**6.52CG.1. INTENT.** This section describes the employment of full-time uniformed crossing guards to direct and detour traffic.

**6.52CG.2. DESCRIPTION.** The Contractor shall furnish an adequate number of competent crossing guards to control vehicular and pedestrian traffic when it is necessary to maintain alternating one-way traffic in one lane of a two-way roadway, and at all other locations where construction operations, construction vehicles and equipment, and temporary traffic patterns related to the construction operations require positive temporary traffic control for safe, efficient traffic operations.

**6.52CG.3. METHODS.** All crossing guards, whether paid for under this item or not, shall be proficient in speaking, writing and reading English and adequately trained in controlling vehicular and pedestrian traffic by a recognized training program such as that provided by the American Traffic Safety Services Association, the National Safety Council, unions or construction industry associations, or by an individual who holds a current certification as a flagger training instructor from such a program.

All crossing guards, whether paid for under this item or not, their apparel, hand-signaling devices, and procedures to be used by them shall be in compliance with the requirements of Chapter 6E. FLAGGER CONTROL, in the Federal "Manual on Uniform Traffic Control Devices for Streets and Highways" 2009 Edition, or later edition, and shall each be equipped with an active two-way radio.

Prior to the start of crossing guard operations, the Contractor shall provide to the Engineer a list of certified crossing guards to be used in the contract, identifying the source of crossing guard training for each individual. When requested by the Engineer, crossing guards shall demonstrate their competency in crossing guard procedures. Crossing guards not competent in controlling vehicular and pedestrian traffic procedures to the satisfaction of the Engineer shall be retrained or replaced at once. Each crossing guard paid under this item must be a full-time crossing guard. If any worker performing services under this item is also assigned the task of directing construction equipment (as per attached Example #2, worker acting as a flagperson 'A') or any laborer tasks, then such worker shall be deemed to be subject to the provisions of Labor Law §220 Prevailing Wage Schedule and will not be paid for under this Item.

**6.52CG.4. MEASUREMENT.** The quantity to be measured for payment shall be the number of person-hours of uniformed crossing guard service actually performed, as authorized by the Engineer. Laborers who are not full-time crossing guard will not be measured for payment as crossing guards under this or any other item. Each uniformed crossing guard shall be required to work a minimum of eight (8) hours a day and the Contractor will be given a minimum of twelve (12) hours advanced notice by the Engineer as to when to furnish a crossing guard.

**6.52CG.5. PRICE TO COVER.** The contract price per person-hour shall cover the cost of all labor, materials, equipment, and insurance necessary to employ a uniformed full-time crossing guard, and equip him/her with safety vests, hard hats, and signaling devices, including all other incidental costs necessary to control and detour traffic, as shown on the Contract Drawings, the Examples #1 and #2 on pages 395 and 396 (excluding worker acting as a flagperson "A" in Example #2), or as directed by the Engineer.

Payment for flagperson "A" in Example #2, shall be deemed to be included under other items of work, as appropriate.

Where there is no scheduled item for Crossing Guard, the cost of furnishing Crossing Guards as required shall be deemed included in the unit price bid for the Maintenance and Protection of Traffic item.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.52 CG	CROSSING GUARD	PERSON-HOUR (P/HR)

**[Added 02-24-2014]**

16. Refer to Pages 480 and 481, **Subsection 7.13.2.(B) MAINTENANCE OF STREETS**, 4<sup>th</sup> paragraph, beginning with the words "The Contractor shall maintain the traveled way . . . ;  
Delete the 4<sup>th</sup> paragraph, in its entirety;  
Substitute the following text:

"The Contractor shall maintain the traveled way in such a condition and conduct operations in such a manner that snow and ice may be readily removed by others as and when necessary, and in such a manner that proper drainage is provided for the melting of snow in the banks resulting from normal plowing. However, the Contractor will not be responsible for snow or ice removal on the pavement or traveled way opened for public usage, except within the limits of the work zone(s) which may include, but is not be limited to, stairways, promenades, esplanade areas, and sidewalk, including those fronting his office and the Engineer's field office all of which will be the responsibility of the Contractor."

## 3. NEW SECTIONS

**SECTION 4.02 I**  
**Asphalt Concrete Paving,**  
**Type I-1 and I-4**

**PART 1. GENERAL**4.02I.1.01. SUMMARY.

- A. This Section specifies requirements for plant mix macadam base course, bottom course, top course, tack coat and overlay of existing pavement with performance graded asphalt specified in 4.02I.2.02.B.
- B. Except as in 4.02I.1.01.C. below, recycled asphalt concrete pavement (consisting of reclaimed asphalt pavement blended with new materials) may be used to the maximum percentages specified in 4.02I.1.04.C.2.b.
- C. Recycled asphalt concrete shall not be used in mixes where modified asphalts are used.

4.02I.1.02. REFERENCES. The following is a listing of the publications referenced in this Section:

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO M320	Performance Graded Asphalt Binder
AASHTO R28	Practice for Accelerated Aging of Asphalt Binder Using a Pressurized Aging Vessel (PAV)
AASHTO T313	Test Method for Determining the Flexural Creep Stiffness of Asphalt Binder Using the Bending Beam Rheometer (BBR)
AASHTO T315	Test Method for Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR)
AASHTO T48	Flash and Fire Points by Cleveland Open Cup
AASHTO T240	Effect of Heat and Air on a Moving Film of Asphalt (Rolling Thin Film Oven Test)

American Society for Testing and Materials (ASTM)

ASTM C 88	Test Method For Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C 117	Test Method for Materials Finer than 75-micrometres (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C 127	Test Method for Specific Gravity and Absorption of Coarse Aggregate
ASTM C 128	Test Method for Specific Gravity and Absorption of Fine Aggregate
ASTM C 131	Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C 136	Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM C 566	Test Method for Total Moisture Content of Aggregate by Drying

ASTM C 1252	Test Methods for Uncompacted Void Content of Fine Aggregate (as Influenced By Particle Shape, Surface Texture, and Grading)
ASTM D 75	Practice for Sampling Aggregates
ASTM D 242	Mineral Filler for Bituminous Paving Mixtures
ASTM D 692	Coarse Aggregate for Bituminous Paving Mixtures
ASTM D 979	Practice for Sampling Bituminous Paving Mixtures
ASTM D 995	Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures
ASTM D 1073	Fine Aggregate for Bituminous Paving Mixtures
ASTM D 2041	Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
ASTM D 2172	Test Methods for Quantitative Extraction of Bitumen from Bituminous Paving Mixtures
ASTM D 2419	Test Method for Sand Equivalent Value of Soils and Fine Aggregate
ASTM D 2726	Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures
ASTM D 3203	Test Method for Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
ASTM D 3549	Test Method for Thickness or Height of Compacted Bituminous Paving Mixture Specimens
ASTM D 3666	Minimum Requirements for Agencies Testing and Inspecting Bituminous Paving Materials
ASTM D 4125	Test Methods for Asphalt Content of Bituminous Mixtures by the Nuclear Method
ASTM D 4318	Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D 4402	Method for Viscosity Determinations of Unfilled Asphalt Using the Brookfield Thermosel Apparatus
ASTM D 4791	Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
ASTM D 4867	Effect of Moisture on Asphalt Concrete Paving Mixtures
ASTM D 5444	Test Method for Mechanical Size Analysis of Extracted Aggregate
ASTM D 5821	Test Method for Determining the Percentage of Fractured Particles in Course Aggregate
ASTM D 5976	Type I Polymer Modified Asphalt Cement for Use in Pavement Construction
ASTM D 6084	Method for Elastic Recovery of Bituminous Materials by Ductilometer
ASTM D 6307	Test Method for Asphalt Content of Hot-Mix Asphalt by Ignition Method
ASTM D 6926	Test Method for Preparation of Bituminous Specimens Using Marshall Apparatus



- ASTM D 6927 Test Method for Marshall Stability and Flow of Bituminous Mixtures
- ASTM E 178 Practice for Dealing with Outlying Observations
- ASTM E 950 Test Method for Measuring the Longitudinal Profile of Traveled Surface with an Accelerometer Established Internal Profiling Reference
- ASTM E 1274 Test Method for Measuring Pavement Roughness Using a Profilograph

Asphalt Institute - Manual Series

- MS-2 Mix Design Methods for Asphalt Concrete, and Other Hot-Mix Types
- MS-20 Asphalt Hot-Mix Recycling

Dept. of Transportation - Federal Aviation Administration (FAA)

Eastern Region Laboratory Procedures Manual (ERLPM) March, 1994

Standards for Specifying Construction of Airports

- P-401 Plant Mix Bituminous Pavements

4.02I.1.03. DESIGN AND PERFORMANCE REQUIREMENTS.

A. Job Conditions

1. Apply tack coat only when the base surface is dry and the ambient temperature in shade has not been below 32 degrees F for 12 hours immediately prior to application, unless otherwise approved by the Engineer.
2. Do not place asphalt concrete upon a wet or frozen surface.
3. The minimum laydown temperature shall be not less than 310°F, when the base temperature is below 50°F and not less than 275°F when the base temperature is 50°F or greater. The Engineer will measure the temperature of the asphalt concrete in the truck at the paver.
4. The minimum allowable base temperature for a lift thickness is shown in the following table:

<u>Nominal Lift thickness (inches)</u>	<u>Minimum Allowable Base Temperature (Degrees F)</u>
2 or greater	32
1-1/2 or greater, but less than 2	40
Less than 1-1/2	50

5. If nominal lift thickness is two inches or greater and the base temperature is below 32°F, the Engineer may approve paving operations if the Contractor can demonstrate, prior to commencing with paving, that density and mat texture uniformity can be achieved. All other requirements apply.
6. In case of sudden rain, the Engineer may at his sole discretion permit placing of mixture already in transit from the plant, provided the surface to be paved is free from pools of water and laydown temperatures conform to the above tabulation. Such permission, however, shall not be interpreted as a waiver of any of the quality requirements.

## B. Asphalt Concrete Mix Design

1. Design asphalt concrete job mix formula based on the "Mix Design Table" specified in 4.02I.2.03.A and specimen compaction temperature specified in 4.02I.1.04.E.3
2. Design top and bottom courses to the following target values:

Design Properties	Bottom Course	Top Course	
	Mix 1 <sup>1</sup>	Mix 2	Mix 3
Marshall Stability, lbs. @ 75 Blows (ASTM D 6927)	2150 min.	2150 min.	2150 min.
Flow Value, 0.01 inch gradation (ASTM D 6927)	8 - 16	8 - 16	8 - 16
Air Voids, Percent <sup>2</sup> (ASTM D 3203)	3.8 - 5.2	2.8 - 4.2	2.8 - 4.2
Percent Voids Filled With Bitumen	65 - 75	67 - 77	67 - 77
Voids in the Mineral Aggregate (VMA) Minimum %	12	13	14

3. Plant mix macadam base course shall be a mixture designed within the gradation limits specified in 4.02I.2.03.A.
4. The design job mix formula shall indicate definite percentages passing for each sieve fraction of aggregate and the asphalt content.
5. Design new job mix formula for each asphalt plant used, whenever there is a change in material or when field conditions dictate a need for redesign.
6. When required by the Engineer, determine the tensile strength ratio of specimens of the composite paving mixture by procedures specified in ASTM D 4867. The value shall be not less than 80 percent.

## C. Plant Production Requirements

1. The asphalt concrete mixture or its components shall not be heated to a temperature outside the limits specified in 4.02I.3.02.A.
2. Plant production tolerance limits for Marshall Stability and flow value are as follows:

Marshall Stability at 75 blows (ASTM D6927) – 1800 lbs. min.<sup>3</sup>

Flow Value, 0.01 inch gradation (ASTM D 6927) - 8 to 16.<sup>3</sup>

<sup>1</sup> For asphalt concrete mixes with five percent of the aggregate or greater retained on the 1" sieve, the Engineer may require the use of six inch molds to increase the repeatability of Marshall test results. For six inch molds Marshall stability shall be 4800 lbs. minimum at 113 blows with 22.5 lb. hammer and 18 inch drop and the flow value shall be within the 12 to 24 range.

<sup>2</sup> Determine by comparing bulk specific gravity (ASTM D 2726) to maximum specific gravity (ASTM D 2041).

<sup>3</sup> If six inch molds are required as set forth in 4.02I.1.03.B.2 Marshall stability shall be 4000 lbs. minimum at 113 blows with 22.5 lb. hammer, 18 inch drop and the flow value shall be within the 12 to 24 range.

Acceptance shall be on a lot basis as set forth in 4.02I.1.04.E.3. The acceptance of each lot shall be based on the Percent of Material Within Tolerance Limits (PWL), as set forth in 4.02I.4.03 B.5. If the PWL of the lot for either parameter is less than 90 percent, the Contractor shall take corrective actions as set forth in 4.02I.3.03.C.

3. Modified Asphalt Performance Grade

Modified asphalt shall meet the performance grade requirements set forth in 2.02 B, when tested in accordance with 4.02I.1.04.E.12. When material fails to meet the requirements, make corrections in accordance with 4.02I.3.03.E.

4. Marshall Air Voids

Targets for Marshall air voids are 4.5 percent for mix 1, and 3.5 percent for mixes 2 and 3. Acceptance shall be on a lot basis as specified in 4.02I.1.04.E.3. The acceptance of each lot shall be based on the Percent of Material Within Tolerance Limits (PWL) as set forth in 4.02I.4.03.B.5. Adjustment to contract compensation shall be made if the PWL of the lot is less than 90 percent as set forth in 4.02I.4.03.C. If the PWL of the lot equals or exceeds 90 percent and the PWL for pavement mat and joint densities for the lot equals or exceeds 90 percent, the percentage adjustment to compensation may be between 100 and 106 as set forth in 4.02I.4.03.C.

The tolerance limits for Mix 1 are 3.0 and 6.0 percent, and for Mixes 2 and 3 are 2 and 5 percent.

D. In-Place Pavement Requirements

1. Surface Smoothness

- a. Final surface shall be smooth and free from roller marks and irregularities greater than 1/4 inch when tested with a 16-foot straight edge. Testing and acceptance shall be on a lot basis as set forth in 4.02I.1.04.E.10.b. Make corrections for deficiencies in surface smoothness as set forth in 4.02I.3.03.A.
- b. Each surface shall conform to the lines and grades shown on the Contract Drawings within a tolerance of plus or minus 0.045 foot, except where closer tolerance is required for proper functioning of appurtenant structures and drainage. Surface grade shall be tested in accordance with 4.02I.1.04.D.8.

2. Density

a. In-Place Mat Density

The target for in-place mat density shall be 98 percent or better. Acceptance shall be on a lot basis as set forth in 4.02I.1.04.E.5. The acceptance of each lot will be based on the Percent of Material Within Tolerance Limits (PWL), as set forth in 4.02I.4.03.B.5. Adjustment to contract compensation will be made based on the PWL of the lot as set forth in 4.02I.4.03.C. The lower tolerance limit for pavement mat density is 96.3 percent.

b. In-Place Joint Density

The target for in-place joint density shall be 97 percent or better. Acceptance will be on a lot basis as set forth in 4.02I.1.04.E.6. The acceptance of each lot will be based on the Percent of Material Within Tolerance Limits (PWL), as set forth in 4.02I.4.03.B.5. Adjustment to contract compensation will be made based on the PWL of the lot for surface course only as set forth in 4.02I.4.03.F. The lower tolerance limit for pavement joint density is 94.3 percent.

- c. Plant mix macadam base course shall have stone thoroughly interlocked, interstices reduced to a minimum and creeping of mixture no longer visible and with no further increase in density achievable by additional rolling.

3. Thickness

The Engineer will test for thickness only after all corrections for surface smoothness and final surface grade have been completed.

Pavement courses shall conform to thicknesses shown on the Contract Drawings within the following tolerances:

Course or Combination of Courses	Tolerance (in inches) Plus or Minus <sup>4</sup>
Thickness of top course	1/4
Total thickness of top course and bottom course	1/4
Total thickness of plant mix macadam base course, bottom course, and top course	1/4
Overlay thickness shall be as required to meet the final surface grade tolerance	--

4. Final Surface Grade

The final surface shall conform to the finished grades shown on the Contract Drawings within a target tolerance of plus or minus 0.04 foot, except where closer tolerance is required for proper functioning of appurtenant structures and drainage. The final surface abutting existing pavements shall smoothly transition to the existing surface grades. The Engineer will test the final surface, which he will accept or reject on a lot basis as set forth in 4.02I.1.04.E.11. For areas within the runway or taxiway edge markings, the Engineer will adjust contract compensation based on the percentage of grade measurements exceeding the target tolerance as set forth in 4.02I.4.03.D. For all areas when 15% or more of the grade measurements exceed the target grade tolerance or any individual measurement exceeds a 0.06 foot grade tolerance, make corrections for deficiencies in final surface grade as set forth in 4.02I.3.03.D.

5. In-Place Air Voids

Asphalt concrete shall have in-place mat air voids between 2.0 percent and 8.0 percent (9.0 percent for bottom course). The Engineer will test in-place air voids in accordance with 4.02I.1.04.E.7. When material fails to meet the requirements, correct in accordance with 4.02I.3.03.B.

4.02I.1.04. QUALITY CONTROL/ASSURANCE.

A. General

- 1. Establish and maintain effective quality control procedures which shall ensure that the materials and completed construction submitted for acceptance conform to Contract requirements whether manufactured or processed by the Contractor or procured from subcontractors or vendors.

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<sup>4</sup> All measurements for this purpose shall be to the nearest 1/8th inch.

2. Pre-Pavement Construction Meeting

- a. A pre-paving meeting will be conducted at the construction site by the Engineer a minimum of 20 days prior to the first day of laydown to discuss Contractor (suppliers) mixes, plant quality control, field quality control, tack coat, control strip, requirements for mat and joint densities, equipment (rollers, material transfer unit and paver), smoothness and grade control, segregation, workmanship, quality assurance testing, incentive and disincentive criteria, and any other pertinent specified requirements.

At no additional cost to the City, make arrangements for the project superintendent and a qualified Contractor's representative to be present at every segment of the paving operations, including but not limited to the following:

- (1) Asphalt Producer's Quality Control Manager
- (2) Contractor's representative for site quality control testing
- (3) Paving crew foreman
- (4) Smoothness testing personnel
- (5) Survey crew chief

- b. Record, type and distribute meeting minutes to all attendees of the meeting within 5 days of the date of the meeting.
- c. Do not schedule the pre-paving construction meeting until all submittals pertaining to the paving operation have been submitted and approved.

3. Provide the Engineer certification in writing stating that all of the testing equipment to be used is properly calibrated and will meet the specifications applicable for the specified test procedures. Upon Engineer's request, test samples to demonstrate an acceptable level of performance.
4. Perform quality control sampling, testing, and inspection during all phases of the work at rates sufficient to ensure that the work conforms to the contract requirements, and at minimum test frequencies required by 4.02I.1.04.D.

B. Quality Control Plan

1. Establish and maintain a Quality Control Plan (Plan) along with all the personnel, equipment, supplies and facilities necessary to obtain samples, perform and document tests and meet specification requirements. For Contracts requiring 5,000 tons of asphalt concrete or greater, the Plan is required. For Contracts requiring less than 5,000 tons of asphalt concrete, the Plan is optional.
2. Describe the Plan in a written document. Submit the written Plan to the Engineer for review and approval at least 28 calendar days prior to the start of paving operations.
3. In the absence of an approved Quality Control Plan the City will make no payments for materials which are subject to specific quality control.
4. The Plan may be carried out wholly or in part by the Contractor or by an independent organization but it shall in all cases remain the responsibility of the Contractor.
5. Plan Contents - The Plan shall be organized to address at least the following items:
  - a. Quality control organization chart.

- b. Area of responsibility and authority of each individual.
  - c. Names and qualifications of personnel as required by 4.02I.1.04.B.7.d.
  - d. A listing of any outside organizations such as testing laboratories that will be employed by the Contractor and a description of the services they will provide.
  - e. A testing plan which lists the tests required to be performed by the Contractor, the frequency of testing, sampling locations and the location of the testing facilities.
  - f. Procedures for ensuring that tests are taken in accordance with the testing plan, that they are documented and that proper corrective actions are taken when necessary.
  - g. Procedures for ensuring that testing equipment is available, that it complies with specified standards and that it has been calibrated against certified standards.
  - h. Procedures for verifying that tests are taken in accordance with the appropriate AASHTO and ASTM standards.
  - i. Procedures for daily submittal of test results to the Engineer.
  - j. An action plan detailing procedures to be used to correct unsatisfactory production processes and construction practices, when tests indicate materials are failing to meet specification for the following:
    - (1) Aggregate gradation
    - (2) Mat and joint density
    - (3) Marshall air voids
    - (4) Surface smoothness
    - (5) Grades
6. Plan Elements. The Plan shall address all elements which affect the quality of the pavement including but not limited to:
- a. Mix Design
  - b. Aggregate Gradation
  - c. Quality of Materials
  - d. Stockpile Management
  - e. Proportioning/temperature control of mixture components
  - f. Mixing and Transportation
  - g. Placing and Finishing
  - h. Joints
  - i. Compaction
  - j. Surface smoothness and grades

7. Quality Control Organization

- a. Implement the Quality Control Plan by the establishment of a separate Quality Control Organization. Develop and submit an organization chart to show all quality control personnel integrated with other management, production and construction functions and personnel.
- b. The organization chart shall identify all quality control staff required to implement all elements of the quality control program, including inspection and testing functions for different items of work.
- c. If an outside organization or independent testing laboratory is used for implementation of all or part of the Plan, the personnel assigned will be subject to the qualification requirements of this 4.02I.1.04B.7.d. The organization chart shall indicate which personnel are contractor employees and which are provided by an outside organization.
- d. The Quality Control Organization shall consist of at least the following personnel:

(1) Plan Administrator

The Plan Administrator shall be an employee of the Contractor. The Plan Administrator shall have prior quality control experience on a project of size and scope comparable to this Contract. In addition, the Plan Administrator shall meet one of the following requirements:

- (a.) A New York State Licensed Professional Engineer with one year of paving experience as approved by the Engineer.
- (b.) Engineer-in-Training with two years of airport paving experience as approved by the Engineer.
- (c.) An individual with three years of highway and/or airport paving experience as approved by the Engineer and with a Bachelor Degree in Civil Engineering, Civil Engineering Technology or Construction.
- (d.) Construction Materials Technician certified at Level III by the National Institute for Certification in Engineering Technologies (NICET).
- (e.) Highway Materials Technician certified at Level III by NICET.
- (f.) Highway Construction Technician certified at Level III by NICET.
- (g.) A NICET certified Engineering Technician in Civil Engineering Technology with 5 years of highway and/or airport paving experience as approved by the Engineer.

Certification at an equivalent level by a State or nationally recognized organization will be acceptable in lieu of NICET certification. The Plan Administrator shall have full authority to institute any and all actions necessary for the successful operation of the Plan to ensure compliance with the Specifications. The Plan Administrator shall report directly to a responsible officer in the Contractor's organization. The Administrator may supervise the Plan on more than one project provided that he can upon request be at the job site within one hour.

(2) Quality Control Technicians

Provide a sufficient number of Quality Control Technicians to adequately implement the Plan. Quality Control Technicians shall be engineers, engineering technicians or experienced craftsmen holding a current certificate issued by the New Jersey Society of

Asphalt Technologists, Inc. (NJSAT) or other Engineer-approved certifying agency or organization. (Information regarding the certification procedure can be obtained by contacting NJSAT.)

The Quality Control Technicians shall report directly to the Plan Administrator and shall perform the following functions:

- (a.) Inspection of all plant equipment used in proportioning and mixing to ensure proper calibration and operating conditions.
- (b.) Performance of quality control tests necessary or desirable to adjust and control mix proportioning in accordance with the job mix formula.
- (c.) Inspection of all equipment used in placing, finishing and compacting material to ensure proper operating condition.
- (d.) Inspection during construction to ensure that placement, joint construction and compaction is in conformance with the specifications and will produce a finished product that meets specification requirements.
- (e.) Performance of all quality control testing as required by 4.02I.1.04.D, including density monitoring.

8. Testing Laboratory.

The Plan must provide for a fully equipped asphalt laboratory located at the plant or job site. It shall be available for joint use by the Contractor for quality control testing and by the Engineer for acceptance testing and must have adequate equipment for the performance of the tests required by these specifications. The Engineer shall have priority in use of the equipment necessary for acceptance testing.

The effective working area of the laboratory shall be a minimum of 250 square feet with a ceiling height of not less than 7.5 feet. Lighting shall be adequate to illuminate all working areas. It shall be equipped with heating and air conditioning units to maintain a temperature of 70°F + 5°F.

In addition to the equipment required for testing, the laboratory shall be equipped with a paper copier and facsimile machine to be utilized by the Engineer.

Keep laboratory facilities clean and maintain all equipment in proper working condition. Allow the Engineer unrestricted access to inspect the Contractor's laboratory facility and to witness quality control activities. The Engineer will advise the Contractor in writing of any noted deficiencies concerning the laboratory facility, equipment, supplies or testing personnel and procedures. When in the Engineer's opinion deficiencies may adversely affect test results, immediately suspend delivery and placement of asphalt materials and do not resume until the deficiencies are satisfactorily corrected.

9. Noncompliance.

In cases where quality control activities do not comply with either the Contractor's Quality Control Program or the Contract provisions, or where the Contractor fails to properly operate and maintain an effective Quality Control Program, the Engineer may:

- a. Order the Contractor to replace ineffective or unqualified quality control personnel.
- b. Carry out the functions and operations of the Contractor's approved Quality Control Program. Costs incurred by the Engineer to operate the Quality Control Program or to otherwise remedy the Contractor's non-compliance with quality related provisions of the Contract shall be deducted from the total amount due the Contractor.



## C. Source of Aggregate and Sampling

## 1. Virgin Aggregate

- a. Select sources of virgin aggregates well in advance of the time the materials are required for the construction. When the aggregates are obtained from a previously approved source, submit random hot bin samples, if requested by the DDC's Director of Quality Assurance & Construction Safety, a minimum of 14 calendar days prior to the start of production and if from a source not previously approved, submit random hot bin samples a minimum 45 calendar days prior to the start of production. Sampling of the hot bin materials for job mix formulation will be observed by the Engineer and identical samples will be obtained for verification of the job mix formulation by the Department's Quality Assurance Laboratory or their agents. The Engineer may require the proposed mix formulation to be batched at the asphalt plant and tested in the presence of the Engineer.
- b. Where previously used or concurrent job mix formulations are to be used, the taking of hot bin samples may be waived by the Engineer.

## 2. Reclaimed Asphalt Pavement

- a. Where reclaimed asphalt pavement material is permitted, it shall have 100 percent passing 1/2 inch sieve and shall be a mixture of only coarse aggregate, fine aggregate, and asphalt cement, free of solvents or other contaminating substances. The fine aggregate contained in the reclaimed asphalt pavement shall have a plasticity index of not greater than 4 when tested in accordance with ASTM D 4318.

Maintain stockpiles of reclaimed asphalt pavement in a manner to prevent contamination with other aggregates and keep covered in order to maintain a low moisture content of the reclaimed asphalt pavement.

- b. Unless otherwise shown on the Contract Drawings, a minimum of 10% to a maximum of 25% recycled asphalt pavement will be required in all asphalt mixes, other than the surface course. Asphalt mixes that contain recycled asphalt pavement will have a tolerance range for plant voids of 1.5-5.5%. Fifty percent of the asphalt cement content contained in the recycled asphalt pavement will be deducted from the optimum asphalt content for an asphalt mix design.
  - c. Contractor's reclaimed asphalt pavement will be considered for use provided that the Engineer is notified of the intended use and that he approves the reclaimed asphalt pavement. Take at least six representative samples, each at least 7 pounds, from each stockpile. Stockpiles shall not exceed 3000 tons. Sample in accordance with ASTM D 75. Sampling will be observed by the Engineer. Take duplicate samples and submit them with mix design for verification. Test samples in accordance with ASTM D 2172 to determine asphalt cement content; test re-covered aggregate in accordance with ASTM C 136 for gradation.
  - d. Once a reclaimed asphalt pavement stockpile has been approved for use, the stockpile shall be dedicated to the Contract and no reclaimed asphalt pavement may be added to the stockpile. If there is an insufficient amount of reclaimed asphalt pavement in the stockpile to complete the work, a new separate stockpile may be made and shall be tested for acceptance as aforementioned.
3. Locate stockpiles of reclaimed asphalt pavement and of new aggregate so as to prevent intermingling.
  4. When more than one asphalt plant is to be used to supply asphalt concrete to the construction site, each asphalt plant shall use a similar job mix formula, as approved by the Engineer.
  5. Locations and timing of random sampling shall be determined in accordance with Section 6 of FAA ERLPM.

## D. Contractor's Quality Control Tests

1. Perform all quality control tests necessary to control the production and construction processes. The testing program shall include, but not necessarily be limited to, tests for the control of asphalt content, aggregate gradation, Marshall properties and temperatures. Obtain samples at the direction of the Engineer for the purpose of quality control testing. Random sampling procedures specified in Section 6 of FAA ERLPM shall be used for determining the selection of samples as follows:

- a. Take four samples of freshly mixed material per each lot (one sample from each subplot) for top, bottom and base courses. Take samples in accordance with ASTM D 979 from material at the mixing plant.

A lot will be defined as one day's production for each mix. Production rates for each mix will be obtained by the Engineer from the asphalt plant at the start of each day's production. A subplot will be defined as a quarter of a lot based on the initial production forecast for the mix. Maximum lot size will be 2000 tons. If a day's production is forecast over 2000 tons, the forecast quantity shall be divided into two or more equal lots. Should actual production be greater than the initial forecast of production for a given mix, the additional production will be divided into the same subplot sizes as initially calculated. If one or two additional sublots are produced they will be added to that day's lot with n=5 or 6 for sublots. If three or more additional sublots are produced in a day, an additional lot will be established for that particular day.

If actual production is less than the initial forecast for a given mix but sufficient material was produced to constitute three sublots, a lot will be formed with three sublots (n=3). Should actual production constitute only one or two sublots, the sublots will be added either to the previous lot or the next production lot, whichever is closer in time. Each subplot shall contain a minimum of 75 tons of material.

Where more than one plant is simultaneously producing material for the job, the lot sizes shall apply separately for each plant.

- b. Test samples to determine asphalt content in accordance with ASTM D 2172, ASTM D 4125 or ASTM D 6307. Test recovered aggregate to determine gradation in accordance with ASTM D 5444. In addition, when automated recording plants are used, submit printouts of asphalt content to the Engineer.
- c. Prepare three plugs from each sample and test them in accordance with ASTM D 6926 using automatic compaction procedures. Marshall air voids shall be determined in accordance with ASTM D 3203. For each subplot, the maximum theoretical density shall be determined in accordance with ASTM D 2041.

Voids filled with asphalt, for each plant sample, shall be computed as follows:

- (1) Determine asphalt content in percentage by volume (I) using:

$$I = \frac{P_b \times G_{mb}}{G_b}$$

Where:

- I = Percentage by volume of asphalt
- P<sub>b</sub> = Percentage by weight of asphalt
- G<sub>mb</sub> = Bulk specific gravity of compacted mixture
- G<sub>b</sub> = Specific gravity of asphalt

- (2) Determine percent voids filled with asphalt (VF) as follows:

$$VF = \frac{I \times 100}{I + P_a}$$

Where:

VF = Percent voids filled with asphalt  
 I = Percentage by volume of asphalt  
 P<sub>a</sub> = Percent Marshall air voids

Voids in the Mineral Aggregate (VMA) will be estimated by adding the asphalt content in percentage by volume to the percent of air voids. Bulk specific gravities will be used to calculate VMA.

- d. Take hot bin or feeder belt composite samples of top, bottom and base course aggregates for mixes at least twice daily and check gradation in accordance with ASTM C 136, including washing material passing No. 8 sieve in accordance with ASTM C 117.
- e. At least six times daily, check and record temperatures at necessary locations to determine the temperatures of:
- (1) aggregates and asphalt immediately before introduction to the pugmill or dryer drum;
  - (2) the mixture immediately after discharge from the pugmill or dryer drum;
  - (3) the mixture at the spreader on the construction site.
- f. Reclaimed Asphalt Pavement
- (1) Where reclaimed asphalt pavement is being used as a substitute for some of the virgin aggregate, take a sample of freshly mixed recycled asphalt concrete in accordance with ASTM D 979 and determine the moisture content at least twice daily. Moisture determinations shall be based on the weight loss by heating an approximately 4 pound sample of the freshly mixed materials for one hour in an oven at 280 plus or minus 5 degrees F. The moisture content of the freshly mixed recycled asphalt concrete shall not exceed 0.5 percent.
  - (2) Take a sample of reclaimed asphalt pavement from the approved stockpile at least once daily and test in accordance with ASTM D 2172 to determine asphalt content and gradation in accordance with ASTM D 5444. The resulting asphalt content and aggregate gradation shall be similar to the average test results of the reclaimed asphalt pavement submitted with Design Job Mix Formula. If there is a variation of plus or minus 1.0 percent in the asphalt content or plus or minus 10 percent in aggregate gradation on any sieve, a second sample shall be taken and tested in the same manner as the first sample. If the results are similar to that of the first sample, appropriate measures shall be taken to adjust the mixture to compensate for the variation in the reclaimed asphalt pavement.
- g. Moisture Content of Aggregate
- For drum plants the moisture content of aggregate used for production shall be determined a minimum of once per lot in accordance with ASTM C 566.
- h. Moisture Content of Mixture
- The moisture content of the mixture shall be determined once per lot in accordance with the procedure given in Section 4.02I.1.04.D.1.f. (1). The moisture content in the freshly mixed

asphalt concrete shall not exceed 0.5%. If the moisture content is 0.5% or greater, stop production and adjust plant operation.

- i. Perform additional testing as required to ensure that mixtures produced meet the requirements of this Section.

## 2. Control Charts

Maintain linear control charts both for individual measurements and range (i.e., difference between highest and lowest measurements) for aggregate gradation and asphalt content. When test results exceed certain limiting values, take action to bring the asphalt concrete production process under tighter control. The Action Limit is the limiting value at which corrective actions shall be made while production may continue. The Suspension Limit is the limiting value at which production must be suspended while corrections are made. Production shall not resume until Contractor's corrections are approved by the Engineer.

Post control charts in a location satisfactory to the Engineer and keep charts current. As a minimum, the control charts shall identify the project number, the contract item number, the test number, each test parameter, the Action and Suspension Limits applicable to each test parameter and the Contractor's test results. Use the control charts as part of a process control system for identifying potential problems and assignable causes before they occur. If in the Engineer's opinion the Contractor's projected data during production indicates a problem and the Contractor is not taking satisfactory corrective action, the Engineer may suspend production or acceptance of the material.

### a. Individual Measurements

Establish control charts for individual measurements to maintain process control within tolerance for aggregate gradation and asphalt content. The control charts shall use the job mix formula target values as indicators of central tendency for the following test parameters with associated Action and Suspension Limits:

CONTROL CHART LIMITS FOR INDIVIDUAL MEASUREMENTS		
Sieve	Action Limit	Suspension Limit
1"	+6%	+9%
3/4"	+6%	+9%
1/2"	+6%	+9%
3/8"	+6%	+9%
No. 4	+6%	+9%
No. 8	+5%	+7.5%
No. 16	+5%	+7.5%
No. 30	+3%	+4.5%
No. 50	+3%	+4.5%
No. 100	+2%	+3%
No. 200	+2%	+3%
Asphalt content	0.45%	+0.7%

b. Range.

Establish control charts for range to control process variability for the test parameters and Suspension Limits listed below. Compute the range for each lot as the difference between the two test results for each control parameter. The Suspension Limits specified below are based on a sample size of  $n = 2$ . Should the Contractor elect to perform more than two tests per lot, the Suspension Limits shall be adjusted by multiplying the Suspension Limit by 1.18 for  $n = 3$  and by 1.27 for  $n = 4$ .

CONTROL CHART LIMITS BASED ON RANGE	
(Based on $n = 2$ )	
Sieve	Suspension Limit
1"	11%
3/4"	11%
1/2"	11%
3/8"	11%
No. 4	11%
No. 8	9%
No. 16	9%
No. 30	6%
No. 50	6%
No. 100	3.5%
No. 200	3.5%
Asphalt Content	0.8%

c. Corrective Action.

The Quality Control Plan shall provide for appropriate action to be taken when the asphalt concrete production process is out of control. The Plan shall contain sets of rules to gauge when a process is out of control and shall describe Contractor's actions to bring the process into control. A process shall be deemed out of control and production stopped and corrective action taken, if:

- (1) One point falls outside the Suspension Limit line for individual measurements or range; or,
  - (2) Two consecutive points fall outside the Action Limit line for individual measurements.
3. Document quality control efforts using copies of the sample forms contained in the FAA ERLPM, Appendix C, in its entirety, or other forms obtained from the Engineer. Make test results available to the Engineer daily.
  4. If a storage silo is used (except where excluded in 4.02I.3.02.A.8):
    - a. Check the silo to see that it can properly store the asphalt concrete for the time involved.
    - b. Take samples of asphalt concrete as it is unloaded from the silo and check them for conformance to this Section. If the asphalt concrete appears segregated, stop using the storage silo until it is demonstrated to the Engineer that the condition has been corrected.

- c. Silo storage time shall be governed by previous State DOT approval, not to exceed 24 hours.
5. Unless otherwise noted on the Contract Drawings, and subject to the approval of the Engineer, select an area to be called a Control Strip from the first day's production of each mix. Each Control Strip shall be a minimum of 100 feet long and two spreader widths wide and shall be constructed to meet the requirements of this Section and in the same manner as the remainder of the course it represents. Take three random samples at the plant and test them for stability, flow and air voids in accordance with ASTM D 6927 and 4.02I.1.04.D.1.c. Take three randomly selected cores from the pavement mat and three along the longitudinal pavement joint and test them to determine density in accordance with 4.02I.1.04.E.5 and E.6. Use the same means and methods which will be used to construct longitudinal and transverse joints as referred to in 4.02I.1.04.B.6.h and 4.02I.3.02.F.1 and 2.

The purpose of the Control Strip is to demonstrate that the completed pavement may be constructed using the proposed equipment and methods of operation and to obtain all quality requirements prior to the start of full production. Construct a new Control Strip whenever a change is made in equipment, methods of operation or type or source of material or whenever there is a change in the job mix formula. The Control Strip may become part of the completed pavement if it meets the requirements of this Section.

6. Include, as part of the quality control plan, the use of a nuclear density device to aid in meeting the specified target densities. Calibrate the nuclear density device with the control strip cores. If other than a nuclear density device is used it shall be calibrated with an additional set of pavement cores.
7. Surface Smoothness

Each lot shall be evaluated with a 16-foot straightedge provided by the Contractor and subject to approval by the Engineer. The lot size shall be 2,000 square yards. Measurements will be made perpendicular and parallel to the centerline of the paving strips at distances not to exceed 25 feet. When more than 15 percent of all measurements within a lot exceed the specified tolerance in 4.02I.1.03.D.1.b, the Contractor shall correct the deficiency in accordance with 4.02I.3.03.A. Written measurement results shall be submitted to the Engineer prior to payment. The Engineer shall perform the survey jointly with the Contractor.

8. Final Surface Grade.

The finished grade of each lot will be determined by running levels at intervals of 50 feet or less longitudinally and 25 feet or less transversely to determine the elevation of the completed pavement. The lot size shall be 2,000 square yards. When more than 15 percent of all the measurements within a lot are outside the specified tolerance, the Contractor shall correct the deficiency in accordance with 4.02I.3.03.A. Survey results shall be submitted to the Engineer prior to payment. The Engineer shall perform the survey jointly with the Contractor.

#### E. Engineer's Sampling and Testing

1. Produce asphalt concrete in approved automated plants equipped with interlocks and printouts meeting the requirements of ASTM D 995 and subject to the following:
- a. Plant interlocks and printouts shall be in operation during production and two (2) copies of all printouts shall be furnished to the Engineer daily.
  - b. Scales shall be certified by an approved agency at least every 180 calendar days and copies of certifications shall be submitted to the Engineer upon request.
2. Provide labor and equipment to take samples, except cores, to check thickness and density.
3. The Engineer will perform acceptance testing for Marshall air voids, stability and flow. Samples will be taken from trucks at the plant, in accordance with FAA ERLPM, Section 6. These samples will be from the sublots that were sampled in 4.02I.1.04.D.1.a. The Engineer will prepare three plugs from

each sample and test them in accordance with ASTM D 6926 and ASTM D 6927 using automatic compaction procedures. The specimen compaction temperatures will be within the following range as measured within 1/2 inch from the outside edge:

<u>Performance Grade</u>	<u>Temperature Degrees F°</u>
PG 64-22, PG 70-22	275 – 295
PG 76-22	300 – 320
PG 82-22	305 - 325

Air voids, voids in mineral aggregate and voids filled with asphalt will be determined in accordance with ASTM D 3203 and 4.02I.1.04.D.1.c. The average test values obtained from each lot of top and bottom courses must conform to the parameters specified in 4.02I.1.03.C.

In lieu of sampling and testing in the field, the Engineer may sample and perform acceptance testing at the plant. The Contractor will be advised at the start of Work where the Engineer will sample and test.

4. For thickness determination, exclusive of overlay pavement, the Engineer will divide each course into area lots consisting of the area covered by the lot sampled as specified in 4.02I.1.04.D.1.a and he will further subdivide each lot into four equal sublots. The Engineer will take one 4-inch diameter core randomly in each subplot to check thickness of the top and bottom courses. One fourth of all such cores will continue through the plant mix macadam base course. Thickness will be determined in accordance with ASTM D 3549.
5. Mat Density
  - a. The Engineer will determine the in-place density of the control strip and subsequently placed pavements by taking cores at random locations as specified below.
  - b. Cores taken from the top and bottom course in place and any other specimens taken at the jobsite, sampled in accordance with the random sampling procedures as specified in 4.02I.1.04.D.1, will be tested by the Engineer for bulk specific gravity in accordance with ASTM D 2726. Cores shall not be taken closer than one foot from a transverse or longitudinal joint for pavement mat density determination. The in-place density of the pavement course will be the ratio of the in-place specific gravity to the laboratory Marshall bulk specific gravity expressed as a percentage.
  - c. Cores taken from courses containing more than 10 percent air voids will be tested by the Engineer for density (Bulk Specific Gravity) according to the following equation:

$$\text{S.G.} = \frac{W}{12.87 d^2 h}$$

Where:

- W = Weight, Dry Specimen (grams)  
 d = Measured Diameter<sup>5</sup> (inches)  
 h = Measured Height<sup>5</sup> (inches)

Laboratory bulk specific gravity and computation of in-place density will be as specified in 4.02I.1.04.E.5.b above.

<sup>5</sup> Average of 5 equally spaced measurements around the core.

- d. The average in-place density determination, taken from the area covered by the lot sampled as specified in 4.02I.1.04.D.1.a, will be determined by the Engineer by summing up the subplot in-place density readings obtained from a lot and dividing the total by the number of sublots. The in-place density from each subplot will be obtained using a core reading taken from each subplot on a random basis and dividing by the Marshall bulk density (ASTM D 6926 and ASTM D 2726) taken for that subplot. Any core with a thickness less than twice the largest sieve size to retain more than 5 percent of any aggregate will be discarded and additional random cores will be taken as required to ensure representative readings.
- e. The Engineer will repeat the procedure specified in a. through d. above whenever a change is made in the type or source of material or whenever a new job mix formula is approved for material from the same source.

#### 6. Joint Density

The Engineer will take one core from each subplot of all surface courses or from the underlying lifts as defined in 4.02I.1.04.D.1.a and will test it in accordance with 4.02I.1.04.E.5. For joint cores the lowest Marshall bulk density for sublots forming the joint will be used to compute the in-place density. The Engineer will take cores from directly over the longitudinal joint in line with the location of the random cores taken under 4.02I.1.04.E.5.b. When a paving lane has two longitudinal joints, both joints will be cored. The in-place joint density will be determined separately for each joint, and the joint producing the lowest in-place density will be used to determine payment. Based on site and placement conditions the Engineer may elect to core only one joint.

#### 7. In-place Air Voids

The Engineer will calculate the in-place mat air voids for each subplot in accordance with ASTM D3203, by comparing the bulk specific gravity (ASTM D 2726) of the cores taken as specified in 4.02I.1.04.E.5.b to the maximum laboratory specific gravity (ASTM D 2041).

8. The Contractor shall patch all areas where samples are taken with an approved asphalt concrete or Portland cement concrete properly tamped to fill all voids and struck off flush with the surface within 24 hours after sampling.
9. The Engineer may at any time, notwithstanding previous plant approval, reject and require the Contractor to dispose of any batch of asphalt concrete mixture which is rendered unfit for use due to contamination, segregation or incomplete coating of aggregate. Such rejection may be based on only visual inspection. In the event of such rejection, the Contractor may take a representative sample of the rejected material in the presence of the Engineer and, if the Contractor can demonstrate in the laboratory, in the presence of and to the satisfaction of the Engineer, that such material was erroneously rejected, the Contractor will be compensated for the material.

#### 10. Surface Smoothness

- (a) A lot is defined as 2,000 SY of final paved surface. Where paving areas are not equally divisible into 2,000 square yard lots, odd sized lots between 1,000 and 3,000 square yards will be used. The odd sized lots will be used for the area remaining after the paved area is divided into 2,000 square yard lots.
- (b) Each lot will be evaluated by the Engineer with a 16-foot rolling straightedge provide by the Contractor and subject to approval by the Engineer. Measurements will be made perpendicular to the centerline of the paving lanes at distances not to exceed 25 feet; longitudinal measurements will be made along the centerline of the paving lane. Designed breaks in grade shown on the Contract Drawings will not be included in the measurements. When more that 15 percent of all measurements within a lot exceed the tolerance specified in 4.02I.1.03.D.1.b, the Contractor shall correct the deficiency in accordance with 4.02I.3.03.A.



11. Final Surface Grade

The grades of the final surface of each lot will be measured at the finished grade locations shown on the Contract Drawings. Where paving lanes are 20 feet or greater in width, an additional line of grades, located at the center of the paving lane and spaced at 25 feet longitudinally, will be measured. A lot is defined as 2,000 square yards of final pavement surface. The transverse limit of the lot will be the transverse limit of paving. Where paving areas are not equally divisible into 2,000 square yard lots, odd sized lots between 1,000 and 3,000 square yards will be used. The odd sized lots will be used for the area remaining after the paved area is divided into 2,000 square yard lots. The Contractor shall perform the survey jointly with the Engineer.

- 12. The Engineer will perform acceptance testing of modified asphalt to determine if it meets the performance grade requirements set forth in 4.02I.2.02.B. Samples will be collected at the asphalt plant for each lot of asphalt concrete produced, as specified in 4.02I.1.04.D1.a. The Engineer will sample the liquid asphalt from the plant storage tanks which must be equipped with a sample valve.
- 13. The Engineer will measure the temperature of each load of asphalt concrete. Any load of asphalt concrete with temperature exceeding 350°F will be rejected.
- 14. Where there is a discrepancy between the Contractor's test results and the Engineer's, the Engineer's results shall govern.

4.02I.1.05. SUBMITTALS

- A. Submit to the Engineer, for approval, all Job Mix Formulae with Checklist (specified in 4.02I.2.03.B) for each type of asphalt concrete mix, from each plant and each type of asphalt concrete mix, from each plant and each new source of material at least 10 days prior to the start of production.
- B. Submit certified test data, location of each type aggregate to be used and quantities to be obtained from each location and make arrangements for the Director of NYCDDC's Quality Assurance Unit to obtain samples from each such location for checking against the samples submitted. Take all samples in accordance with requirements of ASTM D 75 and ASTM D 242.
- C. If requested, submit to the Director of NYCDDC's Quality Assurance Unit samples of each type aggregate to be used and from each source with proper identification as to source, type of aggregate and Contract number. Submit in clean, sturdy bags and in the following amounts for each sample when requested:

Reclaimed Asphalt Pavement (when used)	50 lbs.
Coarse Aggregate	25 lbs.
Fine Aggregate	25 lbs.
Mineral Filler	5 lbs.

- D. Submit to the Director of NYCDDC's Quality Assurance Unit, for approval, four one-quart samples of the asphalt cement and two one-quart samples of the liquid latex (if applicable) proposed for use together with the following data:
  - 1. The name of the supplier(s).
  - 2. An analysis of such asphalts by the supplier, certifying that the results of tests comply with the requirements of AASHTO M320 and this Section.

A certificate, from the liquid latex supplier, identifying and stating the physical properties of the latex components. Percentages of solids and water shall be included.

Resubmit the above data each time an asphalt or liquid latex from a different source is proposed.

- E. Where asphalt cement is to be combined at the plant with an asphalt modifier, submit the asphalt cement in accordance with 4.02I.1.05.D above and submit a 10-pound sample of the asphalt modifier together with a certificate from the modifier supplier identifying and stating the physical properties of the modifier.
- F. Submit quality control plan and control charts to the Director of NYCDDC's Quality Assurance Unit, for approval, at least 5 days prior to the start of production.
- G. Submit to Director of NYCDDC's Quality Assurance Unit, the name of the supplier and an analysis of the asphalt tack coat to be used on the project.
- H. Submit smoothness measurements and surface grade survey results to the Engineer prior to application for payment.

## **PART 2. PRODUCTS**

### **4.02I.2.01. MANUFACTURERS**

- A. Manufacturer of asphalt cement shall be approved by the New York State Department (NYSDOT) of Transportation.
- B. Modified Asphalt shall be one of the following. No Substitution is permitted.
  - 1. Stylink - Koch Materials; Gloucester, NJ
  - 2. Vestoplast "S" Modifier - Creanova, Inc.; Sommerset, NJ
  - 3. Kraton - Shell Chemical Co.; Houston, TX
  - 4. Citgoflex SP - Citgo Asphalt Refining Co.; Paulsboro, NJ
  - 5. Polykote - Suite - Kote Corp.; Cortland, NY
  - 6. Elvaloy RET - E.I. DuPont Co.; Wilmington, DE

### **4.02I.2.02. MATERIALS**

- A. Aggregates
  - 1. If the tensile strength ratio of the specimens of composite mixture is less than 80 percent, as specified in 4.02I.1.03.B.6, the aggregates will be rejected unless the Contractor treats the asphalt with an approved anti-stripping agent. The amount of anti-stripping agent added to the asphalt shall be sufficient to produce a tensile strength ratio of not less than 80 percent.
  - 2. Coarse Aggregate - Material retained on the No. 8 sieve.
    - a. Except for use in the top lift of the top course within the roadway pavement edge markings as shown on the Contract Drawings, coarse aggregate shall conform to ASTM D 692, except as follows: use broken stone or crushed gravel having not less than 75 percent by weight of pieces with two or more fractured faces and 85 percent by weight having at least one fractured face (ASTM D 5821), with a maximum of 8 percent of flat or elongated pieces (ASTM D 4791), with a maximum percentage of wear (ASTM C 131) of 40 percent and with a magnesium sulfate loss (ASTM C 88) of not more than 12 percent for a five-cycle test period.

- b. For the top lift of the top course within the roadway pavement edge markings as shown on the Contract Drawings, coarse aggregate shall conform to ASTM D 692 except as follows: use broken stone which shall be trap rock or gneiss of uniform quality obtained from a source approved by the New York State Department of Transportation (NYSDOT) for use in asphalt concrete. The aggregate shall have not less than 75 percent by weight of pieces with two or more fractured faces, with a maximum of 8 percent of flat or elongated pieces (ASTM D 4791), with a maximum percentage of wear (ASTM C 131) of 30 percent and with a magnesium sulfate loss (ASTM C 88) of not more than 12 percent for a five-cycle test period.
  - c. A flat particle is one having a ratio of width to thickness greater than five; an elongated particle is one having a ratio of length to width greater than five.
3. Fine Aggregate - Material passing the No. 8 sieve and retained on the No. 200 sieve.

Fine aggregate shall be a blend of washed, textured sand and stone screenings conforming to ASTM D 1073, with a maximum percentage of wear (ASTM C 131) of 30 percent and with a magnesium sulfate loss (ASTM C 88) of not more than 18 percent for a five-cycle test period, a plasticity index of not more than 6 and a liquid limit of not more than 25 when tested in accordance with ASTM D 4318. When tested in accordance with ASTM D 2419, the sand equivalent value shall be 35 or greater.

Textured sand shall be defined as a sand which when tested in accordance with ASTM C1252, Method A, results in uncompacted voids greater than 45.0 percent. Sand that has a low texture value and slag shall not be used.

4. Mineral filler shall conform to ASTM D 242 and have a ratio to asphalt by weight not exceeding 1.2.

**B. Asphalt**

Asphalt shall be one of the following conforming to the requirements of AASHTO M320 and as specified within table entitled "Requirements for Performance Graded Asphalts" for the Performance Grade (PG) as shown on the Contract Drawings:

1. Asphalt Cement

Asphalt cement shall meet the requirements for PG 64-22, unless otherwise shown on Contract Drawings.

2. Modified Asphalt

Modified Asphalt shall be one of the following. No Substitution is permitted.

- a. "Stylink", "Kraton (SEBS)", "Polykoto", "Elvaloy RET", or "Citgoflex SP" meeting the requirements for PG 76-22 as shown on the Contract Drawings.
- b. Asphalt cement modified with "Vestoplast 'S'", may be used where PG 76-22 is specified and subject to the following:
  - (1) Add Vestoplast "S" to the asphalt concrete mixture at a rate of 7 percent by weight of asphalt cement, by substitution.
  - (2) Arrange for the manufacturer to provide a representative at the plant at all times during production to verify that the proper quantity of Vestoplast "S" was added to the asphalt concrete.

## C. Tack Coat

Unless otherwise shown on Contract Drawings, asphalt cement shall be as specified in 4.02I.2.02.B.1 above.

## D. Resultant Asphalt Cement

Resultant asphalt cement shall be a mixture of new asphalt cement as specified in 4.02I.2.02.B.1 above, asphalt cement extracted from the reclaimed asphalt pavement and recycling agents if required.

## REQUIREMENTS FOR PERFORMANCE GRADED ASPHALTS

<u>PERFORMANCE GRADE (PG)</u>	<u>64-22</u>	<u>70-22</u>	<u>76-22</u>	<u>82-22</u>
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## These Tests Performed on Original Binder:

Flash Point Temperature (AASHTO T48): Minimum, Degrees Celsius.	230	230	230	230
Dynamic Shear (AASHTO T315):	64	70	76	82
G*/SIN DELTA, Minimum, 1.00 kPa, Test Temperature At 10 Rad/s, Degrees Celsius.				
Rotational Viscosity (ASTM D 4402): Maximum, 3 Pa-s, Test Temperature, Degrees Celsius.	135	135	135	135
Separation Test – R&B (ASTM D 5976): Percent Difference Maximum Degree Celsius.	--	--	4.5	4.5

## These Tests Performed on Rolling Thin Film Oven Test (RTFOT) Residue:

Mass Loss (AASHTO T240): Maximum Percent.	1.00	1.00	1.00	1.00
Dynamic Shear (AASHTO T315): G*/SIN DELTA, Minimum, 2.20 kPa, Test Temperature at 10 Rad/s, Degrees Celsius.	64	70	76	82
Elastic Recovery (ASTM D 6084) 25 Degrees Celsius, 5 cm/minute Elongation, 60 Minutes, Minimum Percent.	--	--	50	75

## These Tests Performed on Pressure Aging Vessel (PAV) Residue:

PAV Aging Temperature (AASHTO R28): Degrees Celsius.	100	100	100	100
Dynamic Shear (AASHTO T315): G*/SIN DELTA, Maximum, 5000 kPa, Test Temperature at 10 Rad/s, Degrees Celsius.	25	28	31	34
Creep Stiffness (AASHTO T313): S, Maximum, 300 MPa m-Value, Minimum 0.300, Test Temperature at 60 Seconds, Degrees Celsius	-12	-12	-12	-12

4.02I.2.03 MIXES.

## A. Mix Design Table

<b>Mix Designation and Percentage by Weight Passing Sieves</b>				
Sieve Size	Plant Mix Macadam Base Course	Bottom Course Mix 1	Top Course Mix 2	Top Course Mix 3
1-1/4"	100	100	---	---
1"	90 - 100	90 - 100	---	---
3/4"	60 - 80	70 - 84	78 - 98	100
1/2"	---	54 - 68	64 - 77	72 - 98
3/8"	15 - 40	44 - 54	52 - 67	60 - 82
No. 4	0 - 10	28 - 36	33 - 46	40 - 56
No. 8	---	17 - 25	23 - 32	28 - 39
No. 16	---	12 - 20	16 - 20	19 - 24
No. 30	---	7 - 15	12 - 16	13 - 19
No. 50	---	5 - 11	8 - 12	8 - 16
No. 100	---	3 - 9	6 - 10	5 - 10
No. 200	---	1 - 5	3 - 6	3 - 6
Asphalt, Weight by Percent of Total Mixture				
	2.5 - 3.1	3.5 - 4.5	4.4 - 5.2	5.2 - 6.2

Note No. 1 - Material passing the No. 200 sieve may consist of fine particles of the aggregate, mineral filler or both. Material passing the No. 30 sieve shall be non-plastic when tested in accordance with the requirements of ASTM D 4318.

Note No. 2 - Lift Thickness shall be no less than two times the nominal maximum size of the aggregate (See Note No. 6).

Note No. 3 - If the aggregate does not satisfy tensile strength ratio requirements, add an approved antistripping agent (See 4.02I.2.02.A.1)

Note No. 4 - Job Mix Formula shall follow a smooth curve within the specified limits for all sieve sizes of the Mix Design Table, but should not fall on the maximum density line and should not cross the maximum density line below the No. 4 sieve. The maximum density line will be determined by plotting the gradations on a 0.45 power graph paper, and drawing a straight line between the amount passing the No. 200 sieve and the amount which is retained on the largest sieve.

Note No. 5 - Notify the Engineer if a satisfactory Job Mix formula using the Mix Design Table cannot be obtained.

Note No. 6 - Nominal maximum size is one sieve size larger than the first sieve to retain more than 10 percent of the aggregate, based on the Contractor's job mix formula.

## B. Job Mix Formula and Checklist

1. The laboratory used to develop the job mix formula shall meet the requirements of ASTM D 3666. Before construction starts, submit to the Engineer a certification signed by the manager of the laboratory stating that it meets these requirements. The certification shall contain as a minimum:
  - a. Qualifications of personnel: laboratory manager, supervising technician and testing technicians.
  - b. A listing of equipment to be used in developing the job mix.
  - c. A copy of the laboratory's quality control system.
2. Develop Job Mix Formula using procedures contained in Chapter V, "Marshall Method of Mix Design" of the Asphalt Institute's Manual Series No. 2 (MS-2) and where applicable, "Asphalt Hot-Mix Recycling", Manual Series No. 20 (MS-20) and provide information for the following checklist:
  - a. General
    - (1) Contractor and Contract number
    - (2) Type of bituminous mixture
    - (3) Type and source of aggregates
    - (4) Type and source of asphalt
  - b. Aggregates
    - (1) Sieve analysis of each aggregate to be used in mixture in accordance with ASTM C 136. The minus 200 fraction shall be tested in accordance with ASTM C 117.
    - (2) Physical test of aggregates - soundness, wear, percent fractured faces and percent flat or elongated particles.
    - (3) Bulk specific gravity and absorption in accordance with ASTM C 127 for coarse aggregate and ASTM C 128 for fine aggregate. The aggregate shall be sampled from the plant hot bins or feeder belt.
    - (4) Proportion used of each type aggregate.
    - (5) Theoretical gradation of combined proportions of aggregates.
  - c. Asphalt
    - (1) Type and grade
    - (2) Specific gravity
    - (3) Type of antistripping agent (if required)
  - d. Optimum Asphalt Content Determination in accordance with ASTM D 6926 and ASTM D 6927
    - (1) Compactive effort (75 or 113 blows applied to specimen, each face, as appropriate)
    - (2) Actual specific gravity and unit weight of each specimen
    - (3) Percentage of asphalt in each specimen

- (4) Theoretical specific gravity of each specimen calculated
  - (5) Graph of stabilities vs. asphalt content
  - (6) Graph of flow values vs. asphalt content
  - (7) Graph of voids filled with asphalt vs. asphalt content
  - (8) Graph of Marshall air voids vs. asphalt content
  - (9) Graph of voids in the mineral aggregate vs. asphalt content.
  - (10) Graph of unit weight vs. asphalt content
  - (11) Visual description of specimens at optimum asphalt content (i.e., dry, flushing, etc.)
  - (12) Graph of Temperature vs. Viscosity of Asphalt
- e. Summation of Established Job Mix Formula
- (1) Combined gradation of aggregates
  - (2) Optimum asphalt content from above graphs
  - (3) Specified job mix tolerance range
  - (4) Mixing Temperature
  - (5) Temperature of mix at point of discharge into haul units
  - (6) Compaction Temperature
- f. Summation of the Characteristics of the Mixture at Optimum Asphalt Content
- (1) Stability, pounds
  - (2) Flow value, hundredths of an inch
  - (3) Actual specific gravity of laboratory compacted mixture
  - (4) Maximum specific gravity of paving mix at optimum asphalt content in accordance with ASTM D 2041
  - (5) Total voids (air), percent, in laboratory compacted mixture
  - (6) Voids filled with asphalt, percent, in laboratory compacted mixture
  - (7) Voids in the mineral aggregate, percent, in laboratory compacted mixture.
  - (8) Actual unit weight, lbs./cu. ft. of laboratory compacted mixture
  - (9) Tensile Strength Ratio - ASTM D 4867

## g. Verification of Job Mix Formula Characteristics

Where the asphalt content for the proposed Job Mix Formula does not coincide with the asphalt content used in the trial specimens, prepare an additional set of specimens for the proposed Job Mix Formula asphalt content to verify that actual Marshall results duplicate those anticipated from the curves.

**PART 3. EXECUTION**4.021.3.01 PREPARATION.

- A. Clean all underlying pavement surfaces and previous courses of all loose and foreign material by sweeping with hand brooms, power sweepers or blowers as directed by the Engineer.
- B. Verify that required grade and density tolerances of previous courses have been obtained before placing asphalt concrete.
- C. Construct keyways for overlay pavements as shown on the Contract Drawings by using longitudinal or transverse cuts into the existing pavement, and removing the necessary amount of pavement to provide a smooth transition from the new to existing asphalt concrete surfaces.
- D. Verify in-pavement castings are set to finished grade.
- E. Remove pavement markings.
- F. Tack Coat
  - 1. Apply tack coat by brush on edges of all previously placed or existing pavement and surfaces of manholes and other structures that will be in contact with pavement course to be placed.
  - 2. Apply tack coat by pressure distributor to existing pavement surface to receive new pavement course or where a course is not placed within 24 hours for roadway areas after placement of the underlying course, except as specified in 4.021.3.02.E.7 and F.2. However, if the underlying pavement course has not been exposed to traffic and, in the opinion of the Engineer, is kept clean, tack coat shall not be required when a course is placed beyond the time frame mentioned above.
  - 3. Unless otherwise shown on the Contract Drawings, apply tack coat at a rate of 0.05 to 0.10 gallons per square yard on asphalt concrete pavement surfaces and 0.10 to 0.15 gallons per square yard on Portland Cement Concrete pavement surfaces. Apply tack coat at a temperature between 275 to 350 degrees F.
  - 4. Protect structures such as manhole frames and covers, joints and steel faced curbs within areas to be tack coated, prior to tack coating, by masking them with tar paper, polyethylene film or other approved materials.
  - 5. After the application of tack coat, follow immediately with placement of asphalt concrete pavement course. Take precautions necessary to maintain and protect the tack coated surface from damage until the next course is placed, including placement and removal of sand as necessary to blot up excess material.
  - 6. Pave and protect all tack coated surfaces prior to opening the area to traffic.
- G. Mixing Plant Requirements for Recycled Asphalt Concrete
  - 1. Batch Plants shall have an appropriately located metering device for adding the reclaimed asphalt pavement to the heated new aggregate and shall provide an accurate method for proportioning the reclaimed asphalt pavement into the mixture.



2. The batch plant's dryer may have to be operated at temperatures higher than with all new materials. If necessary, modify the dryer and the dust collection system to prevent damage.
3. Drum-mix plants shall have an appropriately located metering device for adding the reclaimed asphalt concrete to the dryer-mixer in a manner that does not damage the asphalt in the reclaimed material. Ensure that an accurate method for proportioning the reclaimed asphalt concrete into the mixture is provided. Make provisions for compensating for moisture in reclaimed asphalt concrete.
4. The mixing for a drum-mix plant shall be such as to achieve an intimate blending of new and reclaimed materials and a complete coating of all aggregate particles.
5. The batch or drum-mix plant may be equipped with a surge-storage bin at the mixture discharge point.

4.02I.3.02. APPLICATION.

A. Mixing in Plant

1. Place aggregate through a dryer and heat to temperature not exceeding 350 degrees F.
2. Screen aggregate to appropriate fractions and place each fraction in a storage bin over mixer unit.
3. Use equipment conforming to ASTM D 995 for preparation of paving mixtures, except provide one bin for fine aggregate, three for coarse aggregate and one for reclaimed asphalt pavement (if applicable).
4. Introduce aggregate into mixer at between 250 and 350 degrees F and dry mix for minimum of 5 seconds (7 seconds for mixtures containing Vestoplast "S") before adding asphalt. Where reclaimed asphalt pavement or Vestoplast "S" is used, add to mixer after dry mixing and before asphalt cement.
5. Heat asphalt to a temperature not exceeding 325 degrees F (350 degrees F for modified asphalt) and introduce it into mixer at a temperature of not less than 275 degrees F (300 degrees F for modified asphalt).
6. Mix as long as necessary, but not less than 30 seconds after introduction of asphalt cement, to completely and uniformly coat aggregate particles.
7. Regulate temperature of mixture according to outdoor temperature and as necessary to meet minimum laydown temperatures specified in 4.02I.1.03.A.3. However, asphalt concrete mix production temperatures leaving the plant shall be as follows:

Type of Asphalt	Temperature Degrees F
Asphalt Cement	275 - 325
Modified Asphalt- PG 76-22	305 - 335
Modified Asphalt – PG 82-22	310 – 340

Any deviation from these temperatures must be as approved by the Engineer.

8. Use of storage silos will be permitted provided such silos are approved as specified in 4.02I.1.04.D.4.

## B. Delivery, Placing and Spreading

1. Trucks used for hauling asphalt concrete mixtures shall have tight, clean, and smooth metal beds free from kerosene and other solvents. To prevent the mixture from adhering to them, the truck beds shall be lightly coated with a minimum amount of paraffin oil, lime solution, or other approved material. Each truck shall have a suitable cover to protect the mixture from adverse weather. When necessary, to ensure that the mixture will be delivered to the site at the specified temperature, truck beds shall be insulated or heated and covers shall be securely fastened.
2. Load trucks using a minimum of three drops. About 40 percent of the total weight of the mix to be hauled shall be loaded into the center of the front half of the truck. The truck shall then be pulled forward so that the next 40 percent or so of the total load can be deposited into the center of the back half of the bed, near the tailgate. The vehicle shall then be moved backward so that the remaining 20 percent of the mix can be dropped into the center of the bed, between the first two piles.
3. Deliveries shall be scheduled so that placing and compacting of mixture is uniform without stopping and starting of the paver. Hauling over freshly placed material shall not be permitted until the material has been compacted, as specified herein, and allowed to cool to ambient temperature.
4. Spread evenly, screed and finish each course to tolerances and requirements specified in this Section.
5. Asphalt concrete pavers shall be self-propelled, with an activated screed, heated as necessary, and shall be capable of spreading and finishing courses of asphalt concrete which will meet the specified thickness, smoothness, and grade. The paver shall have sufficient power to propel itself and the hauling equipment without adversely affecting the finished surface.

The paver shall have a receiving hopper of sufficient capacity to permit a uniform spreading operation. The hopper shall be equipped with a distribution system to place the mixture uniformly in front of the screed without segregation. The screed shall effectively produce a finished surface of the required smoothness and texture without tearing, shoving, or gouging the mixture.

6. An automatic screed control system shall be used which is capable of automatically maintaining the specified screed elevation and transverse slope. The control system shall be automatically actuated from a reference system by a sensors.

The control system shall be capable of working in conjunction with any of the following reference systems:

- a. Ski-type device 40 to 60 feet in length.
- b. Taut stringline (wire) set to grade.
- c. Laser beam set to grade.

Automatic controls will not be required where the Contractor can demonstrate to the satisfaction of the Engineer that it can not be used effectively.

7. Before commencing each day's paving, clean the paver of any material left from previous paving operations.
8. Place in minimum of 10-foot wide strips, except that the last strip may be a lesser width if necessary. The length of paving strip shall be estimated by the following guide: 10 times the ambient temperature (degrees F) plus 100 feet. The Engineer will determine the final length.
9. Begin along high sides of areas and proceed towards low side of areas with a one directional slope. Start on centerline and work both ways for crowned pavements.

10. The longitudinal joint in one lift shall offset the longitudinal joint in the lift immediately below by at least 1 foot; however, the longitudinal joint in the surface lift shall be at the centerline of the pavement. Transverse joints in one lift shall be offset by at least 10 feet from transverse joints in the previous lift. Within the same lift, transverse joints in adjacent lanes shall be offset a minimum of 10 feet.
11. When starting paving operations at transverse joints, provide four starting block strips under full length of paver screed. Blocks should be of a thickness appropriate for the lift being placed.
12. The paver's hopper shall be kept half full throughout the paving day. The wings shall not be emptied until the end of the paving day. Residual material shall be disposed of off the site.
13. No raked asphalt concrete material shall be broadcast back onto the pavement mat. Raked material shall be placed back in the paver hopper or disposed of.
14. Use hand placing and finishing methods, as approved by the Engineer, in small areas where use of power equipment is impractical. Lutes shall be used for hand spreading.
15. Provide paving irons and heating equipment for use during paving operations and where necessary to improve the surface conditions, as approved by the Engineer.

C. Grade Control

1. Remove grade stakes just prior to rolling of the plant mix macadam base course.
2. The Engineer will provide bench marks and alignment controls adjacent to each area of construction, which shall be checked and maintained by the Contractor.
3. When placing overlays where automatic grade controls are not required, the thickness of each lift to be placed shall be marked on the pavement adjacent to each side of the paving machine at each location where final pavement grades are shown on the Contract Drawings.
4. Perform Contractor's quality control surveys immediately after top course has been rolled to check final surface grades, in accordance with 4.02I.1.04.D.8.
5. Establish and maintain required lines and grades, including crown and cross slope, for each course during paving operations.
6. Use only qualified surveyors licensed in the State in which Work is being performed.

D. Compaction Equipment

1. Use power rollers weighing not less than 10 tons, having wheel loads of at least 250 lbs./linear inch of combined static and dynamic force and equipped with adjustable scrapers to keep wheel surfaces clean and with efficient means of keeping them wet to prevent the mixture from sticking to the roller.
2. Use types and quantities of equipment as necessary to meet all quality and production requirements of this Section.
3. Do not use steel rollers with pits, flat spots or grooves worn into rolling surface. Roller shall be capable of reversing without backlash.
4. Keep roller on asphalt concrete to avoid contamination of pavement with foreign material.

E. Rolling

1. Commence as soon as material will sustain roller without undue displacement, cracking or shoving.

2. The speed of the roller shall at all times be sufficiently slow to avoid displacement of the hot mixture and be effective in compaction. Any displacement occurring as a result of reversing the direction of the roller, or from any other cause, shall be immediately corrected by the Contractor.
3. The sequence of rolling operations shall be at the discretion of the Contractor.
4. Perform rolling with types and quantity of rollers as may be necessary to satisfy all of the pavement quality requirements specified herein.
5. Do not re-roll cold in-place asphalt concrete with a steel wheel or vibratory roller to attempt to increase density. A pneumatic tire roller may be used, subject to approval by the Engineer.
6. At end of each day's operations or when paving is interrupted sufficiently to allow mixture to cool, make a stop by means of tapering the course and form a transverse joint.
7. When resuming operations, cut back joint to expose a granular surface for full depth of the course, paint exposed edge with tack coat, place fresh mixture against joint, tamp and roll.
8. Any mixture that becomes loose and broken or mixed with dirt, develops check-cracking, or is in any way defective shall be removed and replaced with fresh hot mixture and immediately compacted to conform to the surrounding area. This work shall be done at no cost to the City. Skin patching shall not be allowed.

F. Joints

1. Form all joints in such a manner as to ensure a continuous bond between the courses and to obtain the required density, as demonstrate, tested and approved in the control strip. All joints shall have the same texture as other sections of the course and shall meet the requirements for density, smoothness and grade. Minimize raking of joints. Any mix raked from joint shall be discarded and not broadcast back onto the mat.
2. For transverse joints, the roller shall not pass over the unprotected end of the freshly laid mixture except when necessary to form a temporary stop. After a temporary stop and prior to the continuation of paving, the tapered edge shall be cut back to its full depth and width on a straight line to expose a vertical face before placing the adjacent pavement. Apply tack coat on all newly exposed contact surfaces before placing any fresh mixture against the joint.

G. Feather-Edge

1. When required by the Contract Drawings, the course shall be feather-edged following the "feather-edge" lines shown on the Contract Drawings.
2. The feather-edging shall be accomplished by decreasing the full thickness of the top course in order to maintain the required profile until the course thickness is approximately 1/2 inch.
3. The remainder of the course shall be placed by broadcasting the mix for purpose of segregating the large aggregate which shall be promptly removed. This shall be immediately followed by the rolling operation.

4.02I.3.03. CORRECTIONS OF DEFICIENCIES.

A. Deficiencies in Surface Smoothness and Grade Tolerance of Top Course.

1. In the event surface smoothness and surface grades fail to comply with the "In-Place Pavement Requirements", specified in 4.02I.1.03.D.1 when measured in accordance with 4.02I.1.04.D.7 and D.8, make corrections as specified below at no additional cost to the City.

2. The area of deficiencies in surface smoothness and/or surface grade tolerance shall be defined as the area enclosed by a line of points half way between the grade in excess of the specified tolerance and the next finished grade shown on the Contract Drawings that meets the specified tolerance, both longitudinally and transversely. The area will be determined by the Engineer from the field survey specified in 4.02I.1.04.D.7 and D.8.
  3. Replace pavement deficient in surface smoothness and surface grade tolerance requirements or, at the option of the Engineer, add overlays where required to correct deficiencies in accordance with all applicable requirements of the Contract Drawings and this Section, at times approved by the Engineer, so as not to interfere with operations of the City or others using the area. A minimum thickness of 1-1/2 inches shall be placed as an overlay. Existing pavement shall be removed as necessary to provide square joints for the full depth of the overlay.
  4. Where the deficiency in surface grade tolerance is in excess of 0.045 foot above or below the grade shown on the Contract Drawings but where a contour pattern satisfying riding quality and drainage as shown on the Contract Drawings has been established to the satisfaction of the Engineer, pavement may be left in place, subject to the requirements of 4.02I.4.01.C. and 4.02I.4.03.B.
- B. Deficiencies in In-Place Air Voids of Top and Bottom Courses.
1. Any pavement subplot with in-place air voids less than 2.0 percent or greater than 8.0 percent (9.0 percent for bottom course) shall be removed and replaced at no additional cost to the City. For paving lifts other than the top lift of asphalt concrete the Engineer may elect to accept deficient material subject to an adjustment to Contract compensation. Adjustments to contract compensation will be made as set forth in 4.02I.4.01.G.
  2. In-place air voids will be calculated in accordance with ASTM D 3203 by comparing bulk specific gravity (ASTM D2726) to maximum specific gravity (ASTM D2041).
- C. Deficiency in Marshall Stability and Flow
- In accordance with 4.02I.1.03.C.2 for Marshall stability and flow, if the Percentage of Material Within Tolerance Limits (PWL) of a lot for either parameter as set forth in 4.02I.4.03.B.5 equals or exceeds 90 percent, the lot shall be acceptable. If the PWL for either parameter is less than 90 percent, determine the reason and take corrective action immediately. If the PWL is below 80 percent for either parameter, stop production and make adjustments to the mix.
- D. Deficiency in Final Surface Grade
1. When more than 15 percent of all measurements within a lot exceed the grade tolerance, measured in accordance with 4.02I.1.04.E.11, remove and replace or diamond grind the entire lot in accordance with 4.02I.3.03.A.
  2. When any individual measurement exceeds a grade tolerance of plus or minus 0.06 foot, remove and replace the surface of the area exceeding the tolerance in accordance with 4.02I.3.03.A.
  3. Following the correction of deficiencies, the Engineer will retest the final surface of the asphalt concrete. In the event grade tolerance is exceeded, make additional corrections at no cost to the City.
- E. Deficiencies in the Performance Grade Requirements of Modified Asphalt
- Remove and replace the deficient material on a lot basis, unless the Engineer elects to accept the deficient material subject to an adjustment to Contract compensation. Adjustments to Contract compensation will be made as set forth in 4.02I.4.01.G.

**PART 4. ADJUSTMENTS TO CONTRACT COMPENSATION**

4.02I.4.01. GENERAL.

- A. Where the Contract requires less than 500 tons of asphalt concrete, no adjustments to Contract compensation will be made as specified herein.
- B. Where the Contract requires more than 500 tons of asphalt concrete, adjustments to Contract compensation, if made, will be made as specified in 4.02I.4.03.A, B, C, D, and E.
- C. Notwithstanding other adjustments to Contract compensation or corrections specified herein for various deficiencies, no payment will be made for material placed above the allowable tolerance above required grade as specified in 4.02I.1.03.D.4, or for material that must be removed to correct deficiencies, or for that material placed in excess of the plus tolerance for the total thickness of each course as specified in 4.02I.1.03.D.3.
- D. The computations for adjustments to Contract compensation may require conversion between tons and square yards. Such conversion will be made using the actual computed weight per square yard per inch of thickness determined from the lot's average bulk specific gravity for each type of course times the density of water at 70 degrees F.
- E. Adjustments to Contract compensation for in-place mat densities, in-place joint densities for surface courses and Marshall air voids shall be determined by applying percentages, calculated as specified in 4.02I.4.03.B, to the assigned unit price of sixty dollars (\$60.00) per ton of asphalt concrete; or in the case of Classified Work, by applying such percentages to the actual Contract Unit Price bid for the appropriate asphalt concrete item in the Schedule of Unit Prices For Classified Work, but in no case less than sixty dollars (\$60.00) per ton of asphalt concrete.
- F. The percentage adjustment to the unit price specified in 4.02I.4.01.E for Marshall air voids, mat density and joint density of the surface course shall be as follows, except as set forth in 4.02I.4.01.G:  
  
 When all values calculated in accordance with 4.02I.4.03.B are 100 percent or greater, the highest value will be used to adjust Contract compensation.  
  
 When all values calculated in accordance with 4.02I.4.03.B are less than 100 percent, the lowest value will be used to adjust Contract compensation.  
  
 When values calculated in accordance with 4.02I.4.03.B are both greater and less than 100 percent, the product of the highest and lowest value will be used to adjust Contract compensation.
- G. When the Engineer elects to adjust Contract compensation in lieu of removal and replacement of material with deficient in-place mat air voids in shoulder and in-field area pavements or deficiencies in the modified asphalt performance grade, the percentage adjustment to the unit price specified in 4.02I.4.01.E will be set at 50 percent. No further adjustment will be made for Marshall air voids, mat density or joint density of the surface course.
- H. Adjustments for surface smoothness and final surface grade will be based on the final test results, which will be determined after the correction of deficiencies. Reductions in payment will be determined by the following:

$$R = A \times D \times F \times 0.01938$$

Where:

R = Reduction in payment per lot for surface smoothness or final surface grade, dollars

A = Area of lot, square feet

- D = Price per ton of asphalt concrete, assigned unit price or contract unit price as set forth in 4.02I.4.01.E.
- F = Contract Unit Price Adjustment Factor specified in 4.02I.4.03.D and 4.02I.4.03.E.

Reductions in payment for failure to meet surface smoothness and final surface grades will be calculated separately for the entire pavement or overlay surface. Deductions from Contract compensation will be made for the requirement (surface smoothness or final surface grade) which results in the greatest payment reduction. Reductions for surface smoothness or final surface grade will be in addition to all other adjustments to Contract compensation.

- I. When the Engineer elects to adjust Contract compensation in lieu of correcting areas with deficiencies in surface smoothness, the Contract Unit Price Adjustment Factor specified in 4.02I.4.01.H will set at 0.10.

4.02I.4.02. ADJUSTMENT TO CONTRACT COMPENSATION FOR THICKNESS DEFICIENCY IN PLANT MIX MACADAM BASE COURSE.

- A. Where the deficiency of a plant mix macadam base course core exceeds the allowable minus tolerance in plant mix macadam base course thickness, one additional core will be taken by the Engineer in each of the other three sublots adjacent to the core taken in accordance with 4.02I.1.04.E.4. Plant mix thickness for the area of entire lot will be the average of the four cores<sup>6</sup>. Where there is a deficiency in the average of the four cores in excess of the allowable minus tolerance, the total thickness of succeeding courses in the area of entire lot shall be increased by the amount by which the deficiency exceeds the allowable tolerance.
- B. For each additional lot resampled in accordance with 4.02I.4.02.A above, there will be deducted from the Contract compensation, in addition to adjustments for deficiencies as hereinafter specified, an amount of One Thousand Dollars (\$1,000.00).

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<sup>6</sup> In determining average thickness, if any core exceeds required thickness by more than 1/2 inch, the thickness of that core will be assumed to be 1/2 inch in excess of required thickness.

4.02I.4.03. ADJUSTMENT TO CONTRACT COMPENSATION FOR DEFICIENCIES IN TOP AND BOTTOM COURSES.

A. Deficiency in Thickness

Thickness of each course, excluding overlay, will be the average of the four cores in the lot for each course<sup>7</sup>. Deductions from Contract compensation for deficiencies in thickness of top course or total of top and bottom courses, modified as may be required by 4.02I.4.02.A, will be the following amounts (deducted per square yard) for the entire area lot:

Amount of Minus Deficiency (inches)	Amount of Payment Deduction (Dollars per Square Yard)
Greater than 1/4 and up to 1/2	1.00
Greater than 1/2 and up to 3/4	2.00

For minus deficiencies in excess of 3/4 inch either in average of four cores or in any individual core, at the Engineer's option, remove and replace deficient pavement or place an overlay that will satisfy all requirements of this Section.

B. Deficiency in In-Place Mat Density, In-Place Joint Densities and Marshall Air Voids

1. Top and bottom courses will be evaluated on a lot basis with each lot coinciding with that defined in 4.02I.1.04.D.1.a.
2. Density
  - a. In-place mat density specified in 4.02I.1.03.D.2.a will be evaluated for Section compliance using the average of the random subplot in-place density determinations from cores of the area covered by the lot specified in 4.02I.1.04.D.1.a.
  - b. In-place joint density specified in 4.02I.1.03.D.2.b will be evaluated for Section compliance using the average of random subplot in place joint density determinations from cores of the area covered by the lot specified in 4.02I.1.04.D.1.a.
3. Marshall air voids will be evaluated for Section compliance using the average of the random subplot void determinations from hot mix samples from the lot specified in 4.02I.1.04.D.1.a.
4. The Engineer will check each lot for in-place mat densities, in-place joint densities for surface courses only, and Marshall air voids with adjustments to Contract compensation based on the Percentage of Material Within Tolerance Limits (PWL) as determined by 4.02I.4.03.B.5 below and by the "Table For Estimating Percent of Lot Within Tolerance Limits-PWL (Standard Deviation Method)". No deficient lot will be approved without an adjustment to Contract compensation made in accordance with the tables entitled "Adjustments to Contract Compensation For In-Place Mat Density and Marshall Air Voids", and "Adjustments to Contract Compensation for In-Place Joint Density".

<sup>7</sup> In determining average thickness, if any core exceeds required thickness by more than 1/4 inch, the thickness of that core will be assumed to be 1/4 inch in excess of required thickness.



## 5. Method of estimating Percentage of Material within Tolerance Limits (PWL):

- a. Locate sampling positions on the lot by use of random sampling procedures specified in FAA ERLPM, Section 6.
- b. Make a measurement at each location, or take a test portion and make the measurement on the test portion in accordance with 4.02I.1.04.D and E.
- c. Determine the average value of all samples ( $\bar{X}$ )
- d. Find the standard deviation ( $S_n$ ) by use of the following formula:

$$S_n = \sqrt{d_1^2 + d_2^2 + d_3^2 + \dots + d_n^2 / n - 1}$$

Where

$S_n$  = standard deviation of the number in the set

$d_1, d_2,$  = deviation of the individual sample values  $X_1, X_2, \dots$  from the average value that is,

$$d_1 = (X_1 - \bar{X}), d_2 = (X_2 - \bar{X}), d_n = (X_n - \bar{X})$$

$n$  = number of sublots

- e. Find the Lower Quality Index ( $Q_L$ ) by subtracting the lower tolerance limit (L) from the average values ( $\bar{X}$ ) and dividing the result by standard deviation ( $S_n$ ).

$$Q_L = \frac{\bar{X} - L}{S_n}$$

- f. Find the Upper Quality Index ( $Q_U$ ) by subtracting the average value ( $\bar{X}$ ) from the upper tolerance limit (U) and dividing the result by standard deviation ( $S_n$ ).

$$Q_U = \frac{U - \bar{X}}{S_n}$$

- g. The percentage of material above lower tolerance limit ( $P_L$ ) and the percentage of material below upper tolerance limit ( $P_U$ ) will be found by entering the "Table For Estimating Percent of Lot Within Tolerance Limits - PWL (Standard Deviation Method)" with  $Q_L$  and  $Q_U$ , using the column appropriate to the total number (n) of sublots and reading the number under the column headed "Percent Within Tolerance Limits (PWL)". If the values fall between values shown on the table, use the next higher value for  $P_L$  or  $P_U$ .
- h. For asphalt concrete properties with only a lower tolerance limit (stability, mat density, joint density), the Percentage of Material Within Tolerance Limits (PWL) equals  $P_L$ . For asphalt properties with upper and lower tolerance limits (air voids and flow) determine PWL using the following formula:
 
$$PWL = (P_U + P_L) - 100$$
- i. If the tests within a lot include a very large or a very small value which appears to be outside the limits of variation, the Engineer will check for an outlier in accordance with ASTM E 178, at a significance level of 5 percent, to determine if this value will be discarded when computing Percentage of Material Within Tolerance Limits (PWL).

- C. Adjustment to Contract compensation for each lot will be made in accordance with the formula contained in the table entitled "Adjustment to Contract Compensation For In Place Mat Density and Marshall Air Voids" by entering the appropriate row with the value of PWL and performing the calculation indicated for that PWL to determine the percentage adjustment of the unit price (specified in 4.02I.4.01.E).

ADJUSTMENT TO CONTRACT COMPENSATION FOR IN-PLACE MAT DENSITY AND MARSHALL AIR VOIDS	
Percentage of Material Within Tolerance Limits (PWL)	Percentage Adjustment of the Unit Price (specified in 4.01 E and 4.01 F)
96-100	106
90-96	PWL + 10
80-90	0.5 (PWL) + 55
65-80	2.0 (PWL) - 65
Below 65	8

- D. Deficiency in Final Surface Grade Tolerance

Adjustment to Contract Compensation for each lot will be made using the table entitled "Adjustment to Contract Compensation for Exceeding Final Surface Grade Tolerance" by entering the appropriate row with the percentage of all measurements within a lot which exceed the grade tolerance, measured in accordance with 4.02I.1.04.E.11, and reading the number under the column headed "Contract Unit Price Adjustment Factor".

ADJUSTMENT TO CONTRACT COMPENSATION FOR EXCEEDING FINAL SURFACE GRADE TOLERANCE	
Measurements Exceeding Grade Tolerance (Percent)	Contract Unit Price Adjustment Factor
0.0 – 5.0	0
5.1 – 10.0	0.05
10.1 – 15.0	0.25
15.1 and up	Corrective Work Required as specified in 4.02I.3.03.D.

The Contract Unit Price Adjustment Factor is used to calculate adjustments to Contract Compensation as Specified in 4.02I.4.01.H.

<sup>8</sup> *Remove and replace the lot to meet Section requirements as ordered by the Engineer. In lieu thereof, and subject to the provisions in 4.02I.3.03.B for mandatory removal and replacement, the Contractor and the Engineer may agree in writing that, for purposes of practicality, the deficient lot shall not be removed and adjustment to Contract compensation shall be made at 50 percent of the unit price specified in 4.02I.4.01.E.*

E. Deficiency in Surface Smoothness

Adjustment to Contract Compensation for each lot will be made using the table entitled "Adjustment to Contract Compensation for Surface Smoothness", by entering the appropriate row with the Profile Index, measured and calculated in accordance with 4.02I.1.04.E.10., and reading the number under the column headed "Contract Unit Price Adjustment Factor".

ADJUSTMENT TO CONTRACT COMPENSATION FOR SURFACE SMOOTHNESS	
Average Profile Index (inches per mile)	Contract Unit Price Adjustment Factor
0.0 - 15.0	0.00
15.1 - 16.0	.02
16.1 - 17.0	.04
17.1 - 18.0	.06
18.1 - 20.0	.08
20.1 - 22.0	.10
22.1 and up	corrective work required as specified in 4.02I.3.03.A

The Contract Unit Price Adjustment Factor is used to calculate adjustments to Contract Compensation as Specified in 4.02I.4.01.H.

F. Adjustment to Contract compensation for each lot will be made in accordance with the formula contained in the table entitled "Adjustment to Contract Compensation for In-Place Joint Density" by entering the appropriate row with the value of PWL and performing the calculation indicated for that PWL to determine the percentage adjustment of the unit price (specified in 4.02I.4.01.E.).

ADJUSTMENT TO CONTRACT COMPENSATION FOR IN-PLACE JOINT DENSITY	
Percentage of Material Within Tolerance Limits (PWL)	Percentage Adjustment of the Unit Price (specified in 4.02I.4.01.E and 4.01.F)
96 - 100	106
90 - 96	PWL + 10
80 - 90	0.25 x PWL + 77.5
65 - 80	PWL + 17.5
Below 65	<sup>9</sup>

<sup>9</sup> Remove and replace the lot to meet Section requirements as ordered by the Engineer. In lieu thereof, and subject to the provisions in 4.02I.3.03.B for mandatory removal and replacement, the Contractor and the Engineer may agree in writing that, for purposes of practicality, the deficient lot shall not be removed and adjustment to Contract compensation shall be made at 75 percent of the unit price specified in 4.02I.4.01.E.

TABLE FOR ESTIMATING PERCENT OF LOT WITHIN TOLERANCE LIMITS - PWL  
(STANDARD DEVIATION METHOD)

Percent Within Tolerance Limits (PWL)	Positive Values of $Q_L$ or $Q_U$ (n=Number of Sublots)					
	<u>n=3</u>	<u>n=4</u>	<u>n=5</u>	<u>n=6</u>	<u>n=7</u>	<u>n=8</u>
99	1.1541	1.4700	1.6714	1.8008	1.8888	1.9520
98	1.1524	1.4400	1.6016	1.6982	1.7612	1.8053
97	1.1496	1.4100	1.5427	1.6181	1.6661	1.6993
96	1.1456	1.3800	1.4897	1.5497	1.5871	1.6127
95	1.1405	1.3500	1.4407	1.4887	1.5181	1.5381
94	1.1342	1.3200	1.3946	1.4329	1.4561	1.4716
93	1.1269	1.2900	1.3508	1.3810	1.3991	1.4112
92	1.1184	1.2600	1.3088	1.3323	1.3461	1.3554
91	1.1089	1.2300	1.2683	1.2860	1.2964	1.3032
90	1.0982	1.2000	1.2290	1.2419	1.2492	1.2541
89	1.0864	1.1700	1.1909	1.1995	1.2043	1.2075
88	1.0736	1.1400	1.1537	1.1587	1.1613	1.1630
87	1.0597	1.1100	1.1173	1.1191	1.1199	1.1204
86	1.0448	1.0800	1.0817	1.0808	1.0800	1.0794
85	1.0288	1.0500	1.0467	1.0435	1.0413	1.0399
84	1.0119	1.0200	1.0124	1.0071	1.0037	1.0015
83	0.9939	0.9900	0.9785	0.9715	0.9672	0.9643
82	0.9749	0.9600	0.9452	0.9367	0.9325	0.9281
81	0.9550	0.9300	0.9123	0.9025	0.8966	0.8928
80	0.9342	0.9000	0.8799	0.8690	0.8625	0.8583
79	0.9124	0.8700	0.8478	0.8360	0.8291	0.8245
78	0.8897	0.8400	0.8160	0.8036	0.7962	0.7915
77	0.8662	0.8100	0.7846	0.7716	0.7640	0.7590
76	0.8417	0.7800	0.7535	0.7401	0.7322	0.7271
75	0.8165	0.7500	0.7226	0.7089	0.7009	0.6958

## TABLE FOR ESTIMATING PERCENT OF LOT WITHIN TOLERANCE LIMITS - PWL

(STANDARD DEVIATION METHOD)

Percent Within Tolerance Limits (PWL)	Positive Values of $Q_L$ or $Q_U$ (n=Number of Sublots)					
	<u>n=3</u>	<u>n=4</u>	<u>n=5</u>	<u>n=6</u>	<u>n=7</u>	<u>n=8</u>
74	0.7904	0.7200	0.6921	0.6781	0.6701	0.6649
73	0.7636	0.6900	0.6617	0.6477	0.6396	0.6344
72	0.7360	0.6600	0.6316	0.6176	0.6095	0.6044
71	0.7077	0.6300	0.6016	0.5878	0.5798	0.5747
70	0.6787	0.6000	0.5719	0.5583	0.5504	0.5454
69	0.6490	0.5700	0.5423	0.5290	0.5213	0.5164
68	0.6187	0.5400	0.5129	0.4999	0.4924	0.4877
67	0.5878	0.5100	0.4836	0.4710	0.4638	0.4592
66	0.5563	0.4800	0.4545	0.4424	0.4354	0.4310
65	0.5242	0.4500	0.4255	0.4139	0.4073	0.4031
64	0.4916	0.4200	0.3967	0.3856	0.3793	0.3753
63	0.4586	0.3900	0.3679	0.3575	0.3515	0.3477
62	0.4251	0.3600	0.3392	0.3295	0.3239	0.3203
61	0.3911	0.3300	0.3107	0.3016	0.2964	0.2931
60	0.3568	0.3000	0.2822	0.2738	0.2691	0.2660
59	0.3222	0.2700	0.2537	0.2461	0.2418	0.2391
58	0.2872	0.2400	0.2254	0.2186	0.2147	0.2122
57	0.2519	0.2100	0.1971	0.1911	0.1877	0.1855
56	0.2164	0.1800	0.1688	0.1636	0.1613	0.1592
55	0.1806	0.1500	0.1408	0.1363	0.1338	0.1322
54	0.1447	0.1200	0.1125	0.1090	0.1070	0.1057
53	0.1087	0.0900	0.0843	0.0817	0.0802	0.0792
52	0.0725	0.0600	0.0562	0.0544	0.0534	0.0528
51	0.0363	0.0300	0.0281	0.0272	0.0267	0.0264
50	0.0	0.0	0.0	0.0	0.0	0.0

G. Additional Tests

1. In the event the Contractor elects to question the original density test results obtained from a particular lot for either the mat density or joint density, the Contractor may request additional testing of that lot in writing within 48 hours of receipt of the written test results from the Engineer. Upon written request received from the Contractor for such additional testing, the Engineer will test one additional sample from each subplot from randomly selected locations in the pavement where the lot was placed. The redefined test will consist of the Engineer's original samples and the additional Contractor's requested samples. The "Percent of Material Within Tolerance Limits - PWL" will be determined in accordance with 4.02I.4.03.B.5. The value will be used to determine any adjustment to Contract compensation. Only one resampling per lot will be permitted.
2. Additional tests requested by the Contractor shall be paid for by the Contractor to the City at a cost of One Thousand Dollars (\$1,000) per lot tested.

**PART 5. MEASUREMENT AND PAYMENT**

4.02I.5.01. MEASUREMENT. In determining the area of wearing course or Macadam base course to be paid for, the areas of the spaces occupied by rails, bases of columns, manhole heads, gate boxes, roadway boxes and similar structures will be deducted when they measure more than one (1) square foot and will not be deducted when they measure one (1) square foot or less.

The measured quantity of wearing courses, laid to a specified thickness on an area basis, will be adjusted for deficiencies in accordance with Subsection 4.02I.4.01.

4.02I.6.01. PRICES TO COVER. The unit price bid for

- (A) Asphaltic Concrete Wearing Course, Type I-4, per square yard
- (B) Asphaltic Macadam Base, Type I-1, per square yard

shall cover the cost of all labor, materials and equipment required to furnish and lay the wearing course or Macadam base course, of the Type specified, complete, in full compliance with the requirements of the specifications, to furnish and lay test strips, to furnish such samples for testing, to take core samples for testing, to perform quality control testing in compliance with these specifications, and to provide such testing equipment, laboratory space and facilities as may be required and to maintain the courses or mixtures, as laid, in good condition as specified in Subsection 1.05.5 of the Standard Specifications.

No separate payment will be made for the cost of furnishing and applying of tack coat as directed under Subsection 4.02I.3.01.(F) above.

*Payment will be made under:*

Item No.	Item	Pay Unit
4.02 I4-2	ASPHALTIC CONCRETE WEARING COURSE, TYPE I-4 MIX, 2" THICK	S.Y.
4.02 I4-3	ASPHALTIC CONCRETE WEARING COURSE, TYPE I-4 MIX, 3" THICK	S.Y.
4.02 I1-4	ASPHALTIC MACADAM BASE COURSE, TYPE I-1 MIX, 4" THICK	S.Y.
4.02 I1-6	ASPHALTIC MACADAM BASE COURSE, TYPE I-1 MIX, 6" THICK	S.Y.

**SECTION 4.04 MM  
(NOT A PAY ITEM)  
PROCEDURE FOR ESTIMATING CONCRETE STRENGTH  
BY THE MATURITY METHOD**

**4.04MM.1. DESCRIPTION.** The Maturity Method is a non-destructive procedure for estimating concrete strength and shall be used to determine when to open the concreted area to traffic. The requirements of this Section shall apply to all concrete placed under Item No. 6.97 A.

The Maturity Method will not be used by the Department for accepting the strength of a concrete. Strength testing by destructive means will still be used by the Department for strength acceptance.

Maturity will not be used to decrease curing times.

**4.04MM.2. PROCEDURE FOR DEVELOPING A MATURITY CURVE.** For each proposed mix design develop the maturity curve in accordance with ASTM C 1074. Make 6" x 12" cylinders and base the curve on compressive strength.

- A) Make all specimens from the same batch of concrete. Batch size shall be at least 3 cubic yards. Mix using the same materials, mix design and mixing technique that will be used for concrete on the project. Use the same mixing equipment when possible. Mix at the maximum w/c ratio of the design. Mix at or within 0.5% of the maximum air content of the design. Additional maturity curves similar to the curves shown on pages A1-74 through A1-83, but limited to 28 days, can be made from different batches using the same mix design at lower w/c ratios and air contents, and these additional maturity curves can be used for interpolating concrete strength estimations if it can be shown that the concrete delivered to the project was at a lower w/c or lower air content.
- C) Determine the plastic properties of the batch by performing slump, air content, unit weight, and concrete temperature before making specimens. Determine slump in accordance with ASTM C 143, air content in accordance with ASTM C 231 or ASTM C 173, unit weight in accordance with ASTM C 139, temperature in accordance with ASTM C 1064, shrinkage in accordance with ASTM C 157, and freeze/thaw in accordance with NYSDOT Method 502-3P.
- C) Make a minimum of seventeen (17) specimens in accordance with ASTM C 192. Embed sensors in the center of two (2) of the specimens. Moist cure all specimens in a temperature controlled water bath or in a moist room meeting the requirements of ASTM C 511. Test cylinders in accordance with ASTM C 39. Do not test cylinders with sensors embedded in them. For high early strength concrete and for extra high early strength concrete, test when strengths are approximately equal to 30%, 60%, 75%, 85%, and 100% of the design strength. Additional specimens can be made and tested at other ages as well as unused specimens to help define the maturity curve.
- D) At a minimum, personnel making cylinders and performing slump, air content, unit weight, and concrete temperature shall be ACI certified as Concrete Field Testing Technicians, Grade I, and personnel testing cylinders for compressive strength shall be ACI certified as Concrete Strength Testing Technicians.
- E) Use digital data-loggers in conjunction with a commercial maturity instrument that automatically computes and displays maturity. Develop the curve using the temperature-time factor maturity function. Use a value of 32° F (0° C) for  $T_0$  (datum temperature) unless a more accurate value is determined in accordance with Annex A1 of ASTM C 1074.

**4.04MM.3. ACCEPTANCE OF A MATURITY CURVE BY THE DEPARTMENT.** For each mix design submit the maturity curve, mix design, material sources, plastic test results, strength test results, data, calculations and method used for monitoring maturity in the laboratory to the Engineer. The Department will require 30 days to evaluate the results for acceptance.

**4.04MM.4. USING CONCRETE MATURITY IN THE FIELD.** Estimating concrete strength by maturity is acceptable when the concrete is batched using the same materials (including admixtures), material proportions, mix design, and mixing technique as that of the batch used to develop the maturity curve. The curve can be used on the project to estimate concrete strength if the w/c ratio of the concrete used on the project is less than or equal to the w/c ratio used to develop the curve.

- A) Use digital data-loggers in conjunction with a commercial maturity instrument that automatically computes and displays maturity to monitor field placed concrete. Use the time-temperature maturity function. Use the same value for  $T_o$  (datum temperature) that was used to develop the maturity curve.
- B) Install at least one (1) sensor for every 3,600 square yards of concrete base (or fraction thereof) with the sensor representing the last 3,600 square yards of concrete pavement (or fraction thereof) installed in the last load of concrete mixed and placed that day. Install at least one (1) additional sensor each day in concrete that is placed within the last four (4) hours of work that day where maturity gain is expected to be the slowest. Maturity gain typically is expected to be the slowest in the thinnest section of pavement. If all sections of pavement have the same dimensions and no section is expected to gain maturity slower, place the additional sensor in any section of pavement constructed from the second to last load of concrete mixed and placed that day.
- C) Install additional sensors when necessary for accurately determining the maturity of a concrete or as directed by the Engineer.
- D) Provide one (1) sensor to the Engineer for random placement at the Department's discretion for every ten (10) sensors the Contractor is required to install. If the number of sensors installed by the Contractor exceeds the minimum required by these specifications, the number of sensors above the minimum will not be counted as required sensors.
- E) When installing sensors, use a placement strategy that targets areas where the concrete is expected to gain maturity the slowest. Place sensors near the fringes, in thinner sections, or in shaded areas where the concrete will be cooler. Do not place sensors in the center of the pour where the concrete will be the hottest. Typical sensor placement should be 1' from an edge or corner and 6" below the surface, but try to maintain at least 6" of cover in each direction. At a minimum, install sensors with at least 3" of cover in each direction. Use traditional methods in lieu of maturity if the least dimension of a concrete is less than 6" (i.e. if 3" of cover cannot be maintained in each direction) because ambient conditions may affect the sensor causing maturity readings from that sensor to be inaccurate.
- F) Provide the Engineer with one (1) set of the same maturity monitoring equipment reader that the Contractor will be using on the project so that DDC can independently monitor concrete maturity. Provide DDC personnel training on how to operate the equipment. The monitoring equipment will be returned at the completion of the project.
- G) Maintain a separate log for each sensor which includes a unique ID; location; date and time of installation; date and time that the sensor began monitoring maturity; dates and times of all readings taken from the sensor; the corresponding temperature, maturity, and concrete age at each reading; and the date when readings were discontinued. Notify the Engineer immediately with problems or discrepancies with readings or if any sensors are found to be damaged or operating improperly, and document on the log the date and time this determination was made, what the problem is, and the steps taken to correct it. Have the log available for viewing by DDC project personnel at all times and provide an updated copy or the log to DDC project personnel on a weekly basis if the sensor is still in use.

**4.04MM.5. VERIFICATION OF THE MATURITY CURVE.** Maturity curve verification consists of making test specimens, monitoring the maturity of the specimens, testing the specimens by



destructive means to determine the actual strength, and comparing the actual strength determined by destructive testing with the strength estimated by maturity. If the actual strength is the same or greater than the strength estimated by maturity, the curve is verified. If the actual strength is less than the strength estimate by maturity, the curve is not verified. If a curve cannot be verified, it may be an indication of changes or alterations in the mix design, batching procedures, material proportions, or properties in the materials being used, or that the maturity curve being used was not developed correctly.

Perform maturity curve verification weekly to determine if the strength of the concrete being supplied to the project is equal to or greater than the strength estimated by maturity. If four (4) consecutive weekly maturity curve verifications determine that the maturity curve being used is verified, reduce the frequency to once every two (2) weeks.

If maturity curve verification testing does not verify a maturity curve, immediately notify the Engineer, immediately discontinue using maturity for estimating strength, perform an investigation as to why maturity was not able to be verified, and provide the Engineer with a written report detailing why the curve was not verified and what actions will be taken to ensure that maturity will not be compromised in the future. If the Engineer is satisfied with the report and that the problem has been resolved, maturity can be used again on the project with maturity curve verification being performed as directed by the Engineer, but in no case, less than once a week. If future maturity curve verifications determine that the curve is verified, the frequency of maturity curve verification can be decreased at the City's discretion.

Maturity curve verification consists of the following:

- A) Sample concrete from a load or batch being used on the project. If the maturity curve is based on compressive strength, make five (5) 6" x 12" cylinders for test specimens. Sample in accordance with ASTM C 172. Make and cure test specimens in accordance with ASTM C 31. At a minimum, personnel sampling and making specimens in the field will be ACI certified as Concrete Field Testing Technicians, Grade I.
- B) Place a sensor in the center of one of the test specimens and monitor maturity.
- C) Test the specimens in pairs and average the results to determine strength. Test the first pair of specimens when maturity readings indicate that the specimens have achieved strength between 50% and 70% of the design strength, and test the remaining pair when maturity readings indicate that the specimens have achieved strength between 85% and 100% of the design strength. Test cylinders in accordance with ASTM C 39. Do not test the specimen with the sensor embedded in it. At a minimum, personnel testing cylinders for compressive strength will be ACI certified as Concrete Strength Testing Technicians.
- D) Compare the actual strength determined by destructive testing with the estimated strength determined by maturity to see if the curve is verified or not. If the actual strength is less than the estimated strength, the curve is not verified.

**4.04MM.6. MATURITY CURVE LIFE.** A maturity curve will be valid for two (2) years from the date the batch used to develop the maturity curve was made provided that the use of the Maturity Method is verified as per section 4.04MM.05 of this specification. The validity of a maturity curve can be renewed a maximum of two (2) times. Each renewal extends the validity of the curve for one (1) year.

The renewal of a maturity curve requires submission of a written request for renewal in advance of the maturity curve expiration date, submission of all verification data from section 4.04MM.05, and acceptance of the data by the Department. Send the renewal request and verification data to DDC's Quality Assurance Department.

**4.04MM.7. BASIS OF PAYMENT.** No additional payment will be made for compliance with the provisions of this section.

SECTION 4.07 D  
Granite Curb (1'-0" Wide)

4.07D.1. INTENT. This section describes construction of Granite Curb (1'-0" wide).

4.07D.2. DESCRIPTION. The new Granite Curb shall be one foot (1'-0") wide and with concrete cradle, unless otherwise specified or shown on the Contract Drawings.

4.07D.3. MATERIALS. Construction materials shall comply with the requirements of Sub-Section 4.07.3 of the Standard Highway Specifications for a Type 1, Class A granite curb, except that the width of curb at the top shall be twelve (12") inches.

4.07D.4. METHODS. Construction sequence shall comply with the requirements of Sub-Sections 4.07.4 and 4.07.5 of the Standard Highway Specifications.

4.07D.6. MEASUREMENT. The quantity to be measured for payment shall be the number of linear feet of curb, of each type, constructed, complete, as required, measured in place along the top of the exposed face of curb, and adjusted in accordance with **Section 5.04** of the Standard Highway Specifications.

Curved granite curb will be measured as straight curb when the radius is greater than 100 feet and as corner curb when the radius is 100 feet or less. Corner curb will be measured only from PC to PT.

4.07D.7. PRICES TO COVER. The contract price per linear foot of new curb with concrete cradle shall cover the cost of all labor, materials, equipment, insurance, and incidentals required to construct the curb complete in place, including excavation (other than rock excavation) and backfilling, in full compliance with the requirements of the specifications, to furnish such samples for testing and to provide such testing equipment, laboratory space and facilities as may be required, and to maintain the curb in good condition as required in **Section 5.05** of the Standard Highway Specifications.

*Payment will be made under:*

Item No.	Item	Pay Unit
4.07 DB	NEW GRANITE CURB, STRAIGHT (1'-0" WIDE)	L.F.
4.07 DC	NEW GRANITE CURB, CORNER (1'-0" WIDE)	L.F.

SECTION 6.28 ME

Lighted Timber Fencing for use in Lower Manhattan Project

6.28ME.1. INTENT. This section describes the work to be done in connection with Lighted Timber Fencing.

6.28ME.2. DESCRIPTION. The Contractor shall furnish, install, and maintain and remove, when directed, Lighted Timber Fencing at locations shown on the Contract Drawings, as specified herein and where directed by the Engineer.

6.28ME.3. MATERIALS.

Timber and lumber shall be dense, structural grade Douglas Fir or Southern Yellow Pine, conforming to the requirements of Section 2.40 of the Standard Highway Specifications.

Reflectorizing materials shall conform to the requirements of ASTM Designation B 589 "Standard Specification of Refined Palladium."

Battery operated flashing units shall be as approved by the Engineer.

For additional details about materials see the sketch for timber fencing.

All other unspecified materials shall be as approved by the Engineer.

6.28ME.4. METHODS. All locations of mass excavation being performed under Section JB 410 - MASS EXCAVATION, of the "Joint Bidding Specifications and Sketches for Lower Manhattan", shall be surrounded by lighted timber fencing as shown on the attached sketch. This requirement shall be in addition to providing all other traffic control devices as deemed necessary for the maintenance and protection of vehicular and pedestrian traffic.

Said work shall include the furnishing and incorporation, as required, of all timber, lumber, fastenings, anchors, reflectorizing materials, battery operated flashers and other warning devices; paint and painting; netting; and the furnishing of all labor, materials, plant, equipment, insurance, and necessary incidentals required and completing the work.

Lighted Timber Fencing shall be furnished, installed, and maintained as shown in the attached sketch and as directed by the Engineer.

At the completion of the work or when directed by the Engineer, fencing shall be removed and disposed of away from the work site.

Fencing at all times shall be maintained in a condition satisfactory to the Engineer. Maintenance shall consist of the

replacement of all damaged or worn out components; repainting, as required or directed; replacement of reflectorizing materials, netting and flashers; and general rehabilitation to keep barricades in good condition during the life of the contract.

6.28ME.5. MEASUREMENT AND PAYMENT. The quantity to be measured for payment shall be the number of linear feet of lighted timber fencing installed in the work, complete, based on the summation of the lengths of individual units, measured along the center line on the face of the top rail between the ends of each unit.

Payment will be made for lighted timber fencing only for the initial installation at any location. Whenever fences are moved to a new location, as required by the Contract Drawings or directed by the Engineer, payment will be made in the same manner as if it were an initial installation. Minor movement of the fencing from one side of the roadway to the other side or rearrangement within a work area will not be considered as a movement to a new location and will not entitle the Contractor to additional payment.

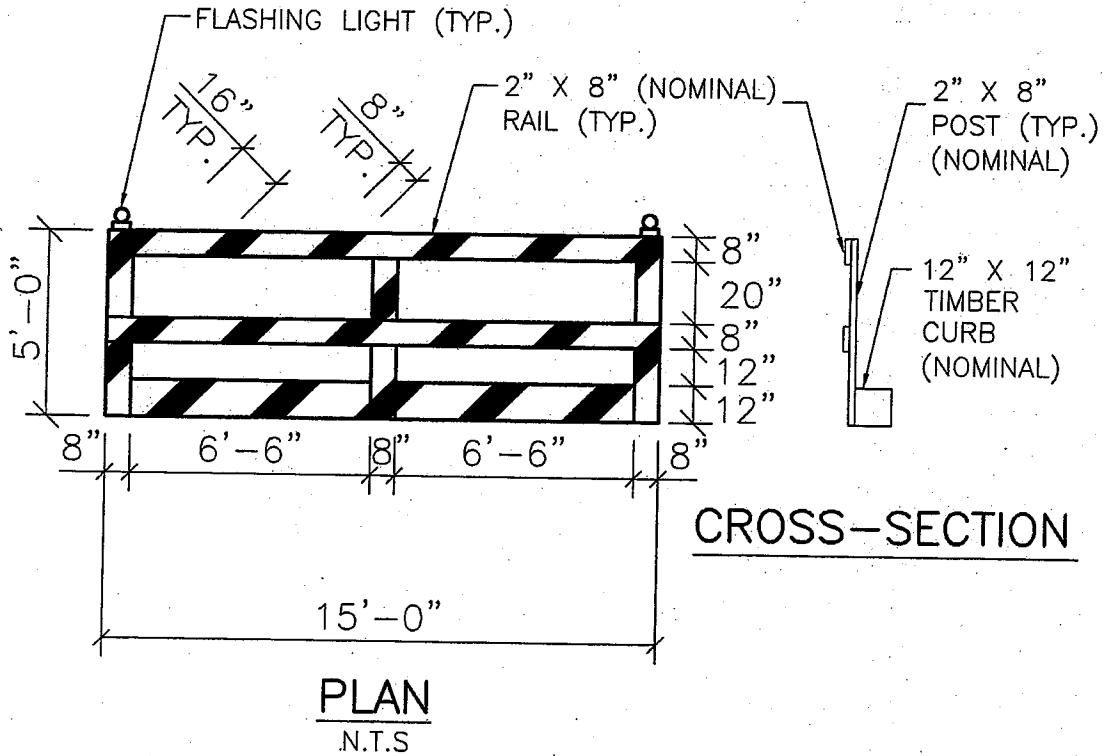
No payment will be made: for movements of fencing made for the Contractor's convenience; for movement of fencing at a given location at the end of a work period and subsequent replacement at the same location at the beginning of the next work period; for movement of fencing at a given location during a work period and subsequent replacement at the same location during the same work period; or for the interchanging of fencing between initial installations.

6.28ME.6. PRICE TO COVER. The contract price bid per linear foot for lighted fencing shall cover the cost of furnishing all labor, materials, plant, equipment, insurance, and necessary incidentals required and completing the work in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.28 ME	LIGHTED TIMBER FENCING FOR USE IN LOWER MANHATTAN PROJECT	L.F.

# LIGHTED TIMBER FENCING FOR USE IN LOWER MANHATTAN PROJECTS



**DETAILS:**

- 1) LUMBER -DOUGLAS FIR OR SOUTHERN YELLOW PINE.  
-ALL SIZES SHOWN ARE "NOMINAL".  
-ALL CONNECTIONS FOR TIMBER RAILS, POSTS & CURBS TO BE NAILED.
- 2) PAINT -TWO COATS APPROVED ORANGE & STAIN RESISTANT REFLECTORIZED WHITE.  
-STRIPES TO BE 45° WITH 8" ORANGE & 16" WHITE.
- 3) LIGHTS -BATTERY OPERATED OR SOLAR POWERED FLASHING DOT APPROVED TYPE.  
-MAXIMUM SPACING 15' CENTER TO CENTER.
- 4) NETTING -TYPE SHALL BE POLYETHYLENE KNITTED MESH, 3.5 OZ PER SQUARE YARD, ORANGE COLOR, 5'-6" HEIGHT WITH REINFORCED EDGE, OR APPROVED EQUAL.  
-NETTING TO BE FASTENED TO FENCE EXTERIOR OVER THE ENTIRE 5'-0" HEIGHT.

SECTION 6.34 A  
Temporary Chain Link Fence, 6'-0" High

6.34A.1. DESCRIPTION. Under this section, the Contractor shall furnish, erect, maintain, and remove, when directed, each type of Temporary Chain Link Fence as shown on the Contract Drawings and directed by the Engineer.

6.34A.2. MATERIALS AND METHODS. All materials and methods shall be as specified in Section 6.34 of the Standard Highway Specifications, with the following modifications and additions:

Temporary Chain Link Fence to be furnished under Item 6.34 ACT, shall consist of chain link fence fabric, top and bottom tension wires, gates, posts to be embedded in the pavement, and all necessary incidental in accordance with the Contract Drawings and the directions of the Engineer.

Temporary Chain Link Fence to be furnished under Item 6.34 ACTP, shall consist of chain link fence fabric, top and bottom rails, gates, and posts. Posts shall be mounted on two (2') feet square plates with a vertical pin not less than two (2') feet high welded to the center of the plate, all as approved by the Engineer. The Contractor shall also be required to secure the fence with sand bags to hold fence in place, and all necessary incidentals in accordance with the Contract Drawings and the directions of the Engineer.

When directed by the Engineer, the Contractor shall remove and dispose of the temporary chain link fence to the satisfaction of the Engineer. The Contractor shall then fill any holes left in the pavement with compacted clean sand to grade.

6.34A.3. MEASUREMENT. The quantities of Temporary Chain Link Fence to be measured for payment shall be the number of linear feet of each type satisfactorily installed, complete, measured in place, from center to center of end posts.

Payment will be made for each type of Temporary Chain Link Fence only for the initial installation at any location. Whenever temporary chain link fence are moved to a new location, as required by the Plans or directed by the Engineer, payment will be made in the same manner as if it were an initial installation. Minor movement of temporary chain link fence from one side of the roadway to the other side, or rearrangement within a work area will not be considered as a movement to a new location and will not entitle the Contractor to additional payment.

No payment will be made: for movements of each type of temporary chain link fence made for the Contractor's convenience; for movement of temporary chain link fence at a given location at the end of a work period and subsequent replacement at the same location at the beginning of the next work period; for movement of temporary chain link fence at a given location during a work period and subsequent

replacement at the same location during the same work period; or for the interchanging of temporary chain link fence between initial installations.

6.34A.4. PRICES TO COVER. The prices bid for each type of Temporary Chain Link Fence shall be a unit price per linear foot and shall cover the cost of all labor, materials, plant, equipment, insurance, and necessary incidentals required to furnish, install, maintain, and remove temporary chain link fence; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer. Temporary chain link fence shall also include, but not limited to, any gates as may be required.

Payment will be made under:

Item No.	Item	Pay Unit
6.34 ACT	TEMPORARY CHAIN LINK FENCE, 6'-0" HIGH	L.F.
6.34 ACTP	TEMPORARY CHAIN LINK FENCE, 6'-0" HIGH, (WITH TOP AND BOTTOM RAILS AND POSTS MOUNTED ON STEEL PLATES)	L.F.

## **SECTION 6.40 DUC**

### **Engineer's Field Office with Conference Room**

**6.40DUC.1. DESCRIPTION.** The Contractor shall provide, furnish and maintain a fully equipped field office for the exclusive use of and occupancy by the Department's engineering personnel and/or Supervising Consultant (herein after called "City personnel"), and by the engineering personnel of private utilities when specified. The field office shall be at a location approved by the Engineer and shall be in a commercial building or store front, and shall be for the exclusive use of and occupancy by the Department's engineering personnel and/or Supervising Consultant (herein after called "City personnel"), and by the engineering personnel of private utilities when specified.

The field office structure and occupancy thereof shall conform to the requirements of all laws, rules, regulations and orders applicable to it.

The field office and all equipment, except as otherwise specified, may be new materials or may be used materials in good condition and satisfactory to the Engineer.

**6.40DUC.2. MATERIALS AND METHODS.** All materials and methods shall comply with the requirements of **Subsections 6.40.2., 6.40.3., 6.40.4, and 6.40.5.** of the Standard Highway Specifications, for a Type DU Field Office, except for the following additions and modifications:

The Contractor will be required to obtain a five and one-half (5-1/2) year lease for the field office with an option for one (1) year renewal.

An open space with individual cubicle arrangement is preferred, enclosed offices will not be required.

The minimum useable floor space (Square Feet) shall be 2,500-square feet of which 480-square feet shall be a 30' x 16' conference room. The conference room shall be equipped with two 3' x 6-1/2' tables and 40 chairs.

**6.40DUC.3. MEASUREMENT.** The quantity to be measured for payment shall be the number of months that the Field Office is available for occupancy by the Field Engineers during the period of the contract. Payment will begin the first month that the office is fully equipped, serviced as specified, and made available for occupancy. Monthly payments will continue for the duration of the contract with the approval of the Assistant Commissioner of Construction. When directed in writing by the Assistant Commissioner of Construction, payment for each month's occupancy after the date of acceptance will be made as part of the final estimate. Monthly payments may be terminated on a specified date prior to acceptance of the contract by written notification by the Engineer that such office will no longer be required on the contract.

**6.40DUC.4. PRICE TO COVER.** The unit price bid per month for the item Engineer's Field Office shall include the cost of furnishing all labor, materials, equipment, ground rental, fire and theft insurance, and utility charges necessary to complete the work of providing or constructing the field office; making all necessary electrical, water, sewer, and other connections required to make the above facilities operative; payment of all rental costs; furnishing and paying for heating fuel, as required; all electrical energy; private telephone services; staples, as specified; and all necessary incidentals to complete the work all in accordance with the specifications and the directions of the Engineer.



*Payment will be made under:*

Item No.	Item	Pay Unit
6.40 DUC	ENGINEER'S FIELD OFFICE WITH CONFERENCE ROOM (JOINT USE)	MONTH

## **SECTION 6.52 FED Uniformed Flagperson**

**6.52FED.1. INTENT.** This section describes the employment of uniformed flagpersons to direct and detour traffic.

**6.52FED.2. DESCRIPTION.** The Contractor shall furnish an adequate number of flagpersons to control vehicular and pedestrian traffic when it is necessary to maintain alternating one-way traffic in one lane of a two-way roadway, and at all other locations where construction operations, construction vehicles and equipment, and temporary traffic patterns related to the construction operations require positive temporary traffic control for safe, efficient traffic operations.

**6.52FED.3. METHODS.** All flagpersons shall be English speaking and adequately trained in flagging operations by a recognized training program such as that provided by the American Traffic Safety Services Association, the National Safety Council, unions or construction industry associations, or by an individual who holds a current certification as a flagger training instructor from such a program.

All flagpersons, their apparel, hand-signaling devices, active two-way radios, and procedures to be used by them shall be in compliance with the requirements of Chapter 6E. FLAGGER CONTROL, in the Federal "Manual on Uniform Traffic Control Devices for Streets and Highways" 2009 Edition, or later edition.

Prior to the start of flagging operations, the Contractor shall provide to the Engineer a list of certified flagpersons to be used in the contract, identifying the source of flagger training for each individual. When requested by the Engineer, flagpersons shall demonstrate their competency in flagging procedures. Flagpersons not competent in flagging procedures to the satisfaction of the Engineer shall be retrained or replaced at once.

Flagpersons are to be paid not less than the most recent prevailing wages rates established for Laborers as determined by the NYC Comptroller or the US Department of Labor, whichever is higher at the time the work is being performed.

The Contractor will be given a minimum of 12 hours advanced notice by the Engineer as to when to furnish a flagperson.

**6.52FED.4. METHOD OF MEASUREMENT.** The fixed price lump sum shown in the bid proposal for this item shall be considered the price bid, although actual payment will be based on the authorized work performed by the Uniformed Flagpersons. The fixed sum is not to be altered in any manner by the bidder.

It is agreed that the quantity to be measured for payment shall be the number of person-hours of uniformed flagperson service actually performed, as authorized by the Engineer.

Laborers who are not uniformed flagperson will not be measured for payment as flagperson under this item.

**6.52FED.5. BASIS OF PAYMENT.** The Contract price for this item shall be a lump sum price for the work performed under this item and shall be equal to the total sum of the amount of wages paid for all authorized Uniformed Flagpersons performing vehicular and pedestrian traffic management, with a twelve (12%) percent markup for Overhead, except that no percentage for

percentage for profit will be allowed on Payroll Taxes or on the premium portion of overtime pay or on sales and personal property taxes; as described in Article 26 of the Standard Construction Contract.

Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, and all material costs for their apparel, hand-signaling devices, active two-way radios, and any other equipment required, and insurance required by Schedule A of the General Conditions other than Workers' Compensation Insurance.

The hourly rate per person-hour shall be the prevailing wage rate for Laborers in effect at the time of the work to control and detour traffic, as shown on the Contract Drawings or as directed by the Engineer.

The Contactor shall be required to submit to the Engineer satisfactory evidence of payment on a New York State certified payroll report forms. No retainage will be withheld by the Department on such payments made under this section.

The total estimated cost of this item is the "fixed sum" amount shown for this item in the Bid Schedule. No guarantee is given that the actual total cost for this item will in fact be the "fixed sum" amount. The "fixed sum" amount is included in the total bid solely to insure that sufficient monies will be available to pay the Contractor for these services.

The "fixed sum" is for bidding purposes only and shall not be varied in the bid. The Contractor will be paid for the actual amount regardless of the fixed sum, which may be more or less than the fixed sum amount.

The Contractor shall maintain separate books of accounts and shall not charge any portion of the cost of wages for Uniformed Flagpersons to another part of the work. Payment and partial payments under this item shall be treated separately from the rest of the contract items.

The New York State certified payroll report forms shall be submitted to the Engineer on a monthly basis and shall include the signed copies of the daily report.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.52 FED	UNIFORMED FLAGPERSON	FIXED SUM

SECTION 6.59 PF  
Temporary Concrete Barrier with Fence

6.59PF.1. Description. The Contractor shall furnish, install, maintain, and remove temporary concrete barriers with chain link fence in accordance with Contract Drawings, specifications and directions of the Engineer.

6.59PF.2. Materials. The temporary concrete barrier shall conform to the requirements of New York State Department of Transportation Standard Sheet No. 619-01, modified to accommodate a chain link fence with posts. Top and bottom rails will not be required for the fence.

Chain link fencing and incidentals shall be in accordance with Section 607 and Materials Section 710, of the current Standard Specifications, Construction and Materials, New York State Department of Transportation, Office of Engineering. The Engineer will inspect all chain link fence material for conformance with specifications.

The Contractor shall be required to provide a solid, secure chain link fence system consisting of posts, post embedment, fence fabric, and all other incidentals as may be required. Fence posts shall be embedded in the concrete barrier and the chain link fence shall extend from the barrier to a height of at least five (5') feet above the barrier.

Maximum spacing of fence posts shall be eight (8') feet from center to center. The details for the embedment of fence posts to the concrete barrier shall be submitted to the Engineer for approval.

Fence fabrication shall be continuous for the length of the concrete barrier; however, at joints between concrete barriers, the gap between fence sections shall not be more than four (4") inches.

Barrier sections shall be pre-cast portable concrete units. The Manufacturer shall certify that the temporary concrete barrier units conform to the details shown on the aforementioned NYSDOT's Standard Sheet or approved drawing.

The Engineer will inspect the temporary concrete barrier sections, complete with fence, upon delivery to the project site for conformance to specifications. Any barrier sections having damage and/or defects in the concrete, fence and/or joint connections will be rejected by the Engineer when in his judgment the performance of the barriers will be affected.

The temporary concrete barrier sections with fence shall form a smooth and continuous barrier when joined together. Any sections damaged or misaligned while in service shall be corrected or replaced to the satisfaction of the Engineer, at no cost to the City.

Striped reflectorization on barriers is required. Striping pattern is to be alternating twelve (12) inch wide stripes of white

and orange sloped downwards in the direction of traffic at 45 degrees.

Reflective sheeting material shall be used and it shall conform to photometric and color (Orange and White) requirements of Subsection 730-05.02, Reflective Sheeting (Class B), of the current Standard Specifications, Construction and Materials, New York State Department of Transportation, Office of Engineer.

6.59PF.3. Methods. The Contractor shall furnish, erect, move, and remove temporary concrete barriers with chain link fence as indicated on the Contract Drawings or as directed by the Engineer.

Where indicated on the Contract Drawings or in the proposal, temporary concrete barriers shall be supplemented by approved steady burning lights.

Each run, or bay, of temporary concrete barrier unit with chain link fence shall be fastened together to form a continuous chain. After placement, each successive unit shall be moved longitudinally to remove the slack in the joint between units. The units at each end of a run or bay shall be anchored as shown on the Standard Sheet. Where shown on the Contract Drawings or directed by the Engineer, the ends of the barrier run shall be fitted with a tapered end section, flared back.

6.59PF.4. Measurement. The quantity to be measured for payment shall be the number of linear feet of temporary concrete barrier with chain link fence actually placed including transition sections, measured along the centerline of the top surface of each barrier.

6.59PF.5. Price to Cover. The contract price bid per linear foot for temporary concrete barrier with chain link fence shall cover the cost of all labor, materials, equipment, insurance, and incidentals necessary to erect, maintain and remove the required temporary concrete barrier with chain link fence. This work shall include, but not be limited to, any required connection devices, orange and white reflective stripes on the faces of the barriers, steady burning yellow lights when indicated on the Contract Drawings, flashing amber lights, and filling holes left in the pavement with an epoxy grout after the barricades have been removed, all in accordance with the Contract Drawings, the Specifications and the directions of the Engineer.

Any movement of temporary concrete barrier with chain link fence, except movements of the concrete barrier necessary to maintain, realign, or replace damaged units will be considered as a movement to a new location and the Contractor will be entitled to payment for the movement.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.59 PF	TEMPORARY CONCRETE BARRIER WITH FENCE	L.F.

## SECTION 6.86 L

## Furnishing and Installing Street Name Signs (Large Size)

6.86L.1. DESCRIPTION. Street name signs shall be furnished and installed as per Section 6.86 of the Standard Highway Specifications, except these street name signs shall be furnished and installed with the following modifications and additions:

They shall be extra large and hung from the mast arm of traffic signals. The actual sign dimensions, layout of text and colors, and mounting hardware required for these signs will be furnished to the Contractor prior to construction.

All signage in each block shall be installed within fourteen (14) calendar days of completion of installation of traffic signals within that block. Failure to meet this requirement shall be deemed a substantial deficiency in compliance with Section 6.70 of the Standard Highway Specification and will be cause for assessment of liquidated damages stipulated therein.

6.86L.4. MEASUREMENT. The quantity to be measured for payment for each of the items is as follows:

Number of square feet of new reflectorized extra large street name signs furnished to the satisfaction of the Engineer.

Number of square feet of extra large street name signs installed to the satisfaction of the Engineer.

6.86L.5. PRICES TO COVER. The contract price per square foot of new extra large reflectorized street name signs furnished shall cover the costs of all labor, materials, plant, equipment, insurance, and incidentals necessary to fabricate the extra large signs including, but not limited to, painting, sheeting, lettering, placement of legends, and to provide samples to Bureau of Traffic Operations for approval; all as shown on contract documents and in accordance with the specifications and directions of the Engineer.

The contract price per square foot of extra large street name signs installed shall cover the costs of all labor, materials, plant, equipment, insurance, and incidentals necessary to hang signs from the mast arm of traffic signals at locations as directed and in accordance with the specifications and direction of the Engineer. The costs shall also include the supplying and sampling of bolts, nuts, clamps, brackets, and all necessary appurtenances as required and, where applicable, picking up signs furnished by the Bureau of Traffic Operations at their designated Sign Shop.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.86 LA	FURNISHING NEW STREET NAME SIGNS (LARGE SIZE)	S.F.
6.86 LB	INSTALLING STREET NAME SIGNS (LARGE SIZE)	S.F.

SECTION 6.97 A  
Extra-High-Early Strength Concrete Base

1. Description. This section describes the construction of an extra high-early strength concrete base for pavement.

In intersections where the street must be fully opened to traffic by the end of each work period, in accordance with the Contract Drawings, the specifications, the traffic stipulations, and the directions of the Engineer, the concrete base shall be laid with an extra high-early strength concrete base.

The Contractor will be subject, under Section 6.70 of the Standard Highway Specifications, to liquidated damages in the amount shown on Schedule A for each and every hour, or any part thereof, that the entire width of pavement designated to be reconstructed with extra high-early strength concrete base is not available to traffic one hour after the end of each work period.

2. Materials and Methods. All materials and methods for the concrete base shall comply with the requirements specified for Item 4.04 H, except for the following modifications and additions:

Concrete shall be extra high early strength capable of obtaining a minimum compressive strength of 2,800 psi in six (6) hours, a minimum compressive strength of at least 3,200 psi at 3 days, and a sufficient size work crew and working time before its initial set to allow for proper placement of the concrete. Modification of concrete shall be with either an increased cement factor (10 bag mix of Portland cement), a reduced water content, superplasticizer, and accelerator or an approved Type IP hydraulic cement complying with the requirements of ASTM C595 modified with additives meeting the requirements of ASTM C688.

A suggested mix design and test results are attached at the end of this Section on pages A1-60 through A1-70. Should the Contractor propose to use this mix design he shall be required to verify that his mix agrees with the first 28 days of the attached test results. Otherwise, if he chooses to use another mix design, he shall be required to document his proposed mix design for 28 days in the same manner as shown on pages A1-60 through A1-70.

The laboratory used to verify that the Contractor's mix agrees with the mix design proved herein, or document another proposed mix design, shall be subject to approval by DDC's Quality Assurance and Construction Safety (QACS) Bureau and shall be in accordance with their 'MIX DESIGN, LABORATORY AND PLANT APPROVAL PROTOCOL'. Copies of this protocol may be obtained at the pre-construction meeting or from the Engineer. The minimum requirement for approval is that the laboratory must have the current AMRL/AASHTO R-18 accreditation in the category of service proposed, it must be currently licensed by the NYC Department of Buildings (DOB), and it must have documented experience estimating concrete strength by the use of Maturity Meters (See Section

4.04 MM in this Addendum). In addition, all testing requirement to verify that the Contractor's mix agrees with the mix design proved herein, or document another proposed mix design, shall be witnessed by a representative of DDC's QACS Bureau.

Prior to all work under this contract, the Contractor shall file with the Engineer Age-Strength data sheets of the job mix formulas for each type of concrete he proposes to use, for various ambient temperatures anticipated during the work period. These data sheet shall be used in determining the curing periods of the concrete used. Data sheets are to be presented in both tabular and graphical forms for various ambient temperatures with a maximum setting period of six (6) hours.

All materials and equipment to be used by the Contractor shall be as approved by the Engineer.

The earth subgrade, immediately before the concrete base is laid, shall be thoroughly compacted by an approved method, to the satisfaction of the Engineer. It shall be smooth, finished to the bottom elevation of the adjacent concrete base pavement, and be dampened with water sufficient only to be absorbed by the subgrade. The subgrade shall not be in a muddy or frozen condition and unsuitable material shall be removed and replaced with acceptable material, thoroughly compacted.

All constituents of concrete shall be delivered to the project site each work period as required. The Contractor shall supply concrete at a rate consistent with placement operations as determined by the Engineer. Concrete must be batched in sufficient quantity to prevent cold joints from being formed during placement. The Engineer may discontinue the use of any type of concrete mixing or transporting units when unsatisfactory results are obtained.

All concrete shall be discharged from the discharge openings directly into the forms or into approved conveyance equipment while fresh and before there is evidence of initial set. Concrete shall be deposited before the initial set has taken place, in as nearly a continuous operation as practical, and with approved tools which will prevent segregation. Concrete shall not be deposited in standing water and shall be thoroughly compacted by use of external vibration (poker nose or screed). No retampering of the concrete will be permitted. Retampering is defined as the addition of water after the mix has attained its desired initial slump.

Concrete cylinders shall be taken at each location of work, as directed by the Engineer, to be tested the same day by the City.

No traffic is to be permitted on newly placed concrete base until it has obtained the minimum 2,800 psi compressive strength specified.



3. Measurement. The quantity to be measured for payment under this item shall be the volume, in cubic yards, of extra high-early strength concrete laid where directed by the Engineer, measured in place, and adjusted for strength deficiencies in accordance with Section 5.04 of the Standard Highway Specifications.

In determining the volume of concrete to be paid for, the spaces occupied by bases of columns, manhole heads, gate boxes, road boxes, and similar structures will be deducted when their superficial areas measure more than one (1) square foot and will not be deducted when they measure one (1) square foot or less.

4. Price to Cover. The contract price per cubic yard of extra high-early strength concrete shall cover the cost of all labor, materials, equipment, insurance, and incidentals necessary to furnish, lay and cure the concrete, complete in place, in full compliance with the requirements of the specifications, to furnish such samples and cores for testing and to provide such testing equipment, laboratory space and facilities as may be required, to maintain the concrete base in good condition as specified in Section 5.05 of the Standard Highway Specifications, and completing the work in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.97 A	EXTRA-HIGH-EARLY STRENGTH CONCRETE	C.Y.

**SUGGESTED MIX DESIGN**

**FOR**

**EXTRA-HIGH-EARLY STRENGTH**  
**CONCRETE BASE**



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**Client:** Dept of Design & Construction **Report #:** 09DDC-95100 **Page 1 of 2**  
 30-30 Thompson Ave. **Date:** 01/26/09  
 Long Island City, N.Y. 11101 **Mix #:** 37  
**Concrete Class:** HE SuperPave **Cementitious:** 940 Type II

**CONCRETE FIELD DATA (ASTM C192)**

Cement lbs/ yd <sup>3</sup>	Sand lbs/ yd <sup>3</sup>	Stone lbs/ yd <sup>3</sup>	Water lbs/ yd <sup>3</sup>	Air Cont., %	Initial Slump in	Final Slump in	Concrete Temp, °F	Unit Wt. lbs/ yd <sup>3</sup>	Ambient Temp °F	Water Temp °F
940	1035	1750	253.3	5.8	0	10.50	85	148.0	60	183

Supplier: CASA Ready Mix  
 Sand: Roanoke-Washed / Specific Gravity: 2.63 – ASTM C33.  
 Stone: Tilcon Clinton Point / Specific Gravity: 2.81 – ASTM C33 #57  
 Type I/II Cement: LaFarge – ASTM C150.  
 Air: MBVR E90 65.8 oz/cu yd  
 Plast. BASF 1390 112.8 oz/cu yd  
 Accelerator: MBNC 534 846

**COMPRESSIVE STRENGTH OF CONCRETE TEST CYLINDERS (ASTM C39) (4" D x 8" H)**

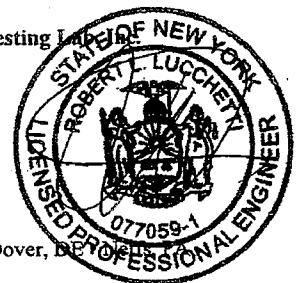
Field #	Date Cast	Date Tested	Age, Days	Cross-Sect. Area, (sq. in.)	Total Load (Lbs.)	Fracture Type	Strength (PSI)	°C Hrs Mat.	Cyl Temp °F	Complies
1	01/26/09	01/26/09	2h	12.57	765	B	61	65	89	
2	01/26/09	01/26/09	3h	12.57	4020	B	320	100	90	
3	01/26/09	01/26/09	3.5h	12.57	6725	B	535	114	104	
4	01/26/09	01/26/09	4h	12.57	12760	B	1015	138	109	
5	01/26/09	01/26/09	4h	12.57	15410	B	1226	140	109	
6	01/26/09	01/26/09	4 ½h	12.57	18640	D	1483	159	111	
7	01/26/09	01/26/09	5	12.57	24300	D	1933	182	114	
8	01/26/09	01/26/09	5 ½h	12.57	32495	D	2585	205	114	
9	01/26/09	01/26/09	6h	12.57	40475	D	3220	228	114	Y
10	01/26/09	01/26/09	6h	12.57	36520	D	2910	228	114	Y
11	01/26/09	01/26/09	7h	12.57	45400	D	3612	275	116	Y
12	01/26/09	01/27/09	7h	12.57	91780	D	7302	881	77	Y
13	01/26/09	01/27/09	7h	12.57	94510	D	7519	881	77	Y
14	01/26/09	01/28/09	2	12.57	107670	D	8565	1303	62	Y

A B C D E



Cone Cone & Split Cone & Shear Shear Columnar

Submitted By: Materials Testing Lab



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**Client:** Dept of Design & Construction  
 30-30 Thompson Ave.  
 Long Island City, N.Y. 11101

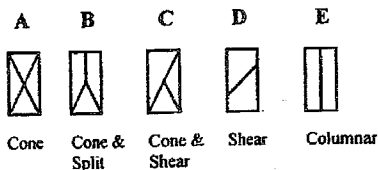
**Report #:** 09DDC-95100  
**Date:** 01/26/09  
**Mix #:** 37

**Concrete Class:** HE SuperPave  
**Cementitious:** 940 Type II

Page 2 of 2

**COMPRESSIVE STRENGTH OF CONCRETE TEST CYLINDERS (ASTM C39) (4" D x 8" H)**

Field #	Date Cast	Date Tested	Age, Days	Cross-Sect. Area, (sq. in.)	Total Load (Lbs.)	Fracture Type	Strength (PSI)	°C Hrs Mat.	Cyl Temp °F	Complies
15	01/26/09	01/28/09	2	12.57	102555	D	8160	1303	62	Y
16	01/26/09	01/29/09	3	12.57	108270	D	8610	1779	68	Y
17	01/26/09	01/29/09	3	12.57	101095	D	8040	1779	68	Y
18	01/26/09	01/30/09	4	12.57	115610	D	9200	2247	68	Y
19	01/26/09	01/30/09	4	12.57	112340	D	8940	2247	68	Y
20	01/26/09	02/02/09	7	12.57	110965	D	8830	3738	71	Y
21	01/26/09	02/02/09	7	12.57	114050	D	9070	3738	71	Y
22	01/26/09	02/02/09	7	12.57	108760	D	8650	3738	71	Y
23	01/26/09	02/09/09	14	12.57	124850	D	9930	7232	69	Y
24	01/26/09	02/09/09	14	12.57	121170	D	9640	7232	69	Y
25	01/26/09	02/09/09	14	12.57	121010	D	9630	7232	69	Y
26	01/26/09	02/23/09	28	12.57	132110	D	10510	14381	68	Y
27	01/26/09	02/23/09	28	12.57	130760	D	10400	14381	68	Y
28	01/26/09	02/23/09	28	12.57	127590	D	10150	14381	68	Y
29	01/26/09	03/23/09	56	12.57	144830	D	11520	-	-	Y
30	01/26/09	04/21/09	84	12.57	150210	D	11950	-	-	Y
31	01/26/09	04/21/09	84	12.57	147520	D	11740	-	-	Y



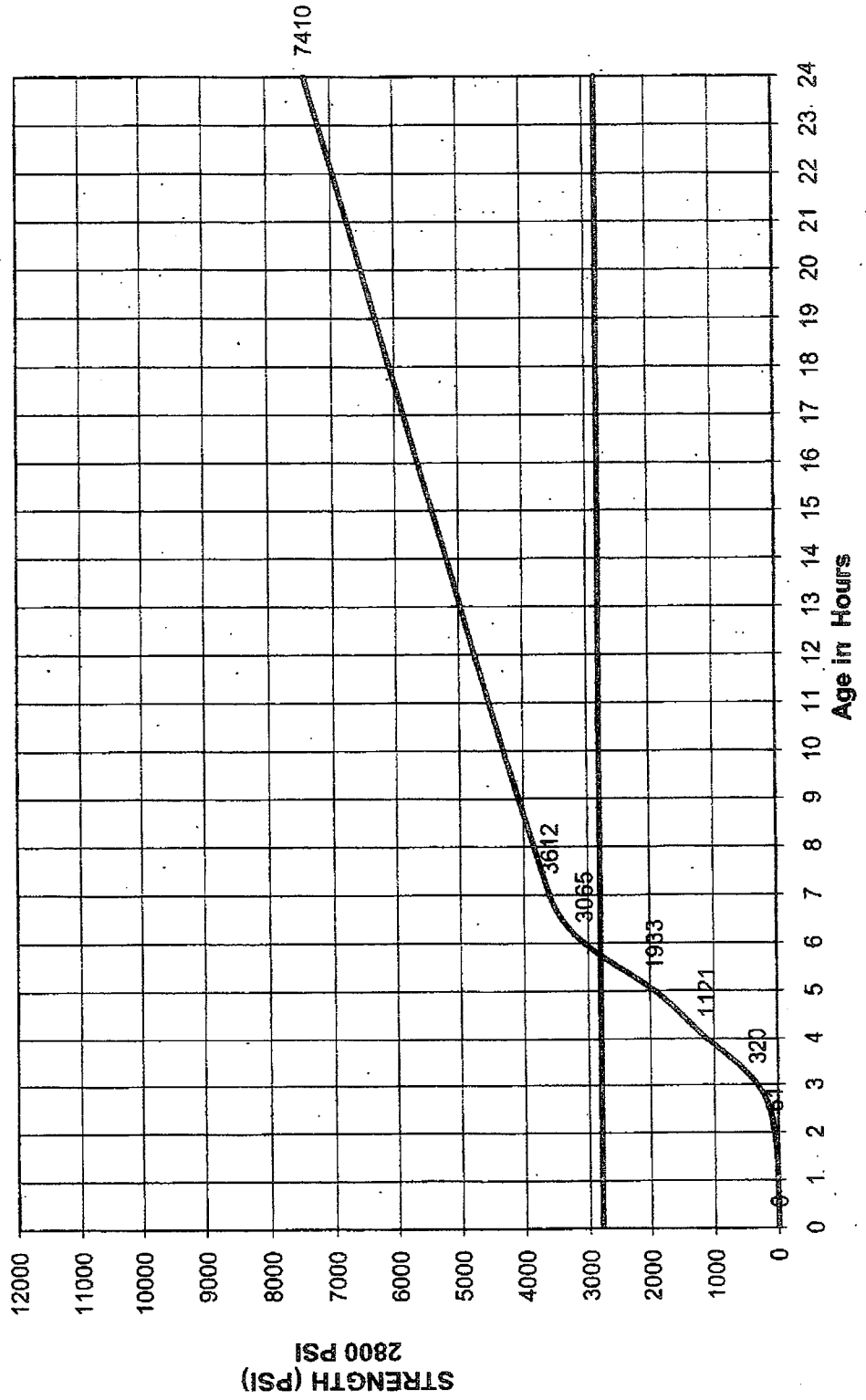
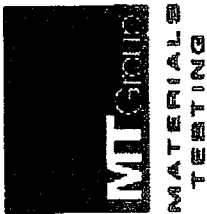
Submitted By: Materials Testing Lab

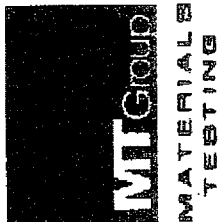


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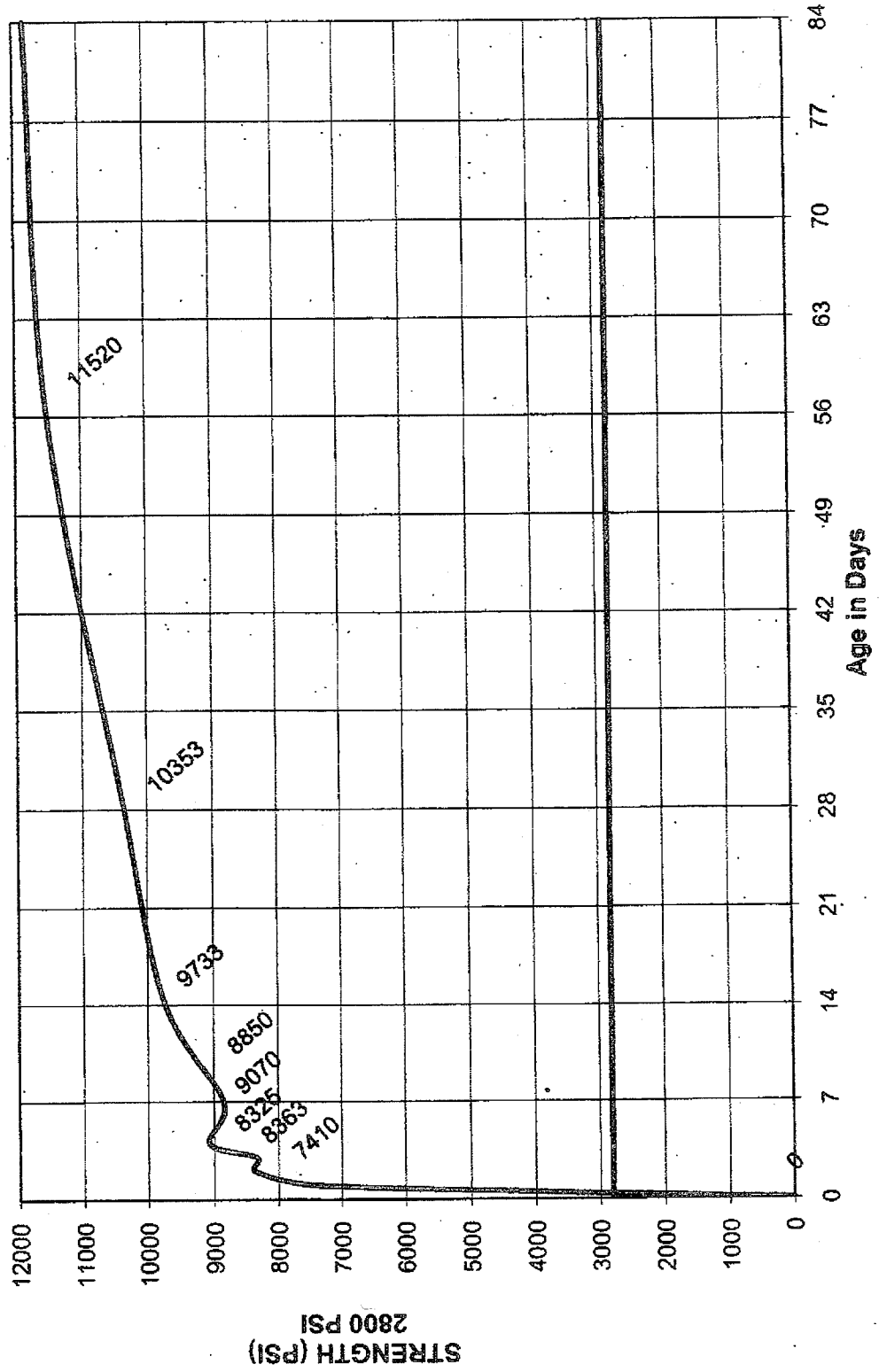
**DDC MIX DESIGNS**  
**Strength Gain over Time**  
**SUPER HE SUPERPAVE**  
**Cementitious 940 Type II**  
**MIX # 37**



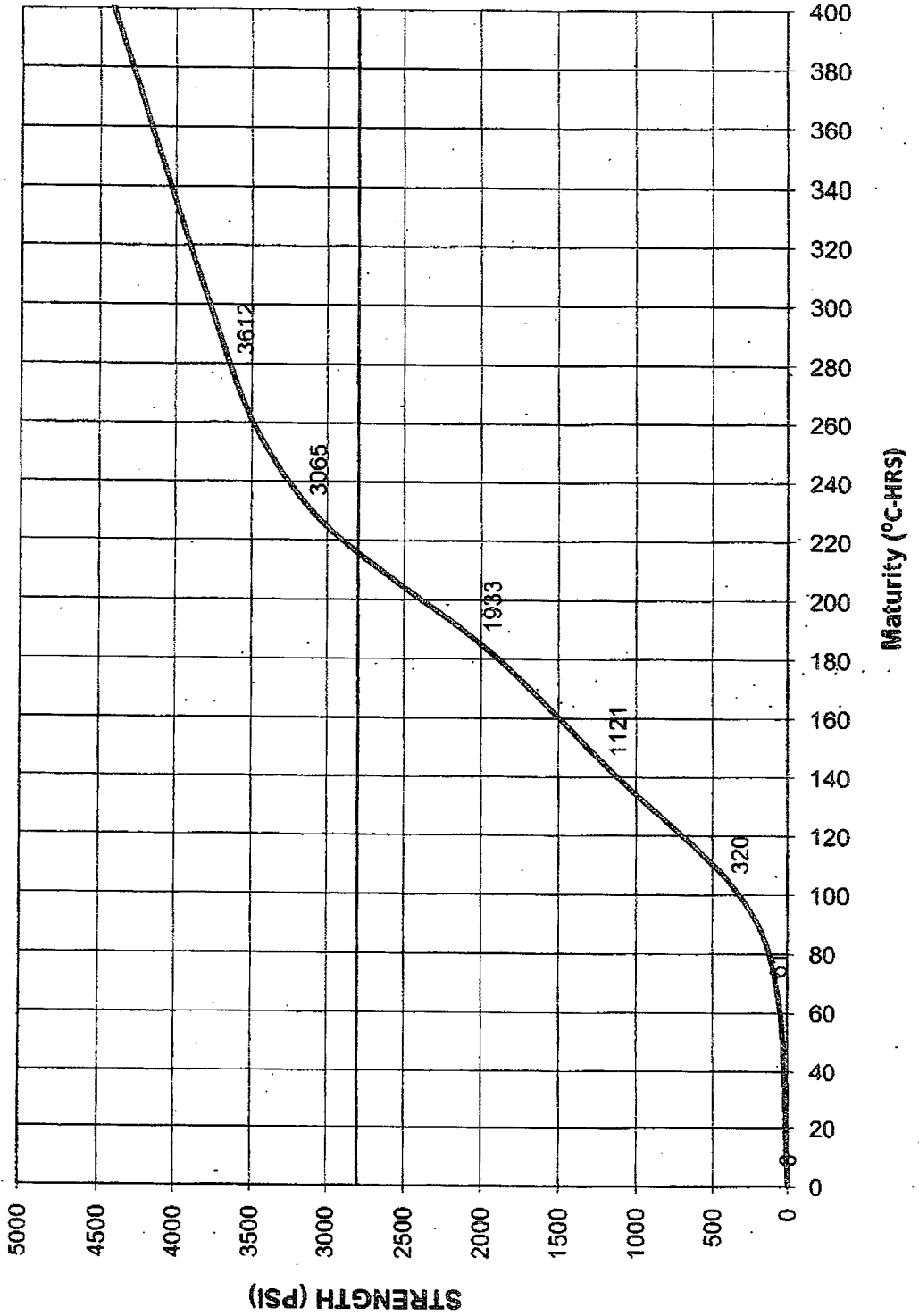


**DDC MIX DESIGNS**  
**Strength Gain over Time**  
**SUPER HE SUPERPAVE**  
**Cementitious 940 Type II**  
**MIX # 37**

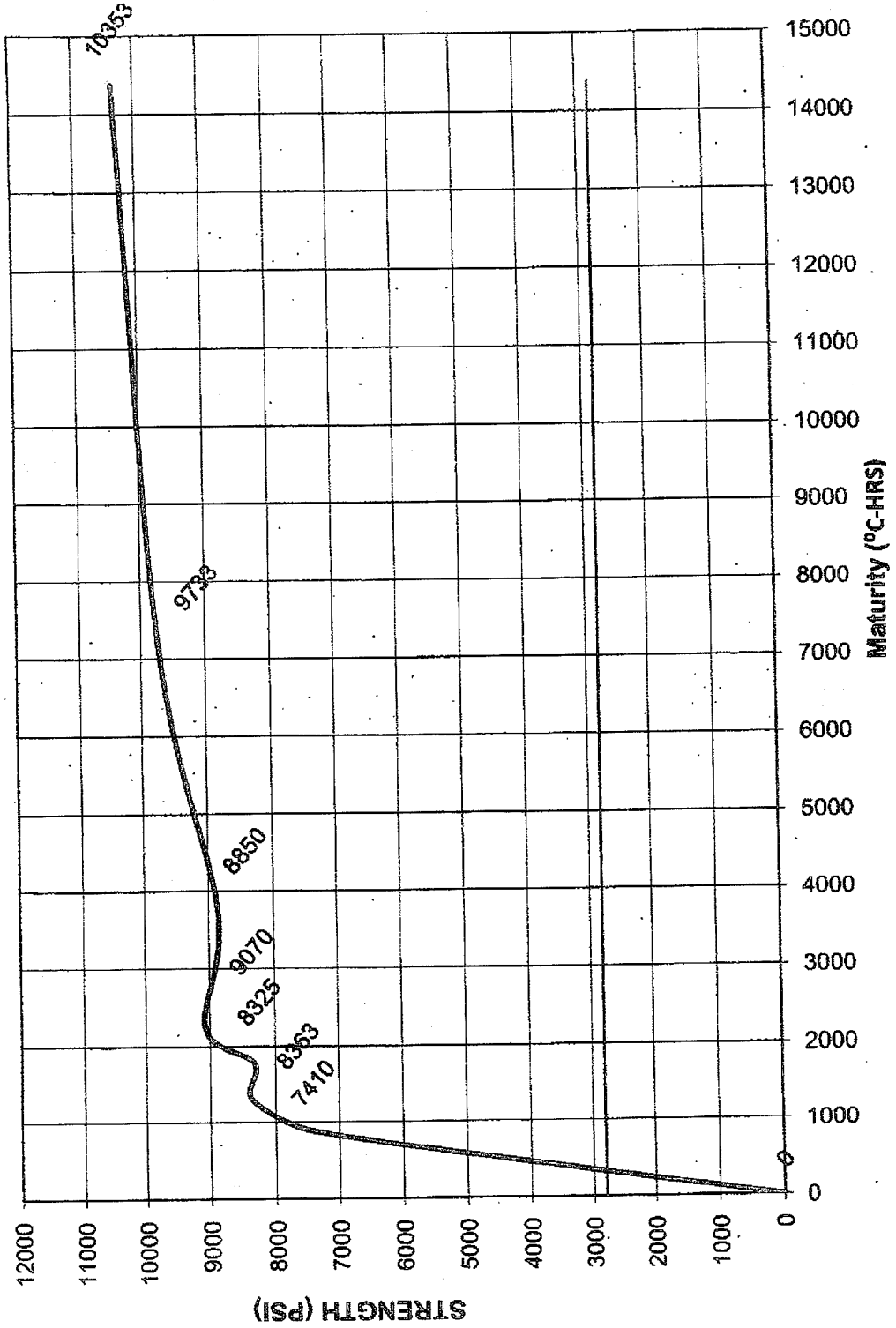
11845



**DDC MIX DESIGNS**  
**Strength Maturity Relationship**  
**SUPER HE SUPERPAVE**  
**Cementitious 940 Type II**  
**MIX # 37**



**DDC MIX DESIGNS**  
**Strength Maturity Relationship**  
**SUPER HE SUPERPAVE**  
**Cementitious 940 Type II**  
**MIX # 37**

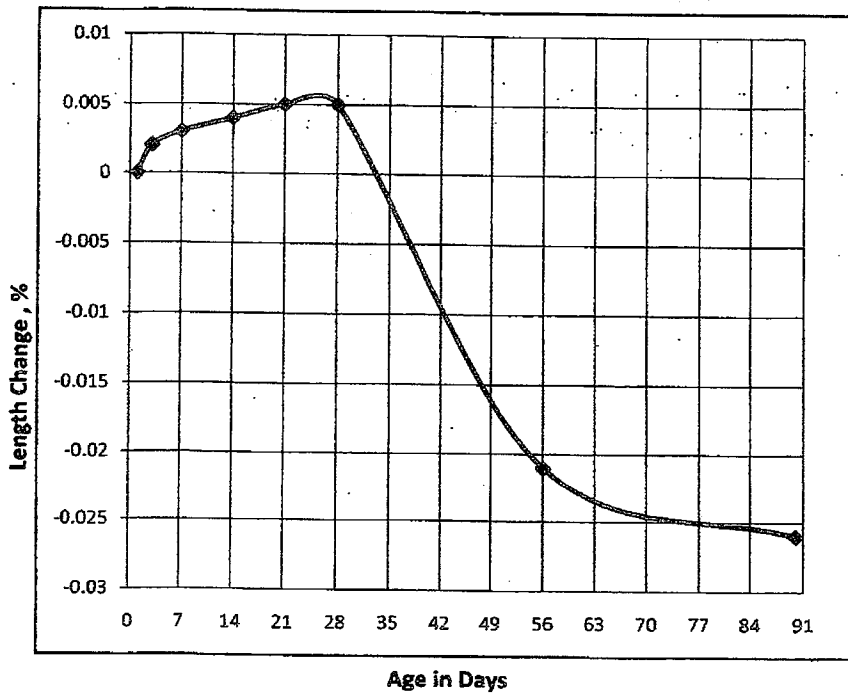




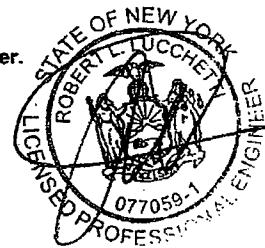


Client: NYC DDC  
Green Concrete Design Mixes  
Procedure: ASTM C 157-06  
4" x 4" x 10" Concrete Prism  
MIX # 37 - Super HE Superpave - Cementitious 940 Type II

Days	Length Change, %
1	0
3	0.002
7	0.003
14	0.004
21	0.005
28	0.005
56	-0.021
90	-0.026



Remarks: For the 28 day result, the sample was immersed in lime saturated water.  
For the 56 & 90 day results, the sample was air-dried.





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 www.materials-testing.com

<b>Client:</b>	NYC Dept. of Design & Construction 30-30 Thomson Avenue Long Island City, NY 11101	<b>Report #:</b> 09DDC-767	<b>Page 18 of 19</b>
		<b>Date:</b> 05/06/09	
		<b>Lab# :</b> 9273	
<b>Project:</b>	DDC Green Concrete Design Mixes		
<b>Test:</b>	Standard Test Method for Resistance of Concrete Cores to Freezing & Thawing.		
<b>Method:</b>	NYSDOT Method 502-3P		
<b>Sampled By:</b>	MTL		

**Test Procedure**

The concrete samples were tested in accordance with NYSDOT Method 502-3P. The samples were completely surrounded in 3% NaCl solution at all times while being subjected to 25 freezing and thawing cycles.

**Required - Material shall not exhibit a weight loss greather than 3 %.**

**Test Results**

Mix #	Cementitious lb/cy	% Fly Ash	Weigth Loss %	Complies
37	940	-	0.0	Yes

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**Reported To:** Simon Sauberman  
**Submitted By:** Materials Testing Lab, Inc.  
 Materials Testing accepts no liability for errors conducted by others.





**Materials Testing Lab Inc.**  
 NY Metropolitan Regional Office / Corporate Headquarters  
 145 Sherwood Avenue, Farmingdale, NY 11735 (631) 815-1900 FAX (631) 815-1901  
 www.materials-testing.com

**Client:** NYC Dept. of Design & Construction      **Report Date:** 11/07/08      **Page 1 of 2**  
 30-30 Thomson Avenue      **Material:** Natural Sand  
 Long Island City, NY 11101      **Supplier:** CASA

**Project:** DDC Green Concrete Design Mixes  
**Test:** Gradation, #200 Wash, Specific Gravity and Absorption of Fine Aggregate  
**Method:** ASTM C117, ASTM C136, ASTM C128  
**Sampled By:** MTL      **On** 11/06/08      **Delivered By:** Materials Testing Lab

**Gradation, #200 Wash**

Sieve Size	% Passing #1	ASTM C33 Specification
3/8"	100.0	100
#4	99.6	95-100
#8	94.0	80-100
#16	83.1	50-85
#30	58.0	25-60
#50	19.0	10-30
#100	4.4	2-10

**Specific Gravity and Absorption of Fine Aggregate**

Specific Gravity (OD):	2.629
Specific Gravity (SSD):	2.653
Apparent Specific Gravity:	2.694
Absorption, %:	0.92

**Location:** Ronoke Sand - Washed

**Complies:**  Y

**Remarks:**  
**Lab # 9064**

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**Reported To:** --  
**Submitted By:** Materials Testing Lab, Inc.





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**Client:** NYC Dept. of Design & Construction **Report Date:** 11/07/08 **Page 2 of 2**  
 30-30 Thomson Avenue **Material:** Crushed Stone  
 Long Island City, NY 11101 **Supplier:** CASA

**Project:** DDC Green Concrete Design Mixes  
**Test:** Gradation, #200 Wash, Specific Gravity and Absorption of Coarse Aggregate  
**Method:** ASTM C117, ASTM C136, ASTM C127  
**Sampled By:** MTL **On** 11/06/08 **Delivered By:** Materials Testing Lab

**Gradation, #200 Wash**

Sieve Size	% Passing #1	ASTM C33 Size #57 Specification
1 1/2"	100.0	100
1"	100.0	95-100
3/4"	91.6	-
1/2"	43.8	25-60
3/8"	20.0	-
#4	5.8	0-10
#8	3.7	0-5
#200	2.2	0-3

**Specific Gravity and Absorption of Coarse Aggregate**

Specific Gravity (OD):	2.807
Specific Gravity (SSD):	2.825
Apparent Specific Gravity:	2.857
Absorption, %:	0.62

**Location:** Tilcon Clinton Point

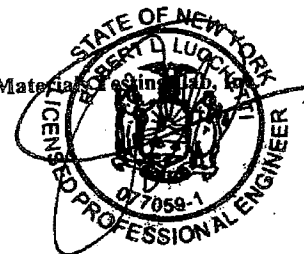
**Complies:**  Y

**Remarks:**  
**Lab # 9064**

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**Reported To:** --

**Submitted By:** Mater



SECTION 7.28 S

Project Information/Groundbreaking Signs (Type A and Type B)

7.28S.1. Intent. This section describes the work of furnishing and installing project information/groundbreaking signs of various sizes to provide the public with information relative to the contract.

These project information/groundbreaking signs are in addition to the standard project signs required under Article 1.06.46 of the General Provisions.

7.28S.2. Description. The work shall consist of furnishing, displaying, maintaining, removing, relocating, and disposing of project information/ground-breaking signs, of the various sizes specified, which will provide the affected public, during groundbreaking ceremonies and during the work to be performed under this contract, with pertinent background information related to the community and to the work to be performed under this contract.

7.28S.3. Materials and Methods. All materials and the details of fabrication, furnishing, erection, assembly and maintenance of each size sign shall conform to the requirements specified below. Attached is a sample of the sign design and content; however, the actual print ready design and content digital files, to be furnished to the Contractor, will be in color.

(A) TYPE A - LARGE FORMAT SUPPLEMENTAL CONSTRUCTION SIGN

1. DDC will provide the Contractor with complete, print-ready design and content on a compact disc in Adobe Illustrator file format.
2. Signs shall be 5' x 5'.
3. Signs shall be digitally printed in color on scrim vinyl banners (whiteness: 75 min; caliper: 19 mil; opacity: 100%) and shall be coated using a solvent borne vinyl elastomer clear coating. Signs shall be ultraviolet, scratch and water resistant. Sign shall be hemmed using weighted belts and shall have silver-colored grommets every foot around the edge on all four sides, 1/2" from the edge.
4. Signs shall be installed on plywood construction fences, chain link fences or on wooden stanchions, or as directed by the Engineer. Signs shall be stretched flat and secured tightly during installation.
5. Signs shall be installed in a highly visible location and moved as appropriate or as directed by the Engineer.

(B) TYPE B - SMALL FORMAT SUPPLEMENTAL CONSTRUCTION SIGN

1. DDC will provide the Contractor with complete, print-ready design and content on a compact disc in Adobe Illustrator file format.
2. Signs shall be 31" x 31".
3. Signs shall be digitally printed in color on 10 mm thick photo paper and shall be encapsulated on both sides with a 3 mm thick heat activated laminate. The laminate shall be a clear polyester film with coextruded heat activated copolymers and shall be ultraviolet, scratch and water resistant. The encapsulation shall leave a 1/4" border around the digital print and shall have a silver colored grommet in each corner.
4. Signs shall be installed in a highly visible location and move as appropriate or as directed by the Engineer. Signs shall be installed by securely tying the corners to pedestrian fencing with 8" white plastic zip ties.

7.28S.4. Measurement. The quantity to be measured for payment shall be the number of Project Information/Groundbreaking Signs, of each type, actually installed at the site to the satisfaction of the Engineer.

7.28S.5. Prices to Cover. The contract price bid per each type sign shall cover the cost of furnishing all labor, materials, plant, equipment, insurance, and necessary incidentals required and completing the work; all in accordance with the specifications and the directions of the Engineer.

*Payment will be made under:*

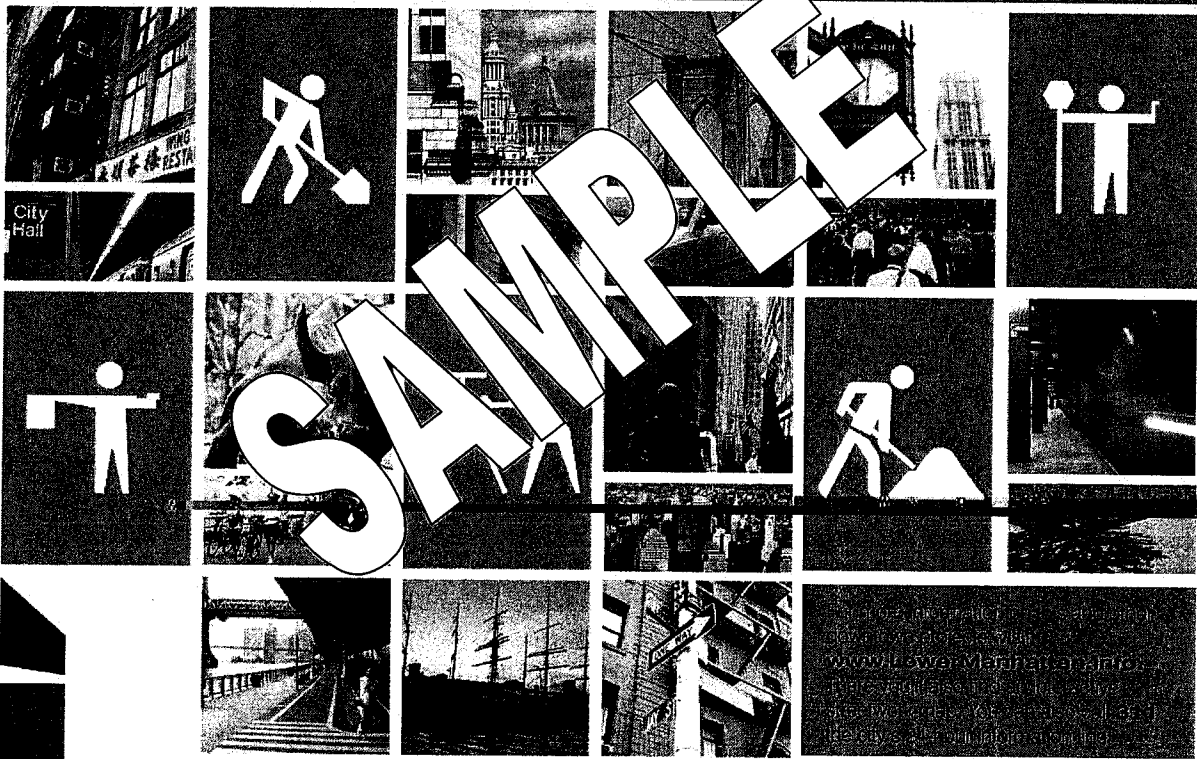
Item No.	Item	Pay Unit
7.28 SA	PROJECT INFORMATION/GROUNDBREAKING SIGNS, TYPE A (LARGE FORMAT)	EACH
7.28 SB	PROJECT INFORMATION/GROUNDBREAKING SIGNS, TYPE B (SMALL FORMAT)	EACH

# What's Going On Here?

Lower Manhattan is the heart of New York City, and the focus of a major effort to improve the quality of the downtown environment. The Lower Manhattan Development Corporation (LMDC) is currently preparing a plan for the Lower Manhattan Development Corporation (LMDC) to improve the quality of the downtown environment.

Part of Chambers Street is being excavated and will be replaced with a new building. The excavated area will be used for a new building. The excavated area will be used for a new building.

Work is scheduled to be completed by Spring 2006.



[www.LowerManhattan.info](http://www.LowerManhattan.info)

SECTION 8.02 J  
Special Modification of Work Methods  
for Installation of New Curb and Sidewalks

8.02J.1. Description. Under this Section, the Contractor shall be required to modify work methods of installing new curb and sidewalk in order to maintain, protect and accommodate the integrity of N.Y.C. Transit Authority (T.A.) facilities, trees, under-sidewalk building vaults, and private Utility Facilities located within a zone of protection immediately beneath existing sidewalk and curb designated to be replaced under other contract items. Private Utility Facilities to be maintained, protected and accommodate under this Section shall consist of Con Edison Co., Empire City Subway, Ltd. and Time Warner, but not cost-sharing Gas. The zone of protection shall define an area of curb and sidewalk where: work is within three (3') feet of T.A. facilities or under-sidewalk building vault facilities; work is within the area of private Utility Facilities, as shown on the Special Care Excavation Plan, where utilities are within 18 inches of either face of curb and/or 12 inches of the base material of proposed curb and/or sidewalk; and/or, work is within the vicinity of existing tree roots. Work in the vicinity of tree roots shall be as directed by the Engineer, in consultation with the Tree Consultant, for a minimum length of five (5') feet on each side of a tree's centerline.

This section is not intended to cover sidewalk replacement of monolithic vault roof/sidewalk slabs where there is no separation between the vault roof and sidewalk slabs.

8.02J.2. Materials. - Not applicable.

8.02J.3. Method of Operation/Construction: Once clearances have been verified by available records, and/or information obtained from test pits (excavated under other contract items), to the satisfaction of the Engineer in consultation with the Transit Authority/facility operator(s)/Tree Consultant, the Contractor shall exercise extreme caution to install new curb and sidewalks within zoned areas of protection. Exercising extreme caution shall mean utilizing appropriate methods of operation/construction, special operations and sequencing, and by employing hand labor, using hand held tools only, under the personal direction of the Engineer in consultation with the appropriate Transit Authority, facility operator, or Tree Consultant: for protection and accommodation of existing street trees where work is within the vicinity of existing tree roots, as directed by the Tree Consultant, for a minimum length of five (5') feet on each side of a tree's centerline; within three (3') feet in any direction of T.A. facilities or under-sidewalk building vault; and, for private Utility Facilities shown on the Contract Drawings, where Utility Facilities are within 18 inches of either face of curb and/or 12 inches of the base material of proposed curb and/or sidewalk. The work shall incorporate, but not be limited by, the following restrictions:



1) Removal of Existing Curb and Sidewalk. Removal of existing curb and sidewalk material shall be performed by sawcutting of curb and sidewalk, for a depth of not less than 2", to assist the Contractor in breaking up the concrete curb and sidewalk for removal by hand. Curb and sidewalk removal shall be done with hand labor, using hand held tools only, working from adjacent undisturbed sidewalk and/or pavement. Furthermore, it shall be understood to mean that digging and/or excavating directly with power mechanized earth moving equipment will not be permitted. Power mechanized earth moving equipment may only be used as a depository of material removed from the excavation by hand as described above. All equipment, methods, and maintenance and protection provisions shall require full authorization by the Engineer in consultation with the facility operator(s)/Tree Consultant.

No removal work will be allowed adjacent to existing trees without the Tree Consultant personally witnessing and directing the work. Every reasonable effort shall be taken so as not to cut or damage tree roots, particularly the thick anchor roots, during removal work. Exposed tree roots shall be covered and protected with clean damp topsoil and/or wet burlap, as approved by the Tree Consultant, immediately after exposure to keep the roots from drying out. Topsoil or burlap shall be kept damp with applications of water, as directed by the Engineer and/or the Tree Consultant. Any fill or backfill placed within the immediate vicinity of existing tree root zones shall be hand firmed only. No separate payment will be made for any topsoil or burlap used to cover and protect tree roots.

2) Preparation & Installation of New Curb and Temporary & New Sidewalk. Backfilling, filling, grading of subbase, and installation of new curb and both temporary and new sidewalk, as required under other Contract Items, shall be performed utilizing materials, equipment and methods of construction that will ensure the integrity of the N.Y.C. Transit Authority, under-sidewalk building vaults, private Utility Facilities, existing street trees, and at the same time meet all requirements for this work as specified in other sections of this contract.

3) Compaction. The Contractor shall compact all subgrade and new subbase materials in areas designated as being within the specified zones of protection by utilizing native and/or blended fill material, equipment and methods of construction that will ensure integrity of the N.Y.C. Transit Authority, private Utility Facilities, under-sidewalk building vaults, and at the same time meet all requirements for compaction as specified in Section 4.11 of the Standard Specifications.

Around trees, the Contractor shall avoid soil compaction caused by the operation of heavy equipment within the root zone area. Also,

the stock-piling of materials and debris in the vicinity of trees, as determined by the Tree Consultant, will not be permitted.

4) Powered Excavating Equipment Limitations. The Contractor shall not employ powered or mechanical excavating equipment within the zone of protection as shown on the Contract Drawings, closer than 3 feet in any direction from N.Y.C. Transit Authority facilities and/or under-sidewalk building vaults, or within the vicinity of tree roots as directed by the Tree Consultant. Powered or mechanical excavating equipment may only be used as a depository for material removed from the excavation by hand as described above.

The Contractor shall not be permitted to store, stand and/or travel equipment/vehicles on specified unpaved zoned protection areas.

8.02J.4. Method of Measurement.

The quantity of "Special Care Excavation and Restoration for Sidewalk Work" to be measured for payment shall be equal to the number of square feet (S.F.) of new sidewalk actually installed under other contract items within the zone of protection area.

The quantity of "Special Care Excavation and Restoration for Curb Work" to be measured for payment shall be equal to the number of linear feet (L.F.) of new curb actually installed under other contract items within the zone of protection area.

For payment purposes, the horizontal limits for a zone of protection area shall be defined, for the purpose of this section, as: the area designated on the Contract Drawings or an area equal to the length of the designated facility multiplied by its width plus three feet on either side; or, the area within the vicinity of existing tree roots as directed by the Tree Consultant for a minimum length of five (5') feet on each side of a tree's centerline. Where overlapping of the zones occur due to multiple facilities and trees, the area will be modified to one zone measured from the outside limits. Where the zone of protection area falls beyond the curb line the outside boundary shall be the curb line.

8.02J.5. Prices to Cover.

A. ITEM 8.02 JA. The contract price per square foot for "Special Care Excavation and Restoration for Sidewalk Work" shall be the incremental cost difference of all labor, materials, equipment, and incidentals required for excavation and disposal of pavement, base and all other material to new subgrade within and adjacent to zone of protection areas; sawcutting, grading, preparation of subgrades,

backfilling, and compaction within zone of protection areas; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer in consultation with the facility operator(s)/Tree Consultant. The price bid shall further include the cost of maintaining, protecting, and accommodating the integrity of existing Transit Authority facilities, private Utility Facilities, and existing street trees during the performance of sidewalk reconstruction (under other Contract Items) within zone of protection areas designated on the Contract Drawings or as directed by the Engineer in consultation with the NYC Transit Authority/facility operator(s)/Tree Consultant.

B. ITEM 8.02 JB. The contract price per linear foot for "Special Care Excavation and Restoration for Curb Work" shall be the incremental cost difference of all labor, materials, equipment, and incidentals required to install new curbs and temporary restoration material under other Contract items, within and adjacent to zone of protection areas; all in accordance with the Contract Drawings, the specifications and the directions of the Engineer in consultation with the NYC Transit Authority/facility operator/Tree Consultant.

Payment for all work specified herein for Item 8.02 JA and for Item 8.02 JB shall be made on a one-time basis only; no payment will be made for the same area of sidewalk or length of curb more than one time. In addition, work under these items shall not be paid in combination with other utility or facility accommodation items.

*Payment will be made under:*

Item No.	Item	Pay Unit
8.02 JA	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	S.F.
8.02 JB	SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	L.F.

SECTION 8.32  
Bark Chip Mulch

8.32.1. DESCRIPTION. Under this section, the Contractor shall furnish and place Bark Chip Mulch in accordance with the plans and specifications and as directed by the Engineer.

8.32.2. MATERIAL. Bark Chip Mulch shall be a natural forest product of 98% bark containing less than 2% wood or other debris. It shall be of white or Red Fir and/or Pine bark of a uniform grade with no additives or any other treatment. Size of bark shall be from 5/8" to 1-1/4". The ph factor should range from 5.8 to 6.2.

8.32.3. METHODS. Bark Chip Mulch shall be applied where required on the plans or directed by Engineer as a ground cover to the surface of beds and tree pits after the planting is completed. Mulch shall be applied to a uniform depth of three (3") inches and shall be so distributed as to create a smooth, level cover over the exposed soil. Plants shall not be covered.

8.32.4. MEASUREMENT. The quantity of Bark Chip Mulch to be paid for will be the number of square yards of ground surface area that has been satisfactorily covered with bark chip mulch within limits of enlarged tree pits surrounding existing trees as indicated on the plans and where directed by the Engineer.

8.32.5. PRICE TO COVER. The unit price bid per square yard for Bark Chip Mulch shall cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to complete the work under this section in accordance with the plans, the specifications and the directions of the Engineer.

No payment will be made under this item for furnishing and placing mulch in tree pits around newly planted or transplanted trees.

*Payment will be made under:*

Item No.	Item	Pay Unit
8.32	BARK CHIP MULCH	S.Y.

## SECTION 9.06 HW

## Allowance for Decorative Mesh Fabric

9.06HW.1. DESCRIPTION. Under this Section, the Contractor will be paid to furnish and install panels of breathable mesh fabric upon which art work is printed in a maximum of 4-colors, as directed by the Engineer. Each panel shall also contain metal grommets installed at a 1' maximum spacing around the perimeter of the fabric for mounting on the Lighted Timber Fencing for use in Lower Manhattan Project (Item No. 6.28 ME), unless an alternate method of mounting the fabric is proposed by the Contractor and approved by the Engineer. All art work to be printed on the fabric will be provided to the Contractor by the City.

At the completion of the work the panels shall remain the property of the City and shall be delivered to the Engineer, unless otherwise directed.

The lump sum payment made under this item shall be equal to the sum total of all invoices submitted by the Contractor, as approved by the Engineer, for furnishing and installing decorative mesh fabric materials, to the satisfaction of the Engineer, plus an allowance of 12% overhead and 10% profit.

The total estimated cost of this item is the "fixed sum" amount shown for this item in the Bid Schedule and shall not be varied in the bid. No guarantee is given that the actual lump sum cost for this item will in fact be the "fixed sum" amount. The "fixed sum" amount is included in the bid solely to insure that sufficient monies will be available to pay the Contractor for this work, which may be more or less than the fixed amount. This "fixed sum" amount shall be included with the other amounts bid by the Contractor for all the other items under this contract.

The unit price shall cover the cost of all labor, materials, equipment, insurance, and incidentals necessary to complete the work under this section in accordance with the Contract Drawings, the specifications and the directions of the Engineer

*Payment will be made under:*

Item No.	Item	Pay Unit
9.06 HW	ALLOWANCE FOR DECORATIVE MESH FABRIC	F.S.

**ITEM 637.9520 – FIELD INFORMATION MANAGEMENT SYSTEM**

**DESCRIPTION:**

This work shall consist of providing a fully operational field information collection and management system and support services.

**MATERIALS:**

The field information management system shall include all the components, and adhere to, the specifications in Attachment A attached to this specification.

The Contractor is required to have the vendor of the field information management system on call for support services for the duration of the contract.

**CONSTRUCTION DETAILS:**

The Contractor shall provide and maintain a field information management system with access made available to parties as designated by the Engineer. The Contractor shall make the system fully operational, including training, prior to the project first working day.

The system shall be maintained and remain in service until either: (a) the Engineer requests its removal in writing, (b) the NYCDOT relinquishes the Engineer’s field office and the field information management system is relinquished as part of the Engineer’s field office, or (c) the later of either thirty (30) days after the final contract acceptance date or thirty (30) days after the date the Contractor provided the last documentation necessary for processing the final contract acceptance.

Ownership of the software supplied by the Contractor shall remain the property of New York City Department of Transportation (NYCDOT). All data is the property of NYCDOT and shall be provided in a useable format at the completion of the contract.

The Contractor shall maintain the information management system vendor account in good standing to prevent service interruptions for the duration of the project.

**METHOD OF MEASUREMENT:**

The field information management system will be measured on a fixed price Dollar Cents pay unit basis.

**BASIS OF PAYMENT:**

The pay item is a ‘draw down’ item. As materials are supplied, the receipts for the materials shall be submitted to the Engineer (Note: ‘materials’ includes all software, software customizations, labor, services, and service contracts provided to furnish and maintain all of the components of the system). The Contractor will be reimbursed for receipted costs of materials plus five percent (5%) for profit and overhead.

The total cost shown in the itemized proposal for this pay item will be considered the price bid even though payment will be made only for actual materials supplied, with profit and overhead. The unit price amount is not to be altered in any manner by the bidder. Should the bidder alter the amount shown, the altered figure will be disregarded, and the original price will be used to determine the total amount bid for the contract.

*Payment will be made under:*

Item No.	Item	Pay Unit
637.9520	FIELD INFORMATION MANAGEMENT SYSTEM	F.S.

**ITEM 637.9520 – FIELD INFORMATION MANAGEMENT SYSTEM**

**ATTACHMENT A**

This pay item shall include supplying a cloud based field information management system with the following capabilities.

**ACCESS**

- Accessible from any internet connected desktop and laptop through a vendor supported browser
- Accessible from vendor supported mobile tablets (ex. Apple iPad)

**SYSTEM FUNCTIONALITY**

The system will provide the following functionality in real time to all authorized users:

- Field Recording
  - Work Report (Inspector Reports) progress tracking quantity, labor, equipment, field sketches, forms, etc.
  - Engineer Reports (EIC Journals) with automatically integrated Work Reports
  - Punch List Issue tracking with Ball In Court, Priority and Due Date assignment
- Cost Control
  - Generate Payment Estimate (Progress Payment) with thresholds to warn Engineer of the following payment scenarios: Quantity Over Authorized Quantity, Quantity Over Material Acceptance Restriction, Charge to Contractor Recorded, Force Account Estimate limit, Field Change Payment Recorded, Major Item Over Run, Minor Item Over Run and Material Partial Payment Recorded
  - Material Acceptance Tracking Module
  - Material Partial Payment (MOH/Stockpile) Module
  - Contract Change Order Module
  - Field Change Payment Tracking
  - DBE Tracking
  - Retainage Tracking
  - Provide electronic data input into NYSDOT CEES system
  - Project Close Out Milestone tracking and CEES based Close Out Reports
  - CEES based Reporting Module
- Document Control (all with Ball in Court, Priority, Due Date and electronic notifications for electronic communication between project participants)
  - Request For Information (RFI) Module
  - Submittal Module
  - Submittal Package Module
  - Transmittal Module
  - Meeting Minutes Module
  - Messages Module
  - File Cabinet for storage of (Photos, Videos, Forms, Contract Documents, Specifications and all project files)
    - Ability to electronically load files into File Cabinet via upload and/or email into from web based email systems
  - Plan Module. (Ability to view, organize and submit/approve original & marked up plans)

**ITEM 637.9520 – FIELD INFORMATION MANAGEMENT SYSTEM**

- Scheduling
  - Display current approved CMP schedule
  - Ability to record activities against CPM schedule
  - Ability to export actual activities used information into Scheduling Software
- Archive. Provide automated conversion of Project records into text selectable PDF files organized into standard folder structure for storage and/or printing
- Provide continual (when and wherever wireless service is reasonably available) two-way synchronization between all components of the system
  - Provide offline option for vendor approved mobile device
- Integrated Search Module
- Support/Help Module

**DATA REQUIREMENTS**

The following information is required for Project Set Up

- Searchable Contract Plans and Proposal
- Searchable Standard Specifications
- Searchable common Data Resources (MURK Manuals, Standard Sheets, Engineering Instructions, etc.)
- Initial CPM Schedule
- Field User Forms

**DATA STORAGE /TRANSFER**

- Data shall be stored and maintained on a cloud based server with regular secondary location backups
- Continual access to system shall be available from the office and field office shall be provided (via internet)
- Raw data will be made available to NYCDOT through provided API
- All data shall be transferred to NYCDOT in a useable electronic format at the end of the contract

**MAINTENANCE /SERVICE**

- Any as-needed maintenance/service/upgrades shall be provided in a timely manner
- Software is able to be customized for NYCDOT direction

**TRAINING**

- In-person training on the use of the systems shall be provided
- Continuous help call support also shall be available for the duration of the contract
- Training and support services shall be performed by a qualified representative from the field information management system vendor



SECTION 91698.93  
INCENTIVE PAYMENTS AND DISINCENTIVE  
ASSESSMENTS FOR B PORTION WORK

1. DESCRIPTION. There is no physical work to be accomplished under this item. This item will enable the Department to make incentive payments to (or disincentive assessments against) the Contractor for early substantial completion (or late completion) of "B" portion work based on the Contractor's bid in units of time "N" on page C-4 of the Bid Booklet.
2. MATERIALS. Not applicable.
3. CONSTRUCTION DETAILS. There are no construction details for this item.
4. METHOD OF MEASUREMENT. The method of measurement shall be lump sum. Actual payments-incentive (or deductions-disincentive) made under this item shall be as stated below.
5. BASIS OF PAYMENT. The amount set forth in the proposal is a fixed price for all bidders. Any bid, other than the specified amount shown in the itemized proposal, will be adjusted by the Department to the fixed price.

The Contractor shall be entitled to payment for this item as follows: To determine the actual lump sum payment-incentive or lump sum deduction-disincentive under this pay item, the number of consecutive calendar days actually required to accomplish the identified "B" portion work will be compared to the number of consecutive calendar days declared on page C-4 of the Bid Booklet by the Bidder to be necessary for "B" portion work completion, excluding punch list and planting work. Should the identified "B" portion work take longer than the number of calendar days declared by the Bidder (as may be adjusted under the contract terms), the number of consecutive calendar days in excess thereof will be multiplied by the Daily Cost of \$10,000.00, and that product (lump sum) will be deducted from monies otherwise due the Contractor as a disincentive. Should the consecutive calendar days required to substantially complete the identified "B" portion work be fewer than the number declared (as may be adjusted under the contract terms), the difference will be multiplied by the Daily Cost of \$10,000.00, and that product (lump sum) will be paid to the Contractor as an incentive. However, time extensions, for whatever reasons granted, will not be deducted from the number of consecutive calendar days actually required to accomplish the identified "B" portion work to determine incentive payments and the incentive shall not exceed \$1,200,000.

Deductions-disincentive made under the terms of this item shall be made as Liquidated Damages as indicated in Schedule A and in the Special Provisions of this Addendum. Any payments made under this item shall be regarded by the parties to include the cost of all overhead, profit, labor, equipment, supplies, materials, insurance, scheduling, and management necessary to substantially accomplish the work within the actual number of days taken. The work of the other items in the Contract will be measured and paid for separately under their appropriate items of work.

SECTION HW-900H  
Allowance for City Work Acceleration

Under this Section, the Contractor will be paid for City work deemed necessary by DDC's Commissioner to accelerate the City work items in the project during critical periods but the use of this item will expire on the original contract substantial completion date. Such accelerated City work includes:

- A. 100% of the premium portions of overtime pay for working during non-scheduled work hours which shall be defined as those hours of work outside the permissible hours stated in the original contract OCMC Traffic Stipulations; or,
- B. The premium portion of overtime pay for overtime actually worked beyond the 40-hour work week but within the permissible hours of work stated in the original contract OCMC Traffic Stipulations; or,
- C. All other incidental expenditures caused by modifications of project site regulations or administrative requirements ordered by the Commissioner that result in additional costs to perform contract work as specified.

Such accelerated City work shall be paid for under this item in accordance with the requirements of **Articles 25 and 26** of the Standard Construction Contract.

Payment made under this Fixed Sum item shall cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to accelerate the City work as ordered by DDC's Commissioner.

No guarantee is given that this allowance item will in fact be required in this contract. The estimated "fixed sum" amount shown in the Bid Schedule is included in the total bid solely to insure a method of payment for any accelerated work performed by the Contractor, as directed by DDC's Commissioner.

*Payment will be made under:*

Item No.	Item	Pay Unit
HW-900H	ALLOWANCE FOR CITY WORK ACCELERATION	F.S.

SECTION HW-908

Allowance for Extra Work due to Archaeological Discoveries

In accordance with the Special Provisions article titled "ARCHAEOLOGICAL DISCOVERIES", should extra work be ordered by the Resident Engineer as a result of any archaeological discoveries being found under this project, it shall be paid for under this item as extra work in accordance with the requirements of Article 26 in the Standard Construction Contract dated December 2013.

Payment made under this Fixed Sum item shall cover the cost of all labor, materials, plant, equipment, insurance, and incidentals necessary to complete any extra work ordered by the Resident Engineer due to archaeological discoveries found at the site.

No guarantee is given that this allowance item will in fact be required in this contract. The estimated "fixed sum" amount shown in the Bid Schedule is included in the total bid solely to insure a method of payment for any extra work performed by the Contractor, as directed by the Engineer in consultation with the City's Archaeologist due to archaeological discoveries found at the site.

*Payment will be made under:*

Item No.	Item	Pay Unit
HW-908	ALLOWANCE FOR EXTRA WORK DUE TO ARCHAEOLOGICAL DISCOVERIES	F.S.

**SECTION HW-910  
PRICE ADJUSTMENTS****HW-910.1. DESCRIPTION.**

This section will provide for additional compensation to the Contractor for increases, or repayment by the Contractor for decreases, in the price of asphalt, fuel, or steel/iron products.

No adjustment will be provided for any extra work to be paid for in accordance with **Article 26** of the Standard Construction Contract. Additional quantities of existing eligible contract pay items at original bid prices will be considered eligible work. Additional work added by agreed price will not be considered eligible work for price adjustment. Work performed by the Contractor at its own expense will not be eligible for price adjustment.

- (A) Asphalt Price Adjustment.** This item will enable the Department to make price adjustments to account for changes in asphalt prices. Price adjustments will be based on the monthly average posted price of the Performance Grade Binder (PGB), regardless of the type asphalt cement used in the work. Price adjustments will be made for eligible work items listed at the end of this section under the title "ELIGIBLE WORK ITEMS FOR ASPHALT PRICE ADJUSTMENTS". Only those items listed will be eligible for price adjustment, no other items will be considered eligible.
- (B) Fuel Price Adjustment.** This item will enable the Department to make price adjustments to account for changes in fuel prices. Price adjustments will be made for eligible work items listed at the end of this section under the title "ELIGIBLE WORK ITEMS FOR FUEL PRICE ADJUSTMENTS". Only those items listed will be eligible for price adjustment, no other items will be considered eligible.
- (C) Steel/Iron Price Adjustment.** This item will enable the Department to make price adjustments to account for changes in steel/iron product prices for materials which will be permanently incorporated into the work. Price adjustments will be made for eligible work items listed at the end of this section under the title "ELIGIBLE WORK ITEMS FOR STEEL/IRON PRICE ADJUSTMENTS". Only those items listed will be eligible for price adjustment, no other items will be considered eligible.

**HW-910.2. MATERIALS.** None specified.

**HW-910.3. CONSTRUCTION DETAILS.**

**(A) Asphalt Price Adjustment.** The asphalt price adjustment will be based solely on the price changes for asphalt as determined by the formulas below. No consideration will be given to the situation where an individual supplier's price exceeds the monthly average posted price, nor will any adjustment be made if the monthly average posted price is within \$15.00 of the Performance Graded Binder (PGB) index price.

**(1) Quantity.** The quantity of asphalt (tons) considered for adjustment will be determined by multiplying the quantity of eligible work items completed by the conversion factors which are listed at the end of this section under the title "ELIGIBLE WORK ITEMS FOR ASPHALT PRICE ADJUSTMENTS".

**(2) Prices.** The PGB index price and the monthly average posted price are defined as follows:

- (a) Asphalt Index Price.** A fixed price per ton of PGB used solely as a basis from which to compute asphalt price adjustments. The PGB index price will be the monthly average posted price for the month of the bid letting, as listed in the NYS Department of Transportation's Engineering Bulletin entitled "*Fuel, Asphalt and Steel Price Adjustments*". The PGB index price for overruns at the original contract bid price will be the monthly average posted price for the month of the bid letting. The PGB index price

for extra work at agreed price will be the monthly average posted price for the month the agreed price was submitted to the Engineer.

**(b) Monthly Average Posted Price.** The monthly average posted price will be determined by the Department, based on prices posted in a monthly NYS Department of Transportation's Engineering Bulletin entitled "*Fuel, Asphalt and Steel Price Adjustments*".

**(3) Adjustment.** Asphalt price adjustment will be based on the following formulas:

**(a) When price increases is greater than \$15:**

Price Adjustment = (Quantity of Asphalt) x (Monthly Average Posted Price - PGB Index Price - \$15.00)

**(b) When price decreases is greater than \$15:**

Price Adjustment = (Quantity of Asphalt) x (Monthly Average Posted Price - PGB Index Price + \$15.00)

**(B) Fuel Price Adjustment.** The fuel price adjustment will be based solely on the price changes for fuel as determined by the formulas below. No consideration will be given to the situation where an individual supplier's price exceeds the monthly average posted price, nor shall any adjustment be made if the monthly average posted price is within \$0.10 of the fuel index price.

**(1) Quantity.** The quantity of fuel (gallons) considered for adjustment will be determined by multiplying the quantity of eligible work completed by the fuel usage factor which are listed at the end of this section under the title "ELIGIBLE WORK ITEMS FOR FUEL PRICE ADJUSTMENTS".

**(2) Prices.** The Fuel Index Price and the monthly average posted price are defined as follows:

**(a) Fuel Index Price.** A fixed price per gallon of fuel used solely as a basis from which to compute fuel price adjustments. The fuel index price will be the monthly average posted price for the month of the bid letting, as listed in the Engineering Bulletin entitled "*Fuel, Asphalt and Steel Price Adjustments*". The fuel index price for overruns at the original contract bid price will be the monthly average posted price for the month of the bid letting. The fuel index price for extra work at agreed price will be the monthly average posted price for the month the agreed price was submitted to the Engineer.

**(b) Monthly Average Posted Price.** The monthly average posted price will be determined by the Department, based on prices posted in a monthly NYS Department of Transportation's Engineering Bulletin entitled "*Fuel, Asphalt and Steel Price Adjustments*".

**(3) Adjustment.** Fuel price adjustment will be based on the following formulas:

**(a) When price increases is greater than \$0.10:**

Price Adjustment = (Quantity of Fuel) x (Monthly Average Posted Price - Fuel Index Price - \$0.10)

**(b) When price decreases is greater than \$0.10:**

Price Adjustment = (Quantity of Fuel) x (Monthly Average Posted Price - Fuel Index Price + \$0.10)

**(C) Steel/Iron Price Adjustment.** If the percentage change does not exceed 5% plus or minus, from the benchmark steel index, no adjustments will be made for materials invoiced that month.

The weight of the steel and/or iron shall be determined from manufacturer's/supplier's data or shipping weights, and exclude minor appurtenances individually weighing less than 5-lbs. (i.e.,

nuts, bolts, washers, etc.). The following sources shall be used, in declining order of precedence, to determine the weight of steel/iron: approved shop drawings, contract documents, Department Standard Sheets, industry standards (i.e., AISC Manual of Steel Construction, AWWA Standards, etc.) and manufacturer's data. Materials will be considered invoiced when invoiced from a Manufacturer or Material Supplier to the Contractor, to a Subcontractor or to a Fabricator.

**(1) Quantity.** The quantity of steel and/or iron considered for adjustment for each eligible contract pay item number (e.g., Item No. 60.21SP3T36 - FURNISHING, DELIVERING AND LAYING 36-INCH STRAIGHT STEEL PIPE, 3/8-INCH WALL THICKNESS) will be measured to the nearest 0.1-Tons.

**(a) Percent Change Greater Than 5%.** If the percentage change calculated by the Engineer is greater than 5%, Price Adjustments will be made for materials invoiced that month. The Contractor shall provide the Engineer a detailed list of the weight of eligible materials, including: the contract pay item, the weight of steel/iron, the month(s) of invoice, the source used to determine the weight, and if requested by the Engineer, copies of invoices to verify the month of invoice.

**(b) Percent Change -5% to +5%.** If the percentage change calculated by the Engineer is 5% or less, no adjustments will be made for materials invoiced that month. The Contractor shall provide the Engineer with a list of the materials invoiced that month, including the contract pay item, the quantity invoiced, and if requested by the Engineer, copies of invoices to verify the month of invoice. The list shall be provided not later than the 15th of the following month.

**(c) Percent Change Lower Than -5%.** If the percentage change calculated by the Engineer is lower than -5%, a Price Rebate will be charged to the Contractor for materials invoiced that month. The Contractor shall provide the Engineer a detailed list of the weight of eligible materials, including: the contract pay item, the weight of steel/iron, the month(s) of invoice, the source used to determine the weight, and if requested by the Engineer, copies of invoices to verify the month of invoice. If the Contractor fails to provide the information required to determine the Price Rebate within 60-calendar days after the end of the month, the percentage change will be applied to the entire unit price, until such time as the Contractor provides the required information.

**(2) Prices.** The Benchmark Steel Index and the Monthly Index are defined as follows:

**(a) Producer Price Index (PPI).** Producer Price Index (PPI) values are published by the US Department of Labor (USDOL), Bureau of Labor Statistics (BLS). Recent PPI values are posted on the NYS DOT Office of Construction Division website at [www.nysdot.gov](http://www.nysdot.gov). A complete listing of PPI values can be found on the BLS website at <http://data.bls.gov/PDQ/outside.jsp?survey=wp>.

**(b) Benchmark Steel Index (BI).** Value of the PPI for *Semifinished Steel Mill Products* (WPU 101702) for the month of contract bid letting. The benchmark steel index for additional work at the original contract bid price will be the value of the PPI for the month of the bid letting. The benchmark steel index for additional work at agreed price will be the value of the PPI for the month the agreed price was submitted to the Engineer.

**(c) Monthly Steel Index (MI).** Value of the PPI for *Semifinished Steel Mill Products* (WPU 101702) for the month the material is invoiced.

**(d) Cost Basis (CB).** Cost Basis defined in dollars per ton listed in the monthly Engineering Bulletin entitled "*Fuel, Asphalt and Steel Price Adjustments*" for the month of bid letting. The cost basis for additional work at the original contract bid price will be the cost basis listed for the month of the bid letting. The cost basis for additional work at agreed price will be the value of the cost basis for the month the agreed price was submitted to the Engineer.

**(3) Adjustment.** Steel/Iron price adjustment will be based on the following formulas:

- (a) The percent change in any given month will be determined as follows:

$$\text{Percentage Change} = \left( \frac{MI - BI}{BI} \right) \times 100$$

- (b) When price increases is greater than 5%:

$$\text{Price Adjustment} = \left[ \left( \frac{MI - BI}{BI} \right) - 0.05 \right] (CB) \text{ Qty}$$

- (c) When price decreases is greater than 5%:

$$\text{Price Rebate} = \left[ \left( \frac{MI - BI}{BI} \right) + 0.05 \right] (CB) \text{ Qty}$$

**HW-910.4. METHOD OF MEASUREMENT.**

The fixed price lump sums shown in the bid proposal for these items shall be considered the unit prices bid, although actual payment will be calculated based on changes in posted material prices. Should the amount shown be altered, the altered figures will be disregarded and the original fixed prices will be used to determine the total contract bid amount.

**(A) Asphalt Price Adjustment.** Asphalt price adjustments will be measured on a Dollar Cents basis.

**(B) Fuel Price Adjustment.** Fuel price adjustments will be measured on a Dollar Cents basis.

**(C) Steel/Iron Price Adjustment.** Steel/Iron price adjustments will be measured on a Dollar Cents basis.

**HW-910.5. BASIS OF PAYMENT.**

Price adjustments will be based on the computations described above. Adjustments, either positive or negative, will be made when the accumulated amount for a price adjustment contract pay item exceeds \$5,000, or at such additional times as the Engineer deems appropriate. Asphalt price adjustments and fuel price adjustments not meeting this criteria will be made in the final contract payment.

If price adjustments are based on estimated material quantities for that time, and a revision to the total material quantity is made in a subsequent or final estimate, an appropriate addition or deduction will be made to the price adjustment previously calculated. The addition or deduction will be based on the same adjustment factors used to calculate the price adjustment which is being revised. If the installation dates of the revised material quantity cannot be determined, the addition or deduction will be based on the adjustment factors in effect during the last month in which any portion of the material quantity was installed.

If eligible items are installed after the original contract completion date and during which time an extension of time without the assessment of engineering charges is approved, the monthly average posted price or monthly index value used to compute price adjustments will be the appropriate monthly average posted price or monthly index value.

If eligible items are installed after the scheduled contract completion date and during which time there are assessed engineering charges and/or liquidated damages, the monthly average posted price or monthly index value used to compute price adjustments will not exceed, but may be less than the monthly average posted price or monthly index value in effect on the last contract completion date without assessed engineering charges.

The "fixed sum" amounts are for bidding purposes only and shall not be varied in the bid. The Contractor will be paid for the actual price adjustment amounts regardless of the fixed sum, which

may be more or less than the fixed amount.

**(A) Asphalt Price Adjustment.** The adjustment will be based on the monthly average posted price in effect at the time the work is completed. The monthly average posted price will be updated about the twentieth of each month and will apply to eligible work performed during the following month.

**(B) Fuel Price Adjustment.** The adjustment will be based on the monthly average posted price in effect at the time the work is completed. The monthly average posted price will be updated about the twentieth of each month and will apply to eligible work performed during the following month.

**(C) Steel/Iron Price Adjustment.** The minimum price adjustment for a contract is \$5,000. The minimum price adjustment for each eligible contract pay item number (e.g., Item No. 60.21SP3T36 - FURNISHING, DELIVERING AND LAYING 36-INCH STRAIGHT STEEL PIPE, 3/8-INCH WALL THICKNESS) is \$1,000. The adjustment will be based on the index in effect at the time of purchase or invoice.

The monthly index is listed as preliminary for 4-months after initial publication. At contract final acceptance, the Engineer will make final revisions to the adjustment based on revised data. If all contract work is complete, preliminary index values as posted by the BLS may be used in place of final values. If a preliminary value is not posted for a given month or months, the preliminary value will be the average of the preceding and following months that are posted. If a final value is not posted for a given month or months, the final value will be determined from the average annual value, if possible, or will be the average of the preceding and following months that are posted.

*Payment will be made under:*

Item No.	Item	Pay Unit
HW-910A	ASPHALT PRICE ADJUSTMENT	F.S.
HW-910F	FUEL PRICE ADJUSTMENT	F.S.
HW-910S	STEEL/IRON PRICE ADJUSTMENT	F.S.

#### ELIGIBLE WORK ITEMS FOR ASPHALT PRICE ADJUSTMENTS

Item No.	Item	Conversion Factor
4.02 AF-R	ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	0.0075-tons/sq.yd.
4.02 I4-3	ASPHALTIC CONCRETE WEARING COURSE, TYPE I-4 MIX, 3" THICK	0.0095-tons/sq.yd.
4.02 CB	ASPHALTIC CONCRETE MIXTURE	0.05-tons/ton

#### ELIGIBLE WORK ITEMS FOR FUEL PRICE ADJUSTMENTS

Item No.	Item	Conversion Factor
4.02 AF-R	ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	2.50-gal./ton
4.02 I4-3	ASPHALTIC CONCRETE WEARING COURSE, TYPE I-4 MIX, 3" THICK	2.50-gal./ton
4.02 CB	ASPHALTIC CONCRETE MIXTURE	2.50-gal./ton
4.04 HD	CONCRETE BASE FOR PAVEMENT, 9" THICK (HIGH- EARLY STRENGTH)	1.00-gal./cu.yd.
4.05 AX	HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)	1.00-gal./cu.yd.
4.11 CA	FILL, PLACE MEASUREMENT	1.00-gal./cu.yd.
4.13 ABX	4" CONCRETE SIDEWALK WITH SPECIAL SCORING (PIGMENTED)	1.00-gal./cu.yd.



4.13 CABS	4" CONCRETE SIDEWALK (PIGMENTED)(SAW CUT TYPE JOINTS)	1.00-gal./cu.yd.
4.13 CABST	4" CONCRETE SIDEWALK ON EXISTING FOUNDATION (PIGMENTED)(SAW CUT TYPE JOINTS)	1.00-gal./cu.yd.
4.13 CBBS	7" CONCRETE SIDEWALK (PIGMENTED)(SAW CUT TYPE JOINTS)	1.00-gal./cu.yd.
6.02 AAN	UNCLASSIFIED EXCAVATION	0.35-gal./cu.yd.
6.97 A	EXTRA-HIGH-EARLY STRENGTH CONCRETE	1.00-gal./cu.yd.
70.81CB	CLEAN BACKFILL	1.00-gal./cu.yd.

ELIGIBLE WORK ITEMS FOR STEEL/IRON PRICE ADJUSTMENTS

Item No.	Item
50.41C6C24	24" D.I.P. CLASS 56 COMBINED SEWER, ON CONCRETE CRADLE
52.11D12	12" DUCTILE IRON PIPE BASIN CONNECTION
52.41D06R	6" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)
52.41D08R	8" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)
60.11R520	FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)
60.11R524	FURNISHING AND DELIVERING 24-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)
60.11R606	FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)
60.11R612	FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)
60.13M0A24	FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24-INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS
60.21SP3T30	FURNISHING, DELIVERING AND LAYING 30-INCH STRAIGHT STEEL PIPE, 3/8-INCH WALL THICKNESS
60.21SP3T36	FURNISHING, DELIVERING AND LAYING 36-INCH STRAIGHT STEEL PIPE, 3/8-INCH WALL THICKNESS
60.21SP4T48	FURNISHING, DELIVERING AND LAYING 48-INCH STRAIGHT STEEL PIPE, 1/2-INCH WALL THICKNESS
60.22BR3T30	FURNISHING, DELIVERING AND LAYING 30-INCH STEEL BENDS AND REDUCERS, 3/8-INCH WALL THICKNESS
60.22BR3T36	FURNISHING, DELIVERING AND LAYING 36-INCH STEEL BENDS AND REDUCERS, 3/8-INCH WALL THICKNESS
60.22BR4T48	FURNISHING, DELIVERING AND LAYING 48-INCH STEEL BENDS AND REDUCERS, 1/2-INCH WALL THICKNESS
60.25PSO	FURNISHING, DELIVERING AND INSTALLING PLATE STEEL OUTLETS ON STEEL PIPE, ACCESS MANHOLE OUTLETS WITH COVERS, AND NUTS AND BOLTS COMPLETE
61.11DMM20	FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS
61.21BVB36	FURNISHING, DELIVERING AND INSTALLING 36-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE
61.21BVO24	FURNISHING, DELIVERING AND INSTALLING 24-INCH BUTTERFLY VALVE, COMPLETE
63.11MH	FURNISHING, DELIVERING AND INSTALLING 36-INCH CAST IRON MANHOLE HEADS AND COVERS
63.11VC	FURNISHING AND DELIVERING VARIOUS CASTINGS
65.61SS	FURNISHING, DELIVERING AND PLACING STRUCTURAL, REINFORCING AND MISCELLANEOUS STEEL

**SECTION NYCT - 7A**  
**Membrane Waterproofing**

**1.0. GENERAL REQUIREMENTS**

**1.1. Scope Of Work.**

- a. The Contractor shall furnish all labor, materials, tools and equipment, and perform all operations necessary for Membrane Waterproofing Work as indicated on the Contract Drawings and as specified herein.

**1.2. Description.**

- a. Membrane Waterproofing, except as otherwise specified herein, shall consist of a membrane of minimum three layers of treated fiberglass fabric mopped with asphalt, applied to the structure as indicated on the Contract Drawings. Where required free drainage shall be provided by pipe drains, hollow tile, or broken stone.

**1.3. Applicable Codes, Standards And Specifications.**

- a. Department of the Army, Corps of Engineers Guide Specification for Military Construction CECS-07112/1985-Bituminous Waterproofing.
- b. American Concrete Institute, ACI 515.1R-79 (Revised 1985) - A Guide to the Use of Waterproofing, Dampproofing, Protective, and Decorative Barrier Systems for Concrete.
- c. Department of the Navy, Naval Facilities Engineering Command, Construction Engineering Handbook NAVFACP-455, Book 7 Moisture Protection.
- d. ASTM D1668: Standard Specification for Glass Fabrics (Woven and Treated) for Roofing and Waterproofing.
- e. ASTM 5035: Standard Test Methods For Breaking Force And Elongation Of Textile Fabrics.
- f. ASTM D41: Standard Specification for Asphalt Primer Used in Roofing, Dampproofing and Waterproofing.
- g. ASTM D449: Standard Specification for Asphalt Used in Dampproofing and Waterproofing.
- h. The N.R.C.A. Waterproofing Manual.
- i. ASTM D6506: Standard Specification for Asphalt Based Protection Board For Below-Grade Waterproofing.

**1.4. Certification of Compliance.**

- a. The Contractor shall obtain certification of compliance with specification requirements prior to delivery and installation.

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*NYC TRANSIT SPECIFICATIONS*  
*SECTION NYCT - 7A, Membrane Waterproofing*

**1.5. Competent Workmen.**

- a. The Contractor will be required to demonstrate that he has the necessary skill and experience required to perform Work of this nature. Only competent persons, skilled in this kind of Work shall be employed to apply the asphaltic compound.

**1.6. Safety Precautions.**

- a. The Contractor shall control workmen exposure to asphalt fumes in the Work Site by adhering to the recommendations developed by the National Institute for Occupational Safety and Health (NIOSH) and outlined in the Publication "A Recommended Standard For Occupational Exposure to Asphalt Fumes."

**1.7. Schedule Of Operations.**

- a. The Contractor shall maintain for the inspection of the Engineer the schedule of operations.

**1.8. Applicable VOC Regulations.**

- a. All Waterproofing materials including primer shall be in compliance with applicable Federal, State and Local VOC regulations.

**1.9. Limitation.**

- a. Waterproofing Membrane shall not be used where soil is contaminated with oil.

**1.10. Manufacturer's Instructions.**

- a. The Contractor shall maintain the copy of manufacturer's installation instructions for the inspection of the Engineer, prior to delivery of materials to the Site.

**1.11. Definition of Ply.**

- a. Except as otherwise specifically provided in Paragraph 3.1, the term "ply" as used in this section shall mean a layer of treated fiberglass fabric, both sides of which shall be coated with asphalt at the time of laying as specified herein.

**1.12. Number of Plies.**

- a. The number of plies of Membrane Waterproofing shall be as indicated on the Contract Drawings.

**1.13. Submittals.**

- a. The submittals required for the Engineer's/Designer's approval shall be as set forth in the Specifications and may also be indicated in the submittal table at the end of this section for the Contractor's convenience. Other items and/or submittals required to indicate conformance with the Contract Documents shall be available for Engineer's inspection.

**2.0. MATERIALS.**

**2.1. General.**

- a. Materials shall be delivered to the Site in the manufacturer's sealed containers, marked with the manufacturer's name and brand indicating the grade and quality of the materials.
  - 1. Materials showing evidence of damage, deterioration, or having been opened will be rejected.
- b. Rejected materials shall be removed from the Site before the application of Membrane Waterproofing is started.
- c. Materials shall be stored so that they will not be subject to physical damage or contamination. These materials shall be protected from oils, greases, waxes and solvents.

**2.2. Material Properties.**

**2.2.1. Fabric Requirements.**

- a. The fabric to be used shall be a fiberglass asphalt treated fabric conforming to ASTM D1668, Type I which shall have been treated before being brought to the Site. The untreated fabric shall weigh not less than 1.4 ounces per square yard, which when treated shall weigh not less than 2.0 ounces per square yard. The thread count shall be between 20 and 24 per linear inch in each direction. The strength of the fabric shall not be less than 75 pounds in either direction by the Strip Method (ASTM D5035).

The material used in treating the fabric shall have the same general characteristics as that used in cementing the layers on the work. The melting point of the asphalt used for treating fabric shall be between 135 degrees and 170 degrees Fahrenheit.

**2.2.2. Asphalt Primer Requirements**

- a. The waterproofing system shall be used with a cold applied primer conforming to ASTM D41.

**2.2.3. Asphalt Requirements.**

- a. Asphalt for subway waterproofing shall consist of fluxed natural asphalt, or asphalt prepared by the careful steam distillation of asphaltic petroleum, or by the careful steam distillation and air-blowing of asphaltic petroleum conforming to ASTM D449. The samples of asphalt, the materials used in its preparation, and the documents related to the method of manufacture shall be maintained for the inspection of the Engineer. The asphalt shall comply with the following requirements:

1. The melting point of fluxed natural asphalt shall be between 115 degrees and 140 degrees Fahrenheit, as determined by the Ring and Ball method. The melting point of steam distilled asphalt shall be between 125 degrees and 140 degrees Fahrenheit as determined by the Ring and Ball method. The melting point of steam-distilled and airblown asphalt shall be between 125 and 140 degrees Fahrenheit as determined by the Ring and Ball method.
2. The consistency of the asphalt shall be determined by the penetration, which shall be between 50 and 100 at 77 degrees Fahrenheit, and not less than 5 at 32 degrees Fahrenheit. Penetration shall be the depth of penetration in hundredths of a centimeter of a No. 2 cambric needle. At 77 degrees Fahrenheit, the needle shall be weighted to 100 grams and shall act for 5 seconds. At 32 degrees Fahrenheit the needle shall be weighted to 200 grams and shall act for one minute.
3. A briquette of the asphalt of cross-section of one square centimeter shall have ductility of not less than 30 centimeters at 77 degrees Fahrenheit, the material being elongated at the rate of 5 centimeters per minute. (Dow moulds).
4. The specific gravity of the asphalt shall be not less than 1.00 at 77 degrees Fahrenheit.
5. Fluxed natural asphalt shall be not less than ninety-five percent soluble in cold carbon disulphide. Steam-distilled asphalt shall be not less than 99 percent soluble in cold carbon disulphide. Steam-distilled and airblown asphalt shall be not less than 99 percent soluble in cold carbon disulphide.
6. When a fifty gram sample of the asphalt is heated for 5 hours at a temperature of 325 degrees Fahrenheit in a tin box approximately 2-3/16 inches in diameter it shall not lose over one percent by weight.
7. The penetration of the residue of the asphalt at 77 degrees Fahrenheit after heating as specified in the preceding paragraph shall be not less than 60 percent of the original penetration.
8. Temperature of asphalt at time of application shall be in accordance with the manufacturer's recommendations.

**2.2.4. Waterproofing Protection Board.**

- a. Waterproofing protection shall be 1/4 inch thick asphalt-impregnated glass fiber rigid board.

**2.2.5. Asphalt Mastic Waterproofing.**

- a. Where indicated on the Contract Drawings, asphalt mastic of the quality specified in Paragraph 2.2.3 ASPHALT REQUIREMENTS shall be used.

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NYC TRANSIT SPECIFICATIONS

SECTION NYCT - 7A, Membrane Waterproofing

**3.0. CONSTRUCTION METHODS.**

**3.1. Preparation Of Surface.**

- a. The asphalt primer shall be applied to a dry substrate and in no case shall it be applied until at least 7 days after concrete placement, or longer if so recommended by the manufacturer.
- b. The membrane shall be applied when the weather is dry and the temperature in the shade is above 40 degrees F (degrees C).
- c. The substrate shall be free of dust, oil, grease and loose, weak and unsound materials. In order to insure a suitable surface, one of the following blast cleaning methods shall be used:
  1. dry sandblasting
  2. wet sandblasting
  3. high-pressure water jetting
- d. All projections shall be removed and all voids made smooth by applying a bed of mortar to the existing concrete.
- e. Bevels and fillets shall be provided where surfaces intersect.

**3.2. Application.**

**3.2.1. Heating.**

- a. The kettles in which the asphalt is heated on the Site shall be equipped with thermometers.
- b. The asphalt shall be heated to a temperature of approximately 250 degrees Fahrenheit, but in no case shall asphalt be heated to a temperature of more than 350 degrees Fahrenheit. Asphalt heated above 350 degrees Fahrenheit shall not be used in the Work.
- c. The fuel for heating the asphalt shall be as nearly as practicable non-smoke-producing. Depending upon local conditions, portable or non-portable heating containers may be used.

**3.2.2. Membrane Waterproofing; How Laid.**

- a. The membrane waterproofing shall not be laid unless concrete is cured for seven days. On smooth surfaces there shall be spread hot melted asphalt in a uniformly thick layer; on this layer of asphalt shall be laid a treated fiberglass fabric; this process shall be repeated until such number of layers as indicated on the Contract Drawings have been placed and a final coat of asphalt shall then be applied. Waterproofing shall not be applied if frothing or bubbling occurs when hot asphalt is applied to the surface. Flat asphalt must stick tightly to the surface.
- b. The fabric shall be rolled out into the asphalt while the asphalt is still hot, and pressed against the asphalt so as to insure the fabric being completely stuck over its entire surface and free from air pockets.

- c. To prevent cooling of the asphalt, only an area of the size to be determined by trial shall be mopped before rolling the fabric into place.
- d. Asphaltic Waterproofing shall be laid over compatible Waterproofing type. If the Waterproofing types are not compatible, metal flashing shall be used to physically separate two incompatible types.
- e. Special care shall be taken to lay Waterproofing Membrane over vertical surface during warm weather. Concrete shall be placed as soon as possible. Waterproofing which has sagged or cracked due to water build-up shall be replaced. When the structural wall or slab is placed against Waterproofing, special efforts are needed to avoid honeycomb in the concrete.

**3.2.3. Asphalt to Completely Cover Surface.**

- a. Each layer of asphalt shall completely and entirely cover the surface on which it is spread without cracks or blowholes.

**3.2.4. Joints.**

- a. Membrane waterproofing shall be so laid that at any cross-section through the fabric there shall be at least the full number of plies required. In order to insure this result there shall be an overlap of at least two inches at the ends and edges of each strip of fabric. The joints shall be staggered between plies.
- b. All joints in membrane waterproofing not laid in a continuous operation shall be lapped so as to secure a full lap of at least one foot at the ends and edges.
- c. In joining membrane waterproofing to asphaltic waterproofing in place, the surfaces of the waterproofing in place shall be cleaned and heated before joining the new waterproofing to that previously laid.

**3.2.5. Leaks to be Stopped.**

- a. Any membrane waterproofing that is found to leak at any time prior to the completion of the Work and final acceptance thereof by the NYCT shall be made watertight and any masonry, to which membrane waterproofing is not applied, that is found to leak at any time prior to the completion of the Work and final acceptance thereof shall be made watertight. In order to make the masonry watertight, portions shall be cut out and replaced if necessary, or the Contractor shall use such other means as may be required to make the masonry or membrane waterproofing watertight. In exceptional cases, leaks may be diverted or otherwise disposed of.

**3.2.6. Use of Asphalt Mastic.**

- a. Asphalt mastic shall be, poured in place, for seals between existing and new waterproofing.

**3.2.7. Precautions After Laying Membrane Waterproofing.**

- a. When concrete is laid against the membrane waterproofing material, care shall be taken not to break, tear or injure in any way the outer surface of the asphalt. The concrete shall be placed as soon as practicable after the membrane waterproofing is laid. No loads shall be placed upon exposed membrane waterproofing and no walking over or working upon exposed membrane waterproofing will be allowed.
- b. Where membrane waterproofing is applied to concrete of inverts, said waterproofing shall be protected with a one-inch thick mortar (or pea gravel aggregate concrete) layer, which shall be placed on top of the waterproofing within 24 hours after installation of waterproofing. The mortar layer shall not be placed until waterproofing has been inspected. Mortar protection shall be omitted if a structural slab is placed within 24 hours after installation of waterproofing.
- c. Waterproofing protection board shall be placed over membrane waterproofing if indicated on the Contract Drawings. Such protection shall be placed in accordance with manufacturer's recommended procedures. Particular attention is called to the Contractor that the intent is to protect the membrane waterproofing from damage during construction and therefore, the protection must be placed immediately upon completion of the placement of membrane waterproofing and prior to subsequent work that may result in damage thereto.
  1. Waterproofing protection board shall be pressed into the final application of asphalt while the asphalt is still hot, with edges of boards brought into moderate contact and joints staggered. Waterproofing protection shall be carefully and neatly fitted around pipes and projections and shall cover the entire surface of the waterproofing.

**3.2.8. Rehabilitation of Waterproofing.**

- a. Where protection concrete is removed from an existing structure, extreme care shall be taken to insure that the existing membrane waterproofing is protected and portions that are disturbed or damaged shall be patched and repaired by the application of asphalt, fabric or any other materials deemed necessary to restore the membrane waterproofing and provide the surface necessary for proper lapping.

**4.0. MEASUREMENT AND PAYMENT.**

**4.1. Payment for Membrane Waterproofing.**

- a. Payment for four (4)-ply Membrane Waterproofing will be made at the unit price bid in ITEM NYCT-7A.1, which price shall include the cost of all incidental work, labor and materials.



- b. Measurement for Membrane Waterproofing will be made on the basis of area covered and the number of plies used with no account being taken of laps.
- c. At joints where membrane waterproofing having any number of plies is lapped over membrane waterproofing having a different number of plies, payment for membrane waterproofing over the area covered by the overlap will be made under the item for the membrane waterproofing having the greater number of plies, to which the lesser number of plies is joined. In no case will payment be made for the laps of membrane waterproofing.
- d. Payment for 6-ply Membrane Waterproofing ordered to be used when severe water conditions are encountered will be made at 150 per cent of the price stipulated in the BID SCHEDULE for 4-ply membrane waterproofing.
- e. Mortar protection layer and protective concrete for membrane waterproofing in place, as required in Paragraph 3.2.7, precaution after laying membrane waterproofing, will be paid for under ITEM NYCT-3A.1, which unit price shall include the cost of all work, labor and materials necessary therefore or incidental thereto.

**4.2. Payment for Waterproofing Protection Board.**

- a. Payment for Waterproofing Protection Board, complete, in place will be paid for at the unit price bid in ITEM NYCT-7A.2, which price shall include the cost of all incidental work, labor and material.
- b. Measurement for Waterproofing Protection Board shall be made on the basis of area covered as indicated in the Contract Drawings with no account being taken of laps.

**Submittal Approvals**

Item No.	Paragraph No.	Submittal	Approval By (Engineer or Designer)
1		NONE	

**Notes:**

- 1. This table does not include approvals for "or equivalent" proposals. Approvals for "or equivalent" proposals are covered in Information For Bidders, Paragraph 9 and Specification Section 1B, Paragraph 1.38.

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NYC TRANSIT SPECIFICATIONS  
SECTION NYCT - 7A, Membrane Waterproofing

**SECTION TV-US**  
**ALLOWANCE FOR MAINTAINING U.S. DEPARTMENT OF HOMELAND SECURITY**  
**AND U.S. MARSHALS SERVICE CAMERAS**

**TV-US.1. DESCRIPTION.** Under this section, the Contractor shall be paid for the work performed by the subcontractor authorized by the U.S. Department of Homeland Security and by the subcontractor authorized by the U.S. Marshals Service to maintain their security cameras by relocating them from their existing poles to newly installed poles. This work shall only be done by subcontractors obtained from the U.S. Department of Homeland Security and from the U.S. Marshals Service approved list of contractors. Information regarding these lists shall be obtained from the U.S. Dept. of Homeland Security and the U.S. Marshals Service contact people listed below. The scheduling of such camera relocations shall be as described in work orders given by the Engineer.

Subcontractors authorized to perform this work shall be required to provide a complete, turn-key removal and reinstallation, testing and maintenance of the cameras for the duration of the contract, which shall include, but not be limited to, all required electronic devices for operation of the cameras, all associated mounting hardware, and all associated cabling and integration of those devices into the appropriate U.S. Department of Homeland Security and U.S. Marshals Service security centers. The subcontractors shall also furnish and install the associated conduit, cabling, transformers, power supplies, over-current protection devices, uninterruptible power supplies, cabinets, enclosures, mounting racks and other supporting infrastructure elements required but not otherwise provided under other contract items for operation of the cameras.

**TV-US.2. MATERIAL.** Non specified.

**TV-US.3. METHODS.** There are two (2) existing U.S. Department of Homeland Security cameras and one (1) existing U.S. Marshals Service camera currently affixed in various locations on Worth Street which will be impacted by the re-construction work under this project. Prior to the start of work, the Engineer and the Contractor shall be required to coordinate the relocations of these cameras with the following people:

Stephen M. Anest Jr.  
Area Commander  
Federal Protective Service  
National Protection and Programs Directorate  
U.S. Department of Homeland Security  
26 Federal Plaza, Room 3012  
New York, NY 10278  
[stephen.anest@dhs.gov](mailto:stephen.anest@dhs.gov)  
Office: (646) 589-6080  
Cell: (917) 583-5541  
Fax: (212) 264-5164

Eiad Saleh  
Judicial Security Inspector  
United States Marshals Service  
Southern District of New York  
500 Pearl Street, Suite 400  
New York, NY 10007  
(212) 331-7201

Only subcontractors who are on the U.S. Marshals Service approved list of security camera installers and subcontractors who are on the Federal Protection Service, U.S. Department of Homeland Security, approved list of security camera installers will be permitted to perform this work.

Each of the approved subcontractors shall be required to remove cameras from their existing locations and reinstall them on the relocated poles and perform all other incidental work to make them functional as directed. Any camera removed from a post but not immediately reinstalled at their new location shall be stored in a secure location by the subcontractor, or as otherwise directed by the Engineer, until it can be reinstalled at its new location at the site.

**TV-US.4. METHOD OF MEASUREMENT.** The fixed sum prices shown in the bid proposal for Allowance for Maintaining U.S. Department of Homeland Security Cameras and for Allowance for Maintaining U.S. Marshals Security Cameras shall be considered the price bid for each of those items, although actual payment will be based on the work performed. The fixed sums are not to be altered in any manner by the bidder.

**TV-US-.5. BASIS OF PAYMENT.** Payment under each of these Fixed Sum items for Maintaining U.S. Department of Homeland Security Cameras and for Maintaining U.S. Marshals Security Cameras shall be made in accordance with the requirements of Article 26 in the Standard Construction Contract and shall cover the cost of all labor, materials, equipment, insurance, and necessary incidentals required to remove, store if required, and reinstall each camera in working order, when directed, in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

The cost of furnishing, installing, maintaining and removing temporary posts or pylons that are only used for temporary camera installations, with no signal or street lighting equipment, along with the cost of temporarily storing cameras during Construction shall also be paid for under this item.

No guarantee is given that these allowance items will in fact be required in this contract. The estimated "fixed sum" amount shown in the Bid Schedule is included in the total bid solely to ensure a method of payment for the work of maintaining U.S. Department of Homeland Security Cameras and U.S. Marshals Security cameras during construction in accordance with the Contract Drawings, the specifications and the directions of the Engineer.

*Payment will be made under:*

Item No.	Item	Pay Unit
TV-USHS	ALLOWANCE FOR MAINTAINING U.S. DEPARTMENT OF HOMELAND SECURITY CAMERAS	F.S.
TV-USMS	ALLOWANCE FOR MAINTAINING U.S. MARSHALS SERVICE CAMERAS	F.S.

## 4. SPECIAL PROVISIONS

The following shall become a part of and apply to the Contract:

This contract is based on an A + B method of bidding (also referred to as cost plus time bidding) requiring contractors to bid a contract amount which is defined as the gross sum for which the entire work will be performed, arrived at by a correct computation of all items specified in the proposal, and to specify the number of days to complete the on-site construction work. The apparent low bid is then determined as the lowest combination of the contract amount plus the number of days specified by the Contractor multiplied by the daily user's cost established by the Department, which is known as the time cost. The contract amount is referred to as the "A" portion of the bid and the time cost is called the "B" portion to the bid. Bids which specify times longer than the maximum time established by the Department for the work shall be declared non-responsive. The sum of the contract amount plus time cost is used only to determine the apparent low bid.

A. MODIFICATIONS TO THE PROPOSAL FOR BIDS.

1. Refer to the Bid and Contract Documents (Volume 2 of 3), INFORMATION FOR BIDDERS, SECTION 16. "Bid Evaluation and Award";  
Add the following paragraphs under SECTION 16:

"The award of contract will be made only to the lowest responsible bidder as determined under this A+B bidding and as will best promote the public interest as provided by the City's Procurement Policy Board (PPB) Rules. The Department of Design and Construction reserves the right to reject any or all proposals, or, pursuant to PPB Rules, to award to other than the low bidder, to waive minor informalities, to advertise for new proposals, or to proceed to do the work otherwise, if, in its opinion, the best interest of the City will thereby be promoted.

If requested by the Department of Design and Construction, the bidder must present evidence of ownership, corporate structure, ability and financial standing, as well as a statement as to equipment showing it to be sufficient to satisfactorily carryout and complete the required work within the time specified in the 'B' portion of its bid."

2. Refer to the Bid and Contract Documents (Volume 2 of 3), INFORMATION FOR BIDDERS, SECTION 26. "Bid, Performance and Payment Security";  
Add the following paragraph to the end of SECTION 26:

"(F) The amount for Bid, Performance and Payment Security shall be based on the 'A' portion items only."

3. Refer to the Bid and Contract Documents (Volume 2 of 3), INFORMATION FOR BIDDERS, Subsection 33.(A) "Comparison of Bids";  
Delete Subsection 33.(A), in its entirety;  
Substitute the following paragraph:

"(A) Comparison of Bids: Bids on Unit Price Contracts (using both A+B Bidding and a single Bid Multiplier) will be compared on the basis of a total estimate price arrived at by taking the sum total of the Bidder's cost adjustment multiplier (on page C-4 of the Bid Booklet) applied to every unit price item in the Bid Schedule, excluding items with a Fixed Sum unit of measurement, multiplied by the Engineer's Estimate of Quantities set forth in the Bid Schedule plus the Fixed Sum unit of measurement items to obtain the "A" portion of the bid, to which the Bidder's "B" portion of the bid (on page C-4 of the Bid Booklet) will be added for comparison of bids only."

B. A + B BIDDING.

- 1) PROPOSAL SHALL SPECIFY THE BID MULTIPLIER AND "B" PORTION OF THE BID. Each proposal shall specify the Bidder's Bid Multiplier and the "B" portion amount for determining the gross sum of both the "A" & "B" portions, in the manner hereafter described for which the work will be performed according to the Contract Drawings and specifications and any amendment to the specifications if the same are issued prior to the date of receipt of the bid. The lowest bid shall be determined by the City on the basis of the gross sum for which the entire work will be performed, arrived at by multiplying the Engineer's Estimate of Quantities by their unit prices adjusted by the Bidder's bid multiplier plus the fixed sum unit priced items ("A" portion), plus the total number of calendar days proposed by the bidder to complete the "A" portion work to which A + B bidding is applicable multiplied by the Daily Cost established by the City ("B" portion).
- 2) The bidding for this project will take into account not only the amounts bid for each contract item ("A" portion), but also the bidder's stated number of consecutive calendar days multiplied by the daily cost ("B" portion) to substantially complete the project ("A" portion work). The total bid shall consist of both the amount of awarded contract, which shall be known as the "A" portion of the bid, plus the product of the number of calendar days specified by the Contractor times the Daily Cost established by the City, which product shall be known as the "B" portion of the bid.

The sum of "A" portion and "B" portion shall be used only in determining the lowest bidder. The days set forth in the "B" portion of the successful bidder's proposal, and the amount specified as the Daily Cost in the bid, will be used to determine any incentive or disincentive payments relative to timely performance of the "A" portion work under contract.

The incentive or disincentive will be paid or collected under Item 91698.93.

C. "B" PORTION WORK. For this project the "B" portion work shall consist of:

The time cost to substantial completion the entire project as described in the Contract Drawings and specifications, inclusive of "Changes and Extra Work" but exclusive of punch list and planting work. The number of consecutive calendar days "N" specified on page C-4 of the Bid Booklet by the Contractor for the "B" portion (time cost) work shall start on the date shown on the "Notice to Proceed".

D. DEFINITION OF TERMS. For this project the following additional definitions shall apply:

- (a) Calendar Day - The days as they succeed each other, inclusive of Sundays and holidays.
- (b) Amount of the Awarded Contract - The correct or corrected total of the quantities shown in the bid proposal multiplied by the individual unit bid prices as adjusted by the Bid Multiplier set forth in the proposal by the bidder ("A" portion of bid).
- (c) Daily Cost - The amount which represents the average daily cost of interference and inconvenience to the street user and the daily cost to the City, but excludes the construction engineering inspection costs.
- (d) Engineering Inspection Costs - The costs to the City for inspection of the Contractor's work.
- (e) Substantially Complete - THIS DEFINITION SHALL APPLY ONLY TO "B" PORTION WORK. The "B" portion (time cost) work shall be considered to be substantially complete when, at the sole determination of the NYCDDC Commissioner, all contract work has been completed, inclusive of Changes and Extra Work but exclusive of punch list and planting work.

E. PREPARATION OF PROPOSAL. The bidder shall establish the number of consecutive calendar days to be used for the "B" portion of the bid. The total number of such consecutive calendar days established by bidder for the "B" portion (time cost) of the bid shall not exceed 1,825 consecutive calendar days which shall include bad weather days, lane restrictions, peak hour restrictions or other similar items as specified in the contract. Bids showing time for completion of "B" portion work in excess of this amount will be considered non-responsive.

The product of the number of consecutive calendar days proposed by the bidder multiplied by the Daily Cost of \$10,000.00 per calendar day shall be added to the amount bid for the "A" portion (all items of

work) of the bid. This total sum will be the amount used to determine the lowest bid for consideration of bids for award.

F. CONSIDERATION OF BIDS. The submitted bid shall consist of two parts:

- (A) The Bid Multiplier which will be applied to each unit price item in the Bid Schedule, excluding Fixed Sum items, to determine the amount of Awarded Contract ("A" portion).
- (B) Total number of consecutive calendar days (N) proposed by the bidder to complete the "A" portion work to which A + B bidding is applicable.

The lowest bid for the project will then be determined by the Department using the combination of (A) + (B) according to the following formula:

$$(A) + [ (N) \times (\text{Daily Cost}) ] = \text{Bid amount for award consideration.}$$

The preceding formula shall be used only to determine the lowest bid for the project and shall not be used to determine the amount of the awarded contract nor the final payment to the Contractor when the project is completed, other than using the Daily Cost for any incentive or disincentive calculations based on performance of "B" portion work.

In addition, as part of the pre-award process for this contract, the low bidder will be required to submit a preliminary schedule and work plan to explain how it arrived at its "N" time proposal.

G. EARLY COMPLETION OF THE "B" PORTION WORK. The Contractor will be paid the Daily Cost for each calendar day that the "A" portion of work of the project is completed before the number of calendar days "N" stated by the Contractor in its bid. However, the total number of calendar days for incentive payment may not exceed 120 days.

H. FAILURE TO SUBSTANTIALLY COMPLETE THE "A" PORTION WORK IN THE TIME BID. Failure to substantially complete the "A" portion work to which A+B bidding applies within the established number of calendar days "N" stated by the Contractor in the bid schedule will result in the Daily Cost of \$10,000.00 per day, assessed as liquidated damages in accordance with Article 15 of the Standard Construction Contract, and Schedule A on Page SA-1 of the Proposal. Said liquidated damages will be assessed for every calendar day in excess of the stated number, up to the time in which the "A" portion work subject to A+B bidding is substantially complete, exclusive of punch list and planting work.

The NYCDDC Commissioner will be the sole authority in determining as to when the work subject to A+B bidding is substantially complete.

I. ADJUSTMENTS TO "B" PORTION WORK. When "B" portion work to which A+B bidding applies is adjusted, particularly under Article 11 and Article 26 of the Standard Construction Contract, consideration will be given to modifying the number of days for the performance of this portion of work. When a contract extension of time is granted under Article 13 of the Standard Construction Contract, consideration will be given to modifying the number of days for the performance of the "A" portion work to which A+B bidding applies. However, time extensions, for whatever reasons granted, will not be used to change the number of calendar days to actually accomplish the identified "B" portion work to determine incentive payments.

J. LINES AND GRADES. The Contractor shall furnish lines and grades in accordance with Section 1.06.27 of the Standard Highway Specifications, except that survey controls established for this project may no longer exist and the Contractor shall be required to re-establish the survey control information using official Borough Survey Control Monuments and Bench Marks, where they exist. The Contractor shall check with the Topographic Section of the Borough President's Office as to the reliability and accuracy of the data to be used for lines and grades.

K. SPECIFIC TRAFFIC STIPULATIONS. Under this contract, the Contractor shall perform the work in strict accordance with the requirements of Section 6.70 in the Standard Highway Specifications, specific traffic stipulations as called for on the Contract Drawings, OCMC Traffic Stipulations attached to the end of these Special Provisions, and the directions of the Engineer. In case of a conflict, the Engineer's decision shall be final.

In addition, the cost of compliance with requirements of the OCMC Traffic Stipulations, unless otherwise provided for, shall be deemed included in the prices bid for all scheduled items.

L. HOLIDAY EMBARGO. A special Holiday Construction Embargo shall be in effect on the Friday of the week preceding Thanksgiving Day week from 6:00 AM to 11:59 PM and again from the Monday of Thanksgiving Day week from 6:00 AM through January 2, at 11:59 PM. Roadway and sidewalk construction activities will be restricted during the embargo period on the streets listed below\*.

Any permits issued prior to the date of this notice, for work during this embargo period on the streets listed below which do not already have the permit stipulation "410" are hereby suspended for the period noted above. All permittees must comply with this embargo unless a special waiver is granted by OCMC. Waiver requests must be filed at least thirteen days before Thanksgiving Day, in the Permit Office by filing a "Request for Roadway/Sidewalk Permits During

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- \* Please note that this embargo only applies to NYCDOT construction permits.
  - \* List of street and maps of the affected locations are available by borough on the Department of Transportation's website at:  
<http://www.nyc.gov/html/dot/html/motorist/trafalrt.shtml>



Embargo Periods" and submitting supporting documentation. Waiver requests should only be submitted for critical reasons for a specific project. If a waiver is granted, the applicant will be notified so they can apply for the approved permits. Waivers **are not** required for ongoing Building Construction Activity Permits which already include the "410" permit stipulation. Waiver request forms may be obtained at any Permit Office or on the Department of Transportation's website at: <http://www.nyc.gov/html/dot/downloads/pdf/holidayembapp.pdf>

Prior to this embargo period all necessary measures must be taken so that all roadways and sidewalks are in proper condition to allow for the expeditious and safe movement of vehicular, bicycle and pedestrian traffic. Tool carts, cable reels, containers, and material stored on roadways must be removed during the embargo period.

The opening of utility access covers is prohibited on any of the streets noted below between the hours of 6:00 AM and midnight unless the utility or contractor files for an Emergency Authorization Number as required by section 2-07 of the Department of Transportation's Highway Rules. The planned opening of utility access covers may occur during the hours of 12:01 AM and 5:59 AM where no authorization number is required.

Temporary restoration of the streets and sidewalks and subsequent removal thereof, if required for the Holiday Embargo period, will be paid for under the appropriate scheduled items.

No extension of time due to the shutdown period will be granted to the Contractor for completion of the work.

M. 9/11 EMBARGO, BIKE RACE ROUTE AND OTHER SPECIAL EVENTS. In order to facilitate the movement of vehicles and pedestrians on the 9/11 Memorial Day, the City reserves the right to shut down the project and the restrictions specified under Article N. HOLIDAY EMBARGO, above, shall apply to all work performed under this contract starting from 12:01 AM of September 9 through 11:59 PM September 11.

In addition, the Contractor will be precluded from proceeding with work at any of the following locations where the Contractor cannot complete such work three (3) days prior to the date of the scheduled activity and the Holiday Embargo restrictions under Article L, above, shall apply:

TD FIVE BORO BIKE TOUR (on or about the first Sunday in May)

HUMAN ADVENTURE CORP RELIGIOUS PARADE (on or about April 6 and also repeats on April 20)

ZIUA USA - ROMANIAN DAY FESTIVAL (on or about April 29)

NAT'L ALLIANCE FOR MENTAL ILLNESS (on or about May 12)

PEARL STREET PARK ASSOC. - THE GREAT JULY 4TH FESTIVAL (July 4)

SEAPORT COMMUNITY COALITION - SUMMER SEAPORT FESTIVAL (on or about August 11)

BOWLING GREEN ASSOCIATION (on or about October 8)

INDEPENDANCE PLAZA TENANTS ASSOCIATION - VETERAN'S DAY FESTIVAL (October 12)

No extension of time due to the above mentioned shutdown periods will be granted to the Contractor for completion of the work.

However, where the Contractor is notified of a Special Unscheduled Event, such as a civic parade or other official activity, party, etc. not listed above, then the Holiday Embargo restrictions under Article L, above, shall apply. Temporary restoration of the streets and sidewalks and subsequent removal thereof for City work, if required, for those Special Unscheduled Event periods will be paid for under the appropriate scheduled items and the Contractor will be granted an extension of time, for the completion of the work, equal to the duration of the ordered shut-down.

N. PRIVATE UTILITY HARDWARE ADJUSTMENTS will be performed by the owning utility company or its agent, at its expense. The Contractor shall notify the utility company 72 hours prior to start of work at each location where its hardware requires adjustment.

O. DISPOSAL OF EXCESS EXCAVATED MATERIAL. All excess excavated material, with the exception of contaminated material, shall become the property of the Contractor and shall be properly disposed of away from the site, at the Contractor's expense. Contaminated material shall be disposed of separately in accordance with contract requirements.

P. N.Y.C. TRANSIT INSURANCE. The Contractor (Permittee) shall indemnify and save harmless the City of New York and the New York City Transit (Permitter) in accordance with the following "Insurance Requirements" and proof that the necessary insurance is in effect will be required before work can commence:

NYCT "OUTSIDE CONTRACT" INSURANCE REQUIREMENTS

1. The Permittee at its sole cost and expense shall carry or cause to be carried and shall maintain at all times during the period of performance under this Agreement policies of insurance as herein below set forth below:
  - (A) Workers' Compensation Insurance (including Employer's Liability Insurance) with limits as specified in Schedule A, which limit may be met by a combination of primary and excess insurance meeting the statutory limits of New York State. The policy shall be endorsed to include Longshoreman's and Harbor Workers' Compensation Act/Maritime Coverage Endorsement and/or Jones Act Endorsement when applicable.

- (B) Commercial General Liability Insurance (I.S.O. 2001 Form or equivalent) approved by Permittor in the Permittee's name with limits of liability as specified in Schedule A for each occurrence on a combined single limit basis for injuries to persons (including death) and damages to property. The limits may be provided in the form of a primary policy or combination of primary and umbrella/excess policy. When the minimum contract amounts can only be met when applying the umbrella/excess policy; the Umbrella/Excess Policy must follow form of the underlying policy and be extended to "drop down" to become primary in the event primary limits are reduced or aggregate limits are exhausted. Such insurance shall be primary and non-contributory to any other valid and collectable insurance and must be exhausted before implicating any Permittor/MTA policy available.

Such policy should be written on an occurrence form and shall include:

- Contractual coverage for liability assumed by the Permittee under this agreement;
- Personal and Advertising Injury Coverage;
- Products-Completed Operations;
- Independent Contractors Coverage;
- "XCU" coverage (Explosion, Collapse, and Underground Hazards) where necessary;
- Contractual Liability Exclusion, applicable to construction or demolition operations to be performed within 50 feet of railroad tracks, must be voided, where necessary; and,
- Additional Insured Endorsement (I.S.O. Form CG 20 26 07/04 version or equivalent) approved the Permittor naming:

New York City Transit Authority (NYCTA), the Manhattan and Bronx Surface Transit Operating Authority (MaBSTOA), the Staten Island Rapid Transit Operating Authority (SlRTOA), MTA Capital Construction Co., the Metropolitan Transportation Authority (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner).

- (C) Business Automobile Liability Insurance Policy - (I.S.O. Form CA 00 01 10 01 or equivalent) approved by the Permittor is required if Permittee's vehicle enters Permittor property. The insurance must be in the name of the Permittee or its contractor entering the Permittor property with limits of liability in the amount specified in Schedule A for claims for

bodily injuries (including death) to persons and for damage to property arising out of the ownership, maintenance or use of any owned, hired or non-owned motor vehicle.

(D) Railroad Protective Liability Insurance policy shall be required as specified in Schedule A.

(E) Environmental/Pollution Exposures

In the event environmental or pollution exposures exist, the Permittee shall require the environmental contractor or sub-contractor to provide the applicable insurance covering such exposure. The limits and type of insurance provided shall be satisfactory to the Permitter and will be confirmed to the parties prior to the start of the work.

## 2. General Requirements Applicable to Insurance Policies

- a) All of the insurance required by this Article shall be with Companies licensed or authorized to do business in the State of New York with an A.M. Best Company rating of not less than A-/VII or better and reasonably approved by the Permitter/MTA and shall deliver evidence of such policies.
- b) Except for Workers Compensation, all references to forms and coverages referred to above shall be the most recent used by the Insurance Services Office, Inc. ("ISO") or equivalent forms approved by the Insurance Department of the State of New York, provided, however, that excess coverages may be written on forms reasonably acceptable to Permitter containing provisions other than those contained in ISO forms but otherwise conforming in substance to the requirements of this Article.
- c) The Permittee or its Contractor performing the work shall furnish evidence of all policies before any work is started to the permitter:

For NYCT Contract Inspection  
C/O Mr. John Malvasio  
Director, MOW Engineering  
130 Livingston Street, Room 8044F  
Brooklyn, NY 11201  
Telephone: (718) 694-1358

These policies must: (i) be written in accordance with the requirements of the paragraphs above, as applicable; (ii) be endorsed in form acceptable to include a provision that the policy will not be canceled, materially changed, or not renewed, unless otherwise indicated herein, at least thirty (30) days prior written notice to the Permitter c/o MTA Risk and Insurance Management (MTA RIM) Department - Standards, Enforcement & Claims Unit, 2 Broadway - 21st floor, New York,

NY 10004; and (iii) state or be endorsed to provide that the coverage afforded under the contractor's policies shall apply on a primary and not on an excess or contributing basis with any policies which may be available to the Permittor/MTA, and also that the contractor's policies, primary and excess, must be exhausted before implicating any Permittor/MTA policy available. (iv) In addition, contractor's policies shall state or be endorsed to provide that, if a subcontractor's policy contains any provision that may adversely affect whether contractor's policies are primary and must be exhausted before implicating any Permittor/MTA policy available, contractor's and subcontractor's policies shall nevertheless be primary and must be exhausted before implicating any Permittor/MTA policy available. Except for Professional Liability, policies written on claims made basis are not acceptable. At least two (2) weeks prior to the expiration of the policies, contractor shall endeavor to provide evidence of renewal or replacement policies of insurance, with terms and limits no less favorable than the expiring policies. Except as otherwise indicated in the detailed coverage paragraphs below, self insured retentions and policy deductibles shall not exceed \$100,000, unless such increased deductible or retention is approved by Permittor/MTA. The Permittee shall be responsible for all claim expense and loss payments within the deductible or self-insured retention. The insurance monetary limits required herein may be met through the combined use of the insured's primary and umbrella/excess policies.

- d) Certificates of Insurance may be supplied as evidence of policies of the above policies, except for Policy (D) Railroad Protective Liability Insurance Policy. However, if requested by the Permittor, the Permittee shall deliver to the Authority, within forty-five (45) days of be request, a copy of such policies, certified by the insurance carrier as being true and complete. The Railroad Protective Liability Insurance Policy must be provided in the form of the Original Policy. A detailed Insurance Binder may be provided, ACORD or Manuscript Form, pending issuance of the Original Policy. The Original Policy must be submitted to MTA RIM within 30 days of the Binder Approval.
- e) If a Certificate of Insurance is submitted, it must: (1) be provided on the Permittor Certificate of Insurance Form or MTA Certificate of Insurance Form for Joint Agency Agreements; (2) be signed by an authorized representative of the insurance carrier or producer and notarized; (3) disclose any deductible, self-insured retention, sub-limit, aggregate limit or any exclusions to the policy that materially change the coverage; (4) indicate the Additional Insureds and Named Insureds as required herein, along with a physical copy of the Additional Insured Endorsement (I.S.O. Form CG 20 26 07/04 version or equivalent), as applicable and the endorsement(s) must include policy number(s); (5) reference the Contract by

number on the face of the certificate; and (6) expressly reference the inclusion of all required endorsements.

- f) The minimum amounts of insurance required in the detail description of policies (A), (B), (C), and (D) above shall not be construed to limit the extent of the Permittee's liability under this Agreement.
- g) If, at any time during the period of this Agreement, insurance as required is not in effect, or proof thereof is not provided to the Permitter, the Permitter shall have the options to: (i) direct the Permittee to suspend work or operation with no additional cost or extension of time due on account thereof; or (ii) treat such failure as an Event of Default.

Q. CONTRACT ITEMS THAT INCLUDE BACKFILL AS A PART OF THEIR WORK.

The following shall pertain to all contract items that have backfill as a part of their work: Backfilling shall comply with Subsection 4.11.3 of the Standard Specifications and no additional payment will be made for any Highway or Street Lighting work item requiring Contractor to furnish additional fill material to meet these requirements when backfilling.

R. SCHEDULING PRESENTATION. The Contractor shall submit construction schedule in the form of a bar chart using "Microsoft Project 2010" or latest version, or in an approved equivalent program which shall be directly and fully translatable into Microsoft Project 2010 format, within seven days of the initial Pre-Construction Meeting. Each bar in the chart shall show dates the Contractor Contract Drawings to start and complete each construction activity after the initial Pre-Construction Meeting. Bar chart shall show the order and interdependence of all activities necessary to complete the work and the sequence in which activity is to be accomplished as planned by the Contractor and in accordance with all subcontractors or suppliers whose work shall be shown on the bar chart. The Contractor shall submit the bar chart for the Engineer's review and revise it, if required, until approved by the Engineer.

The Contractor shall submit weekly progress status update reports or as otherwise directed by the Engineer. The Contractor shall submit updated bar chart every month. The revised bar chart shall be made in the same form and detail as the original submittal and shall be accompanied by an explanation of the reasons for the revisions all of which shall be subject to approval by the Engineer.

S. ACCELERATED PROJECT SCHEDULE AND COMBINATION OF STAGES.

Contractor shall plan and/or stage its work schedule using all hours/days available. Contractor is advised that all applicable unit prices shall include, for the purpose of this contract, all overtime costs, premium time costs, shift differentials required to complete construction within the specified "Time(s) of Completion" stipulated in this contract.

Contractor shall be permitted to accelerate this project, to combine stages and/or work sequences. Any such changes shall be shown in the construction schedule, to be furnished in accordance with the General Conditions of the Standard Highway Specifications and the above "SCHEDULING PRESENTATION" Article, and shall be submitted for approval of the Engineer.

T. NOISE CONTROL. The Contractor is directed to Title 24, Chapter 2 of the Administration Code of the City of New York, known as the "New York City Noise Code" by the Department of Environmental Protection. The provisions of this code and its most recent additions and revisions shall apply to this contract. In the event of a conflict between the requirements of the New York City Noise Code and the requirements of Noise Control contained in these special notes, the more stringent of the two shall apply.

The Contractor shall plan and carry out work on this Project to ensure that the noise from construction equipment and activities does not exceed the limits specified herein. The noise abatement operations and conditions specified shall be carried out by the Contractor to limit noise in project and adjacent areas. The Contractor shall conduct a continuous educational effort for the workers on the site to ensure that they are aware of their roles in minimizing noise propagating from the site.

In order to monitor noise abatement operations the Contractor shall employ services of "Noise Control Specialist" for the duration of construction activity. The contractor shall submit qualifications and experience of the prospective specialist/firm to the Engineer for prior approval. The specialist/firm must satisfy the eligibility requirements of qualifications and work experience as required by the N.Y.C.D.E.P.

The monitoring protocol shall be as follows:

- (a) There shall be one outdoor and one indoor monitoring station for each work area or 1,000 ft. of street length whichever is less.
- (b) Monitoring of noise level shall be done prior to start of construction and during construction for each station at the same work hours specified in the contract.
- (c) Locations of monitoring stations shall be recommended by the noise control specialist for approval of the Engineer.
- (d) Engineer shall provide indoor station locations to the contractor after ascertaining availability of the said station from the Community Board.

Should the Contractor fail to carry out the noise abatement operations and conditions specified herein, the Engineer shall have the authority to suspend all work until such time as the Engineer deems that the Contractor has complied with the requirements.

The following additional requirements for noise control shall apply to this contract:

1. Noise Level Requirements for Construction Equipment

- (a) The Contractor shall ensure that all Contractor and Subcontractor equipment, of the types listed in Table A to be used on-site for a total duration greater than 5 days, shall be tested for compliance with the stated noise emission limits during the first day of use on the construction site or at an alternative site acceptable to the Engineer.
- (b) All equipment as described in (a) above shall be re-tested at 6 month intervals while in use on site.
- (c) All compliance tests shall be performed by the Contractor.
- (d) For each piece of equipment tested, the Contractor shall provide a noise report to the Engineer as shown in Figure A.
- (e) Equipment of the types listed in Table A, as described above, shall not be used on-site without valid certificates of noise compliance.
- (f) The Contractor shall provide to the Engineer two noise meters meeting the requirements of Section 2(d) herein. Two acoustic calibrators of the type recommended by the meter manufacturer shall also be provided.



TABLE A

CONSTRUCTION EQUIPMENT NOISE EMISSION LIMITS:  
MEASURED AT 50 FEET FROM CONSTRUCTION EQUIPMENT

<u>Equipment Category</u>	<u>Noise Level, dBA(SLOW)</u>
Auger	83
Backhoe	80
Bar Bender	80
Cherry Picker	80
Chain Saw	86
Compactor	80
Compressor	70
Concrete Mixer	86
Concrete Pump	82
Concrete or Diamond Saw	90
Crane	86
Crawler Miller	90
Dozer	86
Front End Loader	80
Generator	82
Gradall	86
Grader	86
Jackhammer	88
Man Lift	80
Mounted Impact Hammer	95
Paver	86
Pneumatic Tools	86
Roller	80
Scraper	86
Shotcrete Liner (tire-mounted)	79
Striper (walk-behind)	80
Tractor	84
Traffic Line Remover	80
Truck (including truck-mounted equipment)	84
Vibrator	80
Vibratory Pile Driver	95
All Other Equipment with Engines Larger than 3750W	86
Impact Pile Driver	105 dBC(FAST)

FIGURE A

CERTIFICATE OF EQUIPMENT NOISE COMPLIANCE

Contractor Name: \_\_\_\_\_

Contract Name & Number: \_\_\_\_\_

Equipment Type: \_\_\_\_\_

Manufacturer & Model Number: \_\_\_\_\_

Identification Number: \_\_\_\_\_

Rated Power & Capacity: \_\_\_\_\_

Operating Condition During Test: \_\_\_\_\_

Measured Sound Levels at 6 to 15 meters:

Measured Values and Distance:

Engine-Powered or Concrete-Breaking Equipment:

Right Side: \_\_\_\_\_ dBA (SLOW), at \_\_\_\_\_ meters

Left Side: \_\_\_\_\_ dBA (SLOW), at \_\_\_\_\_ meters

Impact Pile Driving Equipment:

Right Side: \_\_\_\_\_ dBC (FAST), at \_\_\_\_\_ meters

Left Side: \_\_\_\_\_ dBC (FAST), at \_\_\_\_\_ meters

Equivalent Values at 50 Feet Distance:

Engine-Powered or Concrete-Breaking Equipment:

Right Side: \_\_\_\_\_ dBA (SLOW).

Left Side: \_\_\_\_\_ dBA (SLOW).

Impact Pile Driving Equipment:

Right Side: \_\_\_\_\_ dBC (FAST).

Left Side: \_\_\_\_\_ dBC (FAST).

Maximum Values Allowed for this Equipment: \_\_\_\_\_ dBA (SLOW) at 15 meters  
\_\_\_\_\_ dBC (FAST) at 15 meters

If equipment sound level exceeds maximum value allowed, indicate action taken to achieve compliance:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name, Work Address & Phone No. \_\_\_\_\_  
of NYSDOT Inspector \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

CONTRACTOR'S ACCEPTANCE: \_\_\_\_\_ Date: \_\_\_\_\_

2. Noise Level Test Procedures of Construction Equipment

- (a) All engine-powered equipment shall be operated by the Contractor or Contractor's representative at high idle (maximum governed rpm) under full load conditions during the tests.
- (b) Portable and mounted impact hammers, such as hoe rams and jackhammers to be used to concrete breaking, shall be tested during the first day of actual operation at the construction site under maximum load conditions as rated by the equipment manufacturer.
- (c) Pile driving equipment shall be tested at the construction site under maximum load conditions as rated by the manufacturer.
- (d) All noise certification measurements shall be performed with an instrument that is in compliance with the criteria for a Type 1 (Precision) or Type 2 (General Purpose) Sound Level Meter as defined in the current revision of ANSI Standard S1.4. An acoustic calibrator of the type recommended by the sound level meter manufacturer shall be used prior to all measurements.
- (e) If possible, measurements shall be made at 50 feet ( $\pm 1.5$  feet) from the right and left sides of the equipment casing, at a height of 5 feet above ground level, with the equipment operating as indicated in items (a), (b) or (c) above for a minimum period of 1 minute. Measurements made at less than 50 feet, because of space limitations at the test site, shall be reduced by the values given in Table B to estimate the 50-foot sound level.

TABLE B

ADJUSTMENTS FOR CLOSE-IN EQUIPMENT NOISE MEASUREMENTS

Measurement Values to be Subtracted from Measured Sound Level  
Distance (Feet)      to Estimate Sound Level at 50 Feet (dBA)

20 to under 21	8
21 to under 23	7
23 to under 26	6
26 to under 29	5
29 to under 33	4
33 to under 37	3
37 to under 41	2
41 to under 47	1
47 to under 50	0

3. Compliance with Equipment Noise Level Requirements

- (a) The Engineer shall retain a copy of the noise report from the Contractor with each piece of equipment used on the project of the types listed in Table A. The report shall be on the form shown in Figure A with certification by the noise control specialist hired by the contractor that equipment noise emissions do not exceed those prescribed.
- (b) If the noise levels obtained during the tests exceed those specified in Table A the Contractor shall promptly modify or alter such equipment and retest, or substitute other equipment to meet the noise level requirements.
- (c) Upon compliance, (including the certification date and equipment identification number) the Engineer will keep the noise reports readily available on file in the Construction field office for inspection upon request.
- (d) The Certification of Noise Compliance will remain valid for a period of 6 months only. Delays caused by certification refusal or by time lost in improving the rejected equipment or finding alternate acceptable equipment shall not be a basis for any monetary or time delay claims or for avoidance of late completion penalties.
- (e) All equipment shall be subject to spot noise level testing by the Engineer at his discretion as necessary to determine that the equipment in use meets the requirements specified in Table A. For this purpose, the Contractor shall furnish noise-measurement instrumentation that complies with the standards specified in paragraph 2. (d). If such tests are requested by the Engineer, the Contractor shall locate and operate the equipment as directed by the Engineer so as to facilitate the measurements. The Engineer shall provide the Contractor with a copy of the results of the measurements. If such tests demonstrate that any equipment does not comply with the requirements specified in Table A, its Certificate of Noise Compliance shall be revoke and equipment shall be taken out of use until compliance is achieved. A new Certificate of Noise Compliance will then be issued.

4. Construction Noise Level Exposure Limits

- (a) In no case shall the public be exposed to construction noise levels exceeding 100 dBA (SLOW) or to impulsive noise levels exceeding 125 dBC (FAST).
- (b) Construction activities shall be conducted in such a manner that the equivalent noise level (Leq) over any one-hour period does not exceed 85 dBA at any noise-sensitive locations (e.g. residence and hotels).

5. Construction Noise Level Exposure Test Procedures

- (a) All noise exposure measurements will be performed with an integrating sound level meter. An acoustic calibrator will be used prior to all measurements.
- (b) The measurement microphone of the sound level meter shall be fitted with an appropriate windscreen, and will be located 1.5 meters above the ground and at least 5 feet away from the nearest sound-reflective surface for the tests.
- (c) Noise exposure measurements will be taken at noise-sensitive locations closest to the construction activities at least once each week and as dictated by construction activities. Measurement periods at each location shall be a minimum of one hour.
- (d) Construction noise exposure measurements will coincide with periods of maximum noise-generating construction activity, and will be performed during the construction phase or activity that the greatest potential to create annoyance or to exceed the noise exposure limits.

6. Compliance with Construction Noise Level Exposure Limits

- (a) Construction noise exposure data will be collected by the Contractor on a weekly basis. The noise report will include (1) a sketch indicating the locations of the measurements and of all nearby construction equipment operating during the measurement period, (2) the measured maximum A-weighted noise level at each location, in terms of dBA (SLOW), (3) the measured maximum C-weighted noise level, in terms of dBC (FAST) and (4) the measured one-hour Leq (in dBA).
- (b) In the event that the measured noise levels exceed the limits specified in paragraph 4 above, the Engineer will immediately notify the Contractor and the Contractor shall implement corrective actions as directed by the Engineer.
- (c) All construction activities will be subject to spot noise level testing by the Engineer at his discretion as necessary to determine that the noise levels meet the exposure limits specified in paragraph 4 above. If such tests demonstrate that the noise levels exceed the specified limits, the Contractor shall implement corrective actions as directed by the Engineer.

7. General Requirements for Construction Equipment Noise Control

- (a) The Contractor shall minimize the use of impact devices, such as jackhammers, pavement breakers, and hoe rams. Where possible, concrete crushers or pavement saws shall be used rather than hoe rams for tasks such as grillage removal and pavement demolition.
- (b) All pneumatic impact tools and equipment used at the construction site shall have intake and exhaust mufflers recommended by the manufacturers thereof, to meet relevant noise ordinance limitations.
- (c) All impact devices (i.e. jackhammers and pavement breakers) shall be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof, to meet relevant noise ordinance limitations.
- (d) Hoppers, conveyors transfer points, storage bins, and chutes shall be lined or covered with sound-deadening material.
- (e) The Contractor shall minimize the use of air or gasoline-driven hand tools.
- (f) All other equipment, including internal combustion engines, shall have mufflers and shield paneling recommended by the manufacturers thereof.

8. General Operational Requirements for Construction Noise Control

- (a) The Contractor shall operate equipment so as to minimize banging, clattering, buzzing, and other annoying types of noises, especially near noise-sensitive locations.
- (b) The Contractor, to the extent feasible, shall configure the construction site in a manner that keeps noisier equipment and activities as far as possible from noise-sensitive locations and nearby buildings.
- (c) The Contractor shall minimize noise from the use of backup alarms near residential buildings by using self-adjusting, ambient noise-sensitive backup alarms that meet OSHA regulations.
- (d) In no case shall the above restrictions limit the Contractor's responsibility for compliance with all applicable Federal, state and local safety ordinances and regulations and other sections of these construction specifications.

9. Acoustic Shed Requirements

- (a) All noise-generating mechanical equipment that is operated by the Contractor at any time other than weekdays between the hours of 8:00 a.m. and 10:00 p.m. and weekends 10:00 a.m. 10:00 p.m. shall be enclosed within an acoustic shed. Such equipment includes, but is not limited to, generators for traffic sign boards and lighting.
- (b) Acoustic sheds shall consist of three-sided, closed-top enclosures, oriented such that the open end of the shed faces away from residential or hotel buildings.
- (c) The shed shall be constructed of 0.5 inch plywood sheeting, or other acceptable material weighing at least 1.5 pounds per square foot, on timber framing with no gaps at joints or corners. Gaps between the bottom edge of the shed panels and the ground shall not exceed 1 inch in width and shall be closed off with solid strips of rubber, neoprene or other suitably dense material.
- (d) The inside of the shed shall be lined with glass fiber or mineral wool type sound-absorbing material at least 2 inches thick, protected by wire mesh or perforated sheets that have at least 30 percent open area.

10. Cost of Work

- (a) The cost of all labor, materials, equipment, insurance necessary for noise abatement measures as described in this section, any necessary modifications of construction methods or equipment and any delays to construction due to work suspension due to non-compliance with noise control requirements or due to necessary modifications to construction methods for compliance with the noise control requirements is deemed included in the prices bid for the items of work for which the equipment is used.

U. UNDER-SIDEWALK VAULTS. The Contractor is hereby advised that under-sidewalk vaults may be present in both sidewalk and roadway areas within the project limits. Where Contractor claims any locations cannot be completed because of vaults, he should indicate by which method he has determined vault interference and provide that information to the Engineer.

Prior to any sidewalk excavation, the Contractor shall be responsible to verify the existence of under-sidewalk vaults. The Contractor shall perform visual sidewalk reconnaissance; search for and examine record drawings; gain access to cellars and obtain measurements within vaults; and perform sub-surface radar examination or use other non-destructive methods to locate possible vault structures. Where these above methods of verification are not available to the Contractor, he/she shall then be required to locate

the vault envelopes and their roof depth below finished sidewalk grade by drilling holes (at no direct payment), or by Test Pits, under Item No. 9.00 C, as directed by the Engineer.

The Contractor shall be liable for any damage to the under-sidewalk building vaults and/or its contents and/or occupants due to his failure to verify the pre-existing vault condition.

Vault records may be available from the following (or other) sources:

A. NEW YORK CITY DEPARTMENT OF BUILDINGS

B. MS. PENNY A. JACKSON  
FOIL / RECORDS ACCESS  
OFFICE OF LITIGATION SERVICES AND RECORDS MANAGEMENT  
NYC DEPARTMENT OF TRANSPORTATION  
55 WATER STREET, 6<sup>TH</sup> FLOOR  
NEW YORK, NY 10041

C. NEW YORK CITY DEPARTMENT OF FINANCE

Where vault roofs are determined to interfere with construction of standard pedestrian ramps, the Engineer's may approve for construction of, or installation of, non-standard pedestrian ramps, which may include relocation of ramps and/or partial roadway ramps.

An overall field sketch of each corner suspected of having a vault, along with at least one photograph (3" x 3" minimum) of each location, and the results of his/her investigation shall be furnished by the Contractor to the Engineer for review at least ten (10) working days prior to start of work at that respective corner. Said photographs shall be in addition to those required under Item 6.43. Each field sketch shall show measurements of affected areas of vaults, the building line as a reference guide which can be employed to indicate the vault envelope in the sidewalk, the boundaries of the underground structures, curb reveals, and location of proposed pedestrian ramps. No additional payment is to be made for this overall sketch.

Any vault structures punctured by the Contractor's operations shall be repaired by the Contractor to match the existing structure. Said hole in vault structures shall be temporarily repaired with an approved epoxy mortar, or securely steel plated if permanent repairs are not completed prior to the end of that same working day. No holes in vault roofs shall be left unattended at any time.

The Contractor shall also be responsible to replace damaged water proofing directly over vault roofs at his own expense.

V. NO EXTENSION OF TIME FOR WINTER SHUT-DOWN. Where the Contractor's approved work schedule for installing sidewalk, curb, roadway base and/or pavement falls within the winter period of



December 1st through April 1st, the Contractor will NOT be granted an extension of time for completion of this contract due to the winter shut-down period, unless otherwise provided in Schedule A.

W. PORT AUTHORITY OF NEW YORK AND NEW JERSEY SURVEY MONUMENTS. When working in the vicinity of Port Authority of New York and New Jersey survey monuments, the Contractor shall hand excavate, under Item 8.02 JA and 8.02 JB, at those Survey Monuments for a distance of five (5) feet around each monument, as directed by the Engineer. Any damage to their survey monuments must be reported to the Port Authority of New York and New Jersey, immediately and they will reinstall their own monuments.

X. THE CONTRACTOR IS ADVISED THAT: The Department has hired a firm to perform the Resident Engineering Services and the staffing will be increased to handle all the extra work expected to monitor this project. This will not be a project left to the Resident Engineer alone. The Deputy Commissioner will be actively involved.

Y. VEHICLES. The Contractor shall be required to furnish one (1) vehicle to be used by Department of Design and Construction (DDC) personnel as assigned by the Deputy Commissioner of the Department, during the life of the Contract. No direct payment will be made for the vehicle, or associated costs. All costs shall be deemed to be included in all scheduled items.

The Contracted vehicle shall be a new small SUV hybrid vehicle as approved by DDC's Director of Fleet Administration; and shall be equipped with a standard equipment package, and meet the following minimum specification:

1. Engine: Manufacturer's Standard 4 cylinder.
2. Transmission: Automatic.
3. Drive: Manufacturer's Standard 4 wheel drive.
4. Steering: Power.
5. Air Conditioning.
6. Body: 4 Doors.
7. Color: Manufacturer's Standard White.
8. Mirror: Left and Right.
9. Radio: AM/FM.
10. Electric Rear Defogger.
11. Brakes: Anti-Lock.
12. Air Bag: Dual
13. Anti-theft device (optional).
14. Power Windows and Locks.
15. Two sets of keys.
16. GPS navigation.
17. Hands-free telecommunication technology.
18. Fire Extinguisher.
19. First Aid Kit.
20. Any additional equipment will not be accepted by DDC.

The Contractor shall provide fuel, oil, proper maintenance, tires

and replacement parts, to keep the vehicle in a safe operating condition, and shall undertake all repairs, including repairs arising from vandalism, accidents, or other damages. A Gas Company Card shall be furnished with each vehicle for fueling purposes. In the event that any vehicle requires maintenance or repairs which cannot be completed the same day, a comparable replacement vehicle shall be provided while the vehicle is out of service. If the vehicle is lost or stolen, the Contractor shall replace the vehicle within 5 business days with a comparable vehicle.

The vehicle shall be provided for the entire duration of this Contract, and shall be returned to the Contractor within thirty days after final acceptance of work or twelve months after substantial completion, whichever comes first. Contractor owned/leased vehicle provided pursuant to this Contract shall remain the property of the Contractor/ Leaser throughout the Contract period; shall be registered in the City's name. If leased vehicle is provided, the Contractor shall obtain from the leasing company the necessary documents allowing the vehicle to be registered as an official City of New York vehicle. The Contractor shall provide insurance for vehicle as set forth in Schedule A.

Within five (5) business days of receipt of notice to provide specified vehicle, the Contractor shall make the vehicle available for inspection by Fleet Administration. Upon determination by Fleet Administration that the vehicle satisfies requirements, the Contractor shall make arrangements through DDC's Fleet Administration for delivery to the DDC. The Contractor shall submit to Fleet Administration a signed MV-82 Part 10 authorizing registration in the City's name together with, in the case of a previously unregistered vehicle, the manufacturer's certification of origin or, in the case of a currently registered vehicle, a copy of the title.

All required transmittals to Fleet Administration shall be made as follows:

Agency Fleet Administrator  
NYC Department of Design and Construction  
30 - 30 Thomson Avenue, 4<sup>th</sup> Floor  
Long Island City, New York 11101  
Telephone No.: (718) 391-1852

When the vehicle is no longer required under this contract, as described above, it shall be de-registered by the City and promptly returned to the Contractor.

Z. THE CONTRACTOR IS NOTIFIED that for use of City water under this project the Contractor shall be required to obtain all necessary permits from the Department of Environmental Protection, at no cost to the Contractor in accordance with the NYC Department of Environmental Protection, STANDARD SEWER AND WATER MAIN SPECIFICATIONS, dated July 1, 2014, Section 12.04 "TEMPORARY USE OF CITY WATER ON CONSTRUCTION PROJECTS".

AA. ARCHAEOLOGICAL DISCOVERIES. The Contractor is notified that the Resident Engineer will retain the services of an Archaeologist (the "City's Archaeologist") for this project.

The City's Archaeologist shall be notified in advance and shall be present on site during sub-surface excavations as he deems necessary. The City's Archaeologist shall be authorized to halt construction at any time in order to record and/or recover any archaeological resources encountered during excavations, and to stabilize in place any human remains encountered. For the purpose of evaluating and recording archaeological resources, the City's Archaeologist shall be allowed to enter trenches provided all standard safety requirements are met. It is understood that some construction down time may be necessary.

In the event that human remains and/or other significant archaeological deposits are encountered during construction or archaeological investigations, Landmarks Preservation Commission (LPC) shall be notified as directed by the City's Archaeologist and the State Historic Preservation Office (SHPO) requires that the following protocol is implemented:

- At all times human remains must be treated with the utmost dignity and respect. Should human remains be encountered work in the general area of the discovery will stop immediately and the location will be immediately secured and protected from damage and disturbance.
- Human remains or associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.
- The County coroner and local law enforcement as well as the SHPO and the involved agency will be notified immediately. The coroner and local law enforcement will make the official ruling on the nature of the remains, being either forensic or archeological. If the remains are archeological in nature, a bioarchaeologist will confirm the identification as human.
- If human remains are determined to be Native American, the remains will be left in place and protected from further disturbance until a plan for their protection or removal can be generated. The involved agency will consult SHPO and appropriate Native American groups to determine a plan of action that is consistent with the Native American Graves Protection and Repatriation Act (NAGPRA) guidance.
- If human remains are determined to be Euro-American, African-American, etc., the remains will be left in place and protected from further disturbance until a plan for their avoidance or

removal can be generated. Consultation with the SHPO and other appropriate parties will be required to determine a plan of action.

Should extra work be ordered by the Resident Engineer as a result of any archaeological discoveries, it shall be paid for as extra work in accordance with the requirements of Article 26 in the Standard Construction Contract dated December 2013.

For additional information, see the "Phase IA Archaeological Documentary Study" attached to the end of these Special Provisions.

AB. THE CONTRACTOR IS ADVISED that NYC Landmarks Preservation Commission has designated 39 and 41 Worth Streets as NYC Landmarks.

AC. PRIVATE UTILITY FACILITIES WORK. The Contractor is advised that this project contains private Utility Facilities work as specified in Addendum No. 6, herein this project, and the "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", which is available for pick-up in the Bid Procurement Office at 30-30 Thomson Ave., Long Island City, NY 11101.

Unit Price Items that are listed in the Bid Schedule and the Contingency Item List, that begin with "JB" are to be done in accordance with the corresponding "JB" specifications contained in the "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN" document issued August 1, 2005. In addition, each "JB" item contains one of the following suffixes to denote the Utility Company that the work is chargeable to: "(CE)" for Consolidated Edison Company of New York, Inc.; "(ECS)" for Empire City Subway Company, Ltd.; "(AT&T)" for American Telephone and Telegraph; and, "(TW)" for Time Warner Entertainment Company, L.P. (e.g.: JB 200(CE) refers to Section JB 200 in the "JB" specifications for work that is chargeable to Consolidated Edison Company of New York).

AD. OVERRUNS OF UNIT PRICE ITEMS. If the quantity of any unit price item necessary to complete the Work exceed one hundred twenty-five (125) percent of the estimated quantity for that item set forth in the bid schedule, the Contractor will not be subject to negotiating a new unit price for such item as per the requirements of Sub-Article 26.1 in the Standard Construction Contract. Overruns of unit item quantities will be paid at the bid price times the multiplier bid by the Contractor (e.g. no renegotiation at 125%).

AE. THE CONTRACTOR IS NOTIFIED that the fuel cost per gallon used in the formula under Sub-Article 26.2.8 of the Standard Construction Contract for **Extra Work** will be derived from the fuel price index for the United States East Coast published weekly by the United States Energy Information Administration ("USEIA"), and available on its website at <http://www.eia.gov/petroleum/gasdiesel/>. The USEIA-published cost per gallon for the applicable fuel on the East Coast for the week in which the first day of each calendar quarter during the contract term occurs (i.e., January 1<sup>st</sup>, April 1<sup>st</sup>, July 1<sup>st</sup>, and September 1<sup>st</sup>) will be used in the reimbursement formula for all **Extra Work** invoiced that was performed during that calendar

quarter. Should the USEIA stop publishing this fuel price index, the fuel cost per gallon will be determined by reference to a substitute index to be agreed upon by the Contractor and the City.

AF. START OF CONTRACT WORK. The Contractor is notified that a Notice To Proceed (NTP) date will be issued for work to commence within 21 to 30 Days of Contract Registration.

AG. PRICES TO INCLUDE. No direct payment will be made for costs incurred in complying with the foregoing Special Provisions, unless otherwise provided. Said costs will be deemed to have been included in the prices bid for all the scheduled contract items.

**CITY OF NEW YORK  
DEPARTMENT OF TRANSPORTATION  
LOWER MANHATTAN BOROUGH COMMISSIONER'S OFFICE  
59 MAIDEN LANE, 37<sup>TH</sup> FLOOR  
NEW YORK, NEW YORK 10038**

OCMC FILE NO: MEC-12-147

CONTRACT NO: HMMWTCA7E

PROJECT: RECONSTRUCTION OF WORTH STREET

LOCATIONS: WORTH STREET BETWEEN HUDSON STREET AND PARK ROW; MULBERRY STREET  
BETWEEN WORTH STREET AND BAYARD STREET AND MOSCO STREET BETWEEN  
MULBERRY STREET AND MOTT STREET

COMMUNITY BOARD: ONE (1), THREE (3), MANHATTAN

Permission is hereby granted to the New York City Department of Design and Construction and its duly authorized agent, to enter upon and restrict the flow of traffic at the above location and its local adjacent streets for the purpose of carrying out the above noted project, subject to the stipulations, as noted below.

**SPECIAL NOTES:**

- **ACCESS TO ABUTTING PROPERTIES:** The Contractor shall coordinate all activities with abutting property owners to ensure access is provided to/from entrances/driveways at all times.
- **ENHANCED MITIGATIONS FOR PEDESTRIAN FLOW:** Timber curb and fencing as per Lower Manhattan Standards shall be provided to ensure pedestrian safety. Pedestrian and traffic management agents shall be provided to assist pedestrian and vehicular traffic at the designated crosswalk areas. These flaggers shall be assigned to this function exclusively.
- **CONSTRUCTION EMBARGO:** A construction embargo will apply to all locations here-in which fall within the Holiday Embargo or any other Special Event Embargoes; such as The Summer Streets event, San Gennaro Feast etc. as published by the Bureau of Permit Management and Construction Control.
- **NYPD TRAFFIC ENFORCEMENT AGENTS (TEA) are required for this project:** Eight (8) Traffic Enforcement Agents (TEA) plus relief daily shall be provided between the hours of 7 am to 7 pm, Sunday through Saturday. TEA's shall be provided at locations to be determined by New York City DOT. All TEA costs shall include relief and supervision.
- **MPT and DETOUR PLANS:** The Contractor must submit a Maintenance and Protection of Traffic (MPT) Plans and Detour Plans to NYCDOT – LMBCO/OCMC for approval at least two weeks before commencing work or before making changes to the current MPT or Detour Plan. "No Standing Anytime - Temporary Construction" signs and temporary pavement markings shall be installed and maintained as warranted by the (MPT) plan. All temporary signs and pavement markings shall be removed upon completion of the project.
- **COMMUNITY OUTREACH:** Community Outreach shall be provided for the duration of the project to notify the public in the form of advanced media advisories. Full roadway closures require a minimum of 14 days of outreach prior to the road closure. All outreach must be coordinated with the list of contacts provided by LMBCO.
- **AUTHORIZED PARKING** – Prior to performing work which impacts Authorized Parking, the Contractor shall submit in writing to NYCDOT – LMBCO/OCMC, a request to occupy space currently used by Authorized vehicles. The Contractor must submit for approval to NYCDOT – LMBCO/OCMC alternate locations for the authorized parking. The Contractor must also perform the necessary measures to relocate regulatory signs, such as, providing advanced warning signs 3 days in advance of any signage change.
- **SEQUENCING OF WORK** – The Contractor will be limited to one (1) block segment and one side of the street at a time. Intersection closures will be limited to one (1) intersection at a time. If the Contractor requests to work more locations concurrently to expedite construction, they must provide an MPT Plan and Detour Plan to NYCDOT – LMBCO/OCMC for approval prior to start of construction at any additional location. They must

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provide the proper number of crews (including utility specialty crews) to work productively at all occupied locations. Additional locations will be permitted at the discretion of NYCDOT – LMBCO/OCMC.

- **BUS ROUTES/STOPS** - The Contractor shall provide written notice to NYC DOT and New York City Transit (NYCT) a minimum of five (5) weeks in advance for lane/street closures that affect bus routes or bus stops. Any relocation of Bus Stops must be coordinated with NYCT prior to starting construction.
- **BROOKLYN BRIDGE FULL WEEKEND CLOSURES:** When the Brooklyn Bridge full weekend closures occur, the Contractor must maintain all open "non-construction" lanes on Worth Street to traffic as well as restore lanes on other streets as determined by NYCDOT – LMBCO/OCMC.
- **NYPD COUNTER TERRORISM:** The Contractor shall provide written notice to NYPD Counter Terrorism a minimum of five (5) weeks in advance of any lane/street closures.
- **9/11 CONSTRUCTION EMBARGO:** A 9/11 Construction Embargo is in effect for this project. No work shall be performed from 9/9 to 9/11 of each year of the contract. The Contractor must maintain all open lanes outside of the construction zone to traffic as well as restore lanes to traffic as determined by NYCDOT – LMBCO/OCMC.
- **BROADWAY EVENTS:** In the case of an event on Broadway, such as a parade, the Contractor may be required to restore lanes to traffic in advance of the event as determined by NYCDOT – LMBCO/OCMC.

#### **SIDEWALK WORK**

- Working hours shall be as follows:
  - 7 AM to 10 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10AM to 6 PM, Sunday
- The Contractor must maintain either a ten (10) foot clear path on the sidewalk or a protected walkway in the roadway at all times. All temporary walkways installed by the Contractor must be free of obstructions and tripping hazards and must meet ADA requirements
- The Contractor may not work on sidewalk on both sides of the street at the same time
- No noisy operations shall occur prior to 8:00 AM on weekdays, 10:00 AM on weekends or after 10:00 PM.
- The Contractor must maintain access to all residential and commercial establishments at all times. All temporary walkways and building entrance ramps installed by the Contractor must be free of obstructions and tripping hazards and must meet ADA requirements

#### **CURB WORK**

- Working hours shall be as follows:
  - 7 AM to 10 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM Sunday
- The Contractor may not work on curbs on both sides of the street at the same time.
- The Contractor must maintain an eight (8) foot clear path on the sidewalk at all times.
- No noisy operations shall occur prior to 8:00 AM on weekdays, 10:00 AM on weekends or after 10:00 PM.

#### **PERMANENT ASPHALT PAVING OPERATIONS**

- Working hours shall be as follows:
  - 9 PM to 5 AM, Monday (PM) through Friday (AM)
  - 9 AM to 10 PM, Saturday
  - 10 AM to 10PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot lanes for traffic at all times.
- The contractor shall coordinate all work with all business operations and agencies within the area.

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**ALL ROADWAY AND UTILITY WORK**

**1. WORTH STREET FROM HUDSON STREET TO WEST BROADWAY**

- Working hours shall be as follows:  
7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot westbound lane for traffic at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how eastbound traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday through Saturday
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**2. WORTH STREET FROM WEST BROADWAY TO CHURCH STREET**

- Working hours shall be as follows:  
7 AM to 10 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot eastbound lane for traffic at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**3. WORTH STREET FROM CHURCH STREET TO BROADWAY**

- Working hours shall be as follows:  
7 AM to 10 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot eastbound lane for traffic at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.



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**4. WORTH STREET FROM BROADWAY TO LAFAYETTE STREET**

- Working hours shall be as follows:
  - 7 AM to 10 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot eastbound lane for traffic at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**5. WORTH STREET FROM LAFAYETTE STREET TO CENTRE STREET**

- Working hours shall be as follows:
  - 7 AM to 10 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot eastbound lane for traffic at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**6. WORTH STREET FROM CENTRE STREET TO BAXTER STREET**

- Working hours shall be as follows:
  - 7 AM to 10 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot westbound lane for traffic at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

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**7. WORTH STREET FROM BAXTER STREET TO MULBERRY STREET**

- Working hours shall be as follows:  
7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot westbound lane for traffic at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**8. WORTH STREET FROM MULBERRY STREET TO MOTT STREET/CHATHAM SQ.**

- Working hours shall be as follows:  
7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot westbound lane for traffic at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**9. MULBERRY STREET FROM WORTH STREET TO MOSCO STREET**

- Working hours shall be as follows:  
7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot northbound lane for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**10. MULBERRY STREET FROM MOSCO STREET TO BAYARD STREET**

- Working hours shall be as follows:  
7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot northbound lane for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

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**11. MOSCO STREET FROM MULBERRY STREET TO MOTT STREET**

- Working hours shall be as follows:
  - 7 AM to 6 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall be allowed a full roadway closure for this segment.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**12. MOTT STREET FROM WORTH STREET TO MOSCO STREET**

- Working hours shall be as follows:
  - 7 AM to 6 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot southbound lane for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**13. MOTT STREET FROM MOSCO STREET TO PELL STREET**

- Working hours shall be as follows:
  - 7 AM to 6 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot southbound lane for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**14. HUDSON STREET FROM WORTH STREET TO LEONARD STREET**

- Working hours shall be as follows:
  - 7 AM to 6 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot northbound lane for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

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PROJECT: RECONSTRUCTION OF WORTH STREET

**15. HUDSON STREET FROM THOMAS STREET TO WORTH STREET**

- Working hours shall be as follows:
  - 7 AM to 6 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot northbound lane for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**16. WEST BROADWAY FROM LEONARD STREET TO WORTH STREET**

- Working hours shall be as follows:
  - 7 AM to 6 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot southbound lane for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**17. WEST BROADWAY FROM WORTH STREET TO THOMAS STREET**

- Working hours shall be as follows:
  - 7 AM to 6 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot southbound lane for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**18. CHURCH STREET FROM WORTH STREET TO LEONARD STREET**

- Working hours shall be as follows:
  - 7 AM to 10 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of three (3) eleven (11) foot northbound lane for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

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**19. CHURCH STREET FROM THOMAS TO WORTH STREET**

- Working hours shall be as follows:  
7 AM to 10 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of three (3) eleven (11) foot northbound lane for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**20. BROADWAY FROM LEONARD STREET TO WORTH STREET**

- Working hours shall be as follows:  
7 AM to 10 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot southbound lane for traffic at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.

The Contractor shall coordinate all work with all business operations and agencies within the area.

**21. BROADWAY FROM WORTH STREET TO THOMAS STREET**

- Working hours shall be as follows:  
7 AM to 10 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot eastbound lane for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**22. LAFAYETTE STREET FROM LEONARD STREET TO WORTH STREET**

- Working hours shall be as follows:  
7 AM to 10 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot southbound lanes for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

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**23. LAFAYETTE STREET FROM WORTH STREET TO DUANE STREET**

- Working hours shall be as follows: 7 AM to 10 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot southbound lanes for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**24. CENTRE STREET FROM WORTH STREET TO LEONARD STREET/HOGAN PLACE**

- Working hours shall be as follows: 7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot northbound lanes for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**25. CENTRE STREET FROM PEARL STREET TO WORTH STREET**

- Working hours shall be as follows: 7 AM to 10 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot northbound lanes for traffic at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**26. BAXTER STREET FROM WORTH STREET TO HOGAN PLACE**

- Working hours shall be as follows: 7 AM to 10 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot northbound lane for traffic at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

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**27. PARK ROW FROM PEARL STREET TO CHATHAM SQUARE**

- Working hours shall be as follows:  
7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot lanes (one (1) eastbound and one (1) westbound) for traffic at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**28. CHATHAM SQUARE FROM MOTT/OLIVER STREET TO EAST BROADWAY**

- Working hours shall be as follows:  
7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of four (4) eleven (11) foot lanes for traffic (two (2) westbound and two (2) eastbound lanes) for traffic at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM, Sunday to Saturday.
- No noisy operations shall occur prior to 8:00 AM on weekdays, prior to 10:00 AM on weekends or after 10:00 PM.
- The Contractor shall coordinate all work with all business operations and agencies within the area.

**INTERSECTIONS**

**29. INTERSECTION OF WORTH STREET AND HUDSON STREET**

- Working hours shall be as follows:  
7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot northbound lanes for traffic on Hudson Street and one (1) eleven (11) foot westbound lane for traffic on Worth Street at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- The Contractor must maintain all pedestrian crosswalks at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM.
- No noisy operations shall occur prior to 8:00 AM on weekdays, 10:00 AM on weekends or after 10:00 PM.

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**30. INTERSECTION OF WORTH STREET AND WEST BROADWAY**

- Working hours shall be as follows:  
7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot southbound lanes for traffic on West Broadway and one (1) eleven (11) foot lane for traffic on Worth Street at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- The Contractor must maintain all pedestrian crosswalks at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM.
- No noisy operations shall occur prior to 8:00 AM on weekdays, 10:00 AM on weekends or after 10:00 PM.

**31. INTERSECTION OF WORTH STREET AND CHURCH STREET**

- Working hours shall be as follows:  
7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of three (3) eleven (11) foot northbound lanes for traffic on Church Street and one (1) eleven (11) eastbound lane for traffic on Worth Street at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- The Contractor must maintain all pedestrian crosswalks at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM
- No noisy operations shall occur prior to 8:00 AM on weekdays, 10:00 AM on weekends or after 10:00 PM.

**32. INTERSECTION OF WORTH STREET AND BROADWAY**

- Working hours shall be as follows:  
7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot southbound lanes for traffic on Broadway and one (1) eleven (11) foot eastbound lane for traffic on Worth Street at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- The Contractor must maintain all pedestrian crosswalks at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM
- No noisy operations shall occur prior to 8:00 AM on weekdays, 10:00 AM on weekends or after 10:00 PM.

**33. INTERSECTION OF WORTH STREET AND LAFAYETTE STREET**

- Working hours shall be as follows:  
7 AM to 6 PM, Monday through Friday  
9 AM to 6 PM, Saturday  
10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot southbound lanes for traffic on Lafayette Street and one (1) eleven (11) foot eastbound lane for traffic on Worth Street at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- The Contractor must maintain all pedestrian crosswalks at all times.



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- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM.
- No noisy operations shall occur prior to 8:00 AM on weekdays, 10:00 AM on weekends or after 10:00 PM.

**34. INTERSECTION OF WORTH STREET AND CENTRE STREET**

- Working hours shall be as follows:
  - 7 AM to 6 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of two (2) eleven (11) foot northbound lanes for traffic on Centre Street and one (1) eleven (11) foot lane for traffic on Worth Street at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- The Contractor must maintain all pedestrian crosswalks at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM.
- No noisy operations shall occur prior to 8:00 AM on weekdays, 10:00 AM on weekends or after 10:00 PM.

**35. INTERSECTION OF WORTH STREET AND BAXTER STREET**

- Working hours shall be as follows:
  - 7 AM to 6 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot northbound lane for traffic on Baxter Street and one (1) eleven (11) foot westbound lane for traffic on Worth Street at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- The Contractor must maintain all pedestrian crosswalks at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM.
- No noisy operations shall occur prior to 8:00 AM on weekdays, 10:00 AM on weekends or after 10:00 PM.

**36. INTERSECTION OF WORTH STREET AND MULBERRY STREET**

- Working hours shall be as follows:
  - 7 AM to 6 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of one (1) eleven (11) foot northbound lane for traffic on Mulberry Street and one (1) eleven (11) foot westbound lane for traffic on Worth Street at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- The Contractor must maintain all pedestrian crosswalks at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM
- No noisy operations shall occur prior to 8:00 AM on weekdays, 10:00 AM on weekends or after 10:00 PM.

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**37. INTERSECTION OF WORTH STREET, MOTT STREET, CHATHAM SQ., PARK ROW, OLIVER ST**

- Working hours shall be as follows:
  - 7 AM to 6 PM, Monday through Friday
  - 9 AM to 6 PM, Saturday
  - 10 AM to 6 PM, Sunday
- The Contractor shall maintain a minimum of four (4) eleven (11) foot lanes for traffic on Chatham Sq. (two eastbound and two westbound); one (1) eleven (11) foot southbound lane for traffic on Mott Street; one (1) eleven (11) foot westbound lane for traffic on Worth Street; two (2) eleven (11) foot lanes for traffic on Park Row (one eastbound and one westbound); and two (2) eleven (11) foot lane for traffic on Oliver Street (one northbound and one southbound) at all times.
- The Contractor shall submit to LMBCO/OCMC a "Detour Plan" which shows how traffic will be diverted away from the work zone and how the detour will affect other detours within the area, a minimum of 14 days in advance of any change in MPT.
- The Contractor must maintain all pedestrian crosswalks at all times.
- During water main and related work that requires water shut offs; the working hours shall be 9:00 PM to 5:00 AM.
- No noisy operations shall occur prior to 8:00 AM on weekdays, 10:00 AM on weekends or after 10:00 PM.

OCMC FILE NO: MEC  
CONTRACT NO: HMMWTCA7E  
PROJECT: RECONSTRUCTION OF WORTH STREET

**General Notes**

1. **THIS IS NOT A PERMIT.** This stipulation sheet must be submitted with all requests for permits pertaining to the above contract and present at the work site along with all active construction permits when the approved work is being performed.
2. A special Holiday Construction Embargo is in effect for this project. No work shall be performed from the Friday before Thanksgiving to January 2<sup>nd</sup> of each year of the contract. The contractor can apply for a waiver from the Holiday Construction Embargo from the Lower Manhattan Borough Commissioner's Office (LMBCO) or OCMC Streets. If a waiver is granted, new permits will be issued which indicate the waiver.
3. The Contractor is responsible for maintaining work site safety and appearance in accordance with NYC DOT's Highway Rules, NYC DDC's Contractor Good Neighbor Code of Conduct and Lower Manhattan Standards.
4. The Contractor shall communicate extensively with the Community Construction Liaison assigned by DDC to this project.
5. The Contractor must notify the NYC Fire Department, NYC Police Department, NYCEMS, local Community Board, Borough President's Office-Chief Engineer, NYC DOT LMBCO or OCMC-Streets, plus all abutting property owners at least five working days before the start of construction. Confirmation notice must be provided to the same entities two calendar days before the start of construction. The contractor shall provide 14 days notice for any full roadway closures and/or water shut-offs. All full road closure construction sites must still allow for emergency access at all times.
6. The Contractor is advised that other Contractors may be working in the general area during the term of this stipulation. In which event, the permits may require modifications by the LMBCO or OCMC-Streets.
7. No deviation or departure from these stipulations will be permitted without the prior written approval from the LMBCO or OCMC-Streets. Requests for such modifications shall be submitted to the LMBCO, New York City Department of Transportation, 59 Maiden Lane 37<sup>th</sup> Floor, New York, NY 10038 or to OCMC-Streets, a minimum of twenty (20) days in advance for consideration.
8. For this project the Contractor shall furnish, install and maintain all necessary advance warning and detour signs, temporary control devices, barricades, lights and flashing arrow boards in accordance with the "Manual on Uniform Traffic Control Devices," the typical schemes included in this specification; and as ordered by the Engineer-In-Charge and the LMBCO or OCMC-Streets.
10. Prior to any work permits being issued a pre-construction meeting will be held twenty (20) days in advance by the LMBCO or OCMC-Streets and the Engineer-In-Charge. Arrangements for the meeting will be coordinated by the Engineer-In-Charge.
11. Utility specialty work will be permitted beyond regular stipulated working hours with no noisy operations 10:00 PM through 8:00 AM.
12. The Contractor is required to install and maintain six (6) Variable Message Signs (VMS) during this project. The location and message will be determined by NYCDOT/LMBCO.
13. **The LMBCO or OCMC-Streets reserves the right to void or modify these stipulations at any time for any reason, including, but not limited to, the following: community feedback, contractor performance, or further analysis of the project conditions, scope and schedule.**

  
Frank Hrubes  
Director, Construction Coordination  
Lower Manhattan Borough Commissioner's Office

04/03/13  
Date



## THE CITY OF NEW YORK Department of Sanitation

S. ELIZABETH SEARLE  
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for Legal Affairs

Bureau of Legal Affairs  
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### Department of Sanitation Rules and Regulations Governing Non-Putrescible Solid Waste Transfer Stations

#### INTERPRETIVE MEMORANDUM # 2 February 14, 1995

*Subject: Temporary Storage and Processing of Construction and Demolition Debris  
by New York City Agency Contractors*

Contractors performing construction work for New York City agencies may be required to excavate dirt, concrete, rock, gravel and similar materials ("construction materials") from a contract site or to remove from a contract site construction materials resulting from construction, demolition, alteration, repair or renovation of structures, streets or buildings. On street construction projects, construction materials required to be excavated or removed may also include asphalt. The purpose of this Interpretive Memorandum is to (a) define the circumstances under which the Department of Sanitation (the "Department") will not deem its Rules and Regulations Governing Non-Putrescible Solid Waste Transfer Stations (the "Rules") to apply to the temporary storage, processing and/or stockpiling (collectively, "stockpiling") of such construction materials and (b) the procedure for ensuring such exemption. It is the responsibility of the contracting agency to oversee its contractors' compliance with the Rules and with this Interpretive Memorandum.

1. When No Transfer Station Permit is Required

Where a City contractor has:

- (a) set aside an area of a contract site for stockpiling construction materials excavated from and/or intended for that site; or
- (b) received written approval from the contracting agency for an off-site stockpiling location,

the Department will not deem such stockpiling location a transfer station and will not require the contractor to obtain a transfer station permit so long as: -

- (c) no construction materials or debris from off the contract site are received at the designated location for subsequent transfer to another location (other than the contract site); and
- (d) the temporary stockpiling location is clearly described as such in the contract or clearly approved by the construction agency and designated as such in writing to the Department by the agency; and
- (e) the construction agency represents in writing to the Department that such agency will monitor the temporary stockpiling location and ensure its clean-up and restoration pursuant to the procedures set out in this memorandum.



Help Reduce  
New York's Waste.



*Example: Street Construction Projects*

As part of a contract for street construction, the contractor may be working at one end of a street and using an area at the other end of the street for the temporary stockpiling of construction materials. Both ends of the street are part of the construction contract site. In addition, the contractor may have leased an off-site location for temporary stockpiling of materials, which, following processing, will be reincorporated into the contract site, with some portion of the remainder designated for delivery to a Department disposal facility. Neither location will be regulated by the Department as a transfer station so long as the procedures set out in this memorandum are followed.

2. Procedure for Exception.

Upon a City construction agency's approval of any location to be designated as a temporary processing, storage or stockpiling area, that agency must determine that (a) its contract with the contractor provides for clean-up and restoration of such area by, for example, the contractor's posting of a restoration bond and/or by contractual set-off and (b) the agency has adequate procedures for monitoring the designated area to ensure that it does not violate the provisions set forth in this memorandum and that such location is cleaned up and restored at the completion of the contract work.

The City construction agency must submit an official letter to the Department acknowledging compliance with both (a) and (b) immediately above and representing that the agency will ensure the contractor's compliance. The letter to be submitted must be in substantially the following form, addressed to the Director, Bureau of Waste Disposal, Department of Sanitation, 125 Worth Street, Room 726, New York, NY 10013:

"The New York City Department of \_\_\_\_\_ (the "Agency")  
has awarded a construction contract to \_\_\_\_\_ (Contractor)  
\_\_\_\_\_ (the "Contractor") for work to be performed at \_\_\_\_\_ (Contract  
Site) \_\_\_\_\_.

a. This Agency has approved the following locations to be used by the Contractor for the temporary storage, processing and/or stockpiling of construction materials (the "Stockpiling Locations") excavated from the construction site or intended for the construction site:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. The terms of the contract require the Contractor to clean up and restore the Stockpiling Locations, whether on or off the contract site, at or before the completion of the contract work.

c. This Agency assumes responsibility for the monitoring of Stockpiling Locations to ensure that only materials received from and/or intended for the construction site are stockpiled at such locations and we will enforce clean-up and restoration of such Locations at the end of their use for temporary stockpiling or at the termination of the contract, whichever occurs earlier, through restoration

bonding requirements and/or contractual set-off provisions such that the costs of clean-up and restoration will not become a charge to the Department or the City. "

3. When a Transfer Station Permit is Required

A transfer station permit will be required under any circumstances other than those outlined above. Except in the specifically defined circumstances set forth in this memorandum, any operator of a location or facility which receives, processes, stores or stockpiles construction and demolition debris or fill material for purposes of transfer to another location, including to a New York City Department of Sanitation facility, and whether or not under contract to the Department for the delivery of such materials, will be fully subject to the Department's transfer station rules and liable for enforcement for violations.

**HISTORICAL**  
**PERSPECTIVES INC.**



**Phase IA Archaeological Documentary Study  
Worth Street Reconstruction, Centre Street to Mott Street  
New York, New York**

**NYC Department of Design and Construction  
NYCLPC # DOT/HWMWTCA7E**

**Phase IA Archaeological Documentary Study  
Worth Street Reconstruction, Centre Street to Mott Street  
New York, New York**

**NYC Department of Design and Construction  
NYCLPC # DOT/HWMWTCA7E**

Prepared For:



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February 2013



## EXECUTIVE SUMMARY

Current plans by the New York City Department of Transportation and the New York City Department of Design and Construction include the reconstruction of Worth Street in Lower Manhattan, New York. The project, known as HWMWTCA7E, includes the Worth Street corridor from Hudson Street on the west to East Broadway on the east. As part of the proposed project, sponsors submitted project materials to the New York City Landmarks Preservation Commission (LPC) for an initial archaeological review in accordance with New York City Environmental Quality Review (CEQR 2012) regulations and procedures. The LPC responded with the following evaluation:

Hudson Street to Centre Street: There are no further archeological concerns.

Centre Street to Mott Street: Archeological sites from 18th and 19th century occupation may be within this portion of the project site. Accordingly, the Commission recommends that an archaeological documentary study be performed for this portion of the project site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see CEQR Technical Manual 2010) (Sutphin 2011).

Based on these parameters, the Area of Potential Effect (APE) for this project includes the modern roadbed and adjacent sidewalks of Worth Street from the edge of the Centre Street intersection to the edge of the Mott Street intersection (Figures 1 and 2a-c). Planned work within this corridor includes the installation of a new 36-inch steel water main, new catch basins to meet existing combined sewers, a section of new sewer, and the reconstruction of the roadbed and sidewalks. Due to the various locations of planned work, as well as the expectation that additional areas of the roadbed and sidewalks beyond the planned footprint of the new improvements may need to be excavated in order to install them, this report considers the vertical extent of the APE to include all areas to the depth of existing disturbance, or natural soils, whichever is deeper depending on location.

Historical Perspectives, Inc. (HPI) was engaged to complete a Phase IA Archaeological Documentary Study of the Worth Street corridor between Centre and Mott Streets. The goals of this study are to: 1) identify any potential archaeological resources that may be present on the APE; 2) assess the construction and development history of the APE to determine the potential for archaeological resources within the APE; and, 3) evaluate the potential that any archaeological resources may have survived and may remain on the site undisturbed.

Results of this Phase IA Archaeological Documentary Study have revealed a long history of occupation throughout the APE. There are almost no areas of the APE that were not used during the eighteenth and/or nineteenth centuries, either for farm buildings, tannery locations, residences, commercial structures, or some combination thereof. Occupation data (Appendix A) shows that most post-1750s structures within the APE contained multiple occupants and households, which increased as the neighborhood became more densely settled during the nineteenth century. Although turnover of occupants was high within most APE structures, the types of occupants or businesses within these structures often endured over multiple years. Some of the recognizable characteristics among the lots include the presence of grocers, inn keepers or boardinghouse keepers, taverns or porterhouses, brothels, bakeries, or commercial properties, with additional residents in varying numbers.

These structures and their lots within the APE corridor were demolished and capped at different times. The first leg of Anthony [Worth] Street, from Collect to Orange and Cross Streets, was laid out in 1817, and extended over lots fronting Little Water and Cross Streets (Ludlam 1817; Figure 10). Buildings and yard areas were affected, with buildings demolished and lots capped by the street work. Although likely already demolished by 1817, the tannery workshop west of Little Water Street and shown on the 1801 Loss map (Figure 9) would have fallen within this area as well. There were two episodes of street widening along this stretch of Anthony/Worth Street, one in 1833, from Little Water to Cross Streets, and one in 1860 from Centre to Little Water Streets. In both cases, the street was widened 20 feet on the south side, necessitating removal of buildings then fronting Anthony/Worth Street. Last, the section of Worth Street from the Five Points intersection at Park and Baxter Streets to Chatham Street legally was opened in 1868, again necessitating the demolition of numerous structures and capping of yard areas on lots fronting Park, Baxter, Mulberry, Mott, and Chatham Streets. Figures 22a-c illustrate the locations of historic lots overlaid on top of the modern APE.

While most, if not all, of the APE was once occupied, the degree of later disturbance has eliminated some areas from archaeological sensitivity. Specifically, those sections of the APE where deeply buried sewers and their associated trenches are located, generally in the center of the street beds, may be considered too disturbed to retain archaeological sensitivity. However, the diameter of the sewers ranges from 15 inches to 72 inches, depending on location, and as archaeological monitoring in other streets in Lower Manhattan has discovered, often the trenches in which the sewers were laid were quite narrow, only slightly wider than the sewers themselves. Within the Worth Street APE corridor, the approximate locations of these sewers are indicated on Figures 23a-c, although it is assumed that the actual placements may vary slightly from their mapped locations. Additionally, based on prior studies and a review of the documentary literature, it is estimated that roughly the upper 2 feet in the APE have been disturbed by multiple episodes of road regulating and paving. The remainder of the APE, below the ca. 2 foot depth and on either side of the sewer trenches, may still contain archaeological resources below the ca. 2-foot depth, depending on location and the degree of additional vertical disturbance, either from documented or undocumented previous excavations within the APE.

Based on the above conclusions, HPI recommends that archaeological field investigations within the APE consist of archaeological monitoring in conjunction with project construction, rather than pre-construction archaeological testing. Draft guidelines addressing the use of archaeological monitoring on urban sites (NYAC/PANYC 2002), as well as LPC guidelines (2002) indicate that monitoring is appropriate where archaeological testing is found to be not feasible. Within those street beds in Lower Manhattan that have also been identified as having archaeological sensitivity, monitoring has been the preferred method of archaeological field study.

Within the APE, where large amounts of pavement, soil and other overburden will need to be removed before reaching the archaeological resource zone, it will be most practical (and cost effective) to undertake these excavations in tandem with project construction, which can provide the large-scale excavation and soil removal operations necessary, shore up the site to facilitate deep excavation, and provide dewatering equipment if the water table interferes with archaeological resource recovery. OSHA regulations require stepping or shoring if excavations extend below 4 feet.

Although HPI has identified all areas of archaeological sensitivity within the APE, it is likely that only certain parts of this large expanse of sensitivity will be impacted by the planned project. At a minimum, it is expected that installation of the new 36-inch diameter steel water main at depths of ca. 7 feet below the existing street level throughout the length of the APE, and which is to be located just outside of the existing deep disturbance from earlier sewer trenches, will require archaeological monitoring. Depending on the depths of other planned project-related infrastructure components, additional archaeological monitoring may be required in those locations. Shallower reconstruction efforts, such as installation of new sidewalk paving if not extending below 2 feet in depth, may not require archaeological monitoring.

Taking these variables into account, prior to any excavation within the Worth Street Reconstruction APE, an archaeological monitoring plan should be developed by the archaeological consultant in consultation with LPC. The monitoring plan should be prepared according to applicable archaeological standards (NYAC/PANYC 2002; LPC 2002; CEQR 2012). RPA-certified professional archaeologists, with an understanding of and experience in urban archaeological excavation techniques, would be required to be part of the archaeological team.

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13. Worth Street APE from Centre to Mission Streets in 1920, after street repairs. Source: NYPL Digital Gallery.
14. Worth Street APE from Mulberry to Baxter Streets in 1920, after street repairs. Source: NYPL Digital Gallery.

## I. INTRODUCTION

Current plans by the New York City Department of Transportation and the New York City Department of Design and Construction include the reconstruction of Worth Street in Lower Manhattan, New York. The project, known as HWMWTCA7E, includes the Worth Street corridor from Hudson Street on the west to East Broadway on the east. As part of the proposed project, sponsors submitted project materials to the New York City Landmarks Preservation Commission (LPC) for an initial archaeological review in accordance with New York City Environmental Quality Review (CEQR 2012) regulations and procedures. The LPC responded with the following evaluation:

Hudson Street to Centre Street: There are no further archeological concerns.

Centre Street to Mott Street: Archeological sites from 18th and 19th century occupation may be within this portion of the project site. Accordingly, the Commission recommends that an archaeological documentary study be performed for this portion of the project site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see CEQR Technical Manual 2010) (Sutphin 2011).

Based on these parameters, the Area of Potential Effect (APE) for this project includes the modern roadbed and adjacent sidewalks of Worth Street from the edge of the Centre Street intersection to the edge of the Mott Street intersection (Figures 1 and 2a-c). Planned work within this corridor includes the installation of a new 36-inch steel water main, new catch basins to meet existing combined sewers, a section of new sewer, and the reconstruction of the roadbed and sidewalks. Due to the various locations of planned work, as well as the expectation that additional areas of the roadbed and sidewalks beyond the planned footprint of the new improvements may need to be excavated in order to install them, this report considers the vertical extent of the APE to include all areas to the depth of existing disturbance, or natural soils, whichever is deeper depending on location.

Historical Perspectives, Inc. (HPI) was engaged to complete a Phase IA Archaeological Documentary Study of the Worth Street corridor between Centre and Mott Streets. The goals of this study are to: 1) identify any potential archaeological resources that may be present on the APE; 2) assess the construction and development history of the APE to determine the potential for archaeological resources within the APE; and, 3) evaluate the potential that any archaeological resources may have survived and may remain on the site undisturbed.

This Phase IA Archaeological Documentary Study was prepared to satisfy the requirements of the LPC (LPC 2002, CEQR 2012). The HPI project team consisted of Julie Abell Horn, M.A., R.P.A., who conducted the research, the site visit, and wrote the report; Nancy Dickinson, M.A., who assisted with the research and the site visit; and Faline Schneiderman, M.A., R.P.A., and Cece Saunders, M.A., R.P.A., both of whom assisted with the report, managed the project and provided editorial and interpretive assistance.

## II. METHODOLOGY

The present study entailed review of a number of primary and secondary resources.

- Historic maps were reviewed at the Map Division and Manuscript Divisions of the New York Public Library, the Manhattan Borough President's Office Topographical Bureau (MBPO), the New-York Historical Society, the City of New York Municipal Archives, the Manhattan Borough City Register's Office, and online using various websites. These maps provided both an overview of the topography and a chronology of land usage, as well as more detailed conditions and characteristics at the lot level for portions of the project site.
- Street history, opening and widening data were reviewed at the MBPO.
- Records of the Croton Aqueduct Department were reviewed to ascertain the years when piped city water and sewers became available under adjacent city streets. All of adjacent streets (Centre, Anthony, Cross, Orange, Mulberry, Mott, and Chatham) had received piped water by 1842, but sewers were not installed until 1850-1855, depending on the street (Croton Aqueduct Department 1850-1855). The last segment of Worth Street, from the Five Points intersection to Mott Street, received both water and sewer pipes soon after it was built in ca. 1868.



- Conveyance (deed) index books and other records pertaining to the project site were reviewed at the Manhattan Borough City Register's Office. Data from these books are included in Appendix A. While the index books provide lot numbers for many conveyances, they only indicate the dates the deeds were recorded, which were often a number of years after they were made. Of note, these index books only illustrate lot numbers from the period after Worth Street was extended to Chatham Street. By that time many of the lots had been merged together or eliminated, so not all original lot numbers could be determined. All pages from the index books through 1917 (the last year indexed in the initial volumes) were reviewed, but only those deeds that noted specific lots were included in Appendix A. Tract reports, which are a summary of early conveyances, and are available at the Municipal Archives, were reviewed to ascertain transfer of lands prior to designation of the city lots shown in the index books. Due to the large number of former lots within the project site and the knowledge that the majority of these lots had absentee owners, individual deeds were not reviewed.
- New York City Department of Buildings (DOB) data began to be compiled for Manhattan only in 1866. The last section of the Worth Street alignment was laid out in ca. 1869, giving only a scant three-year span when DOB data could potentially be relevant, if such records still exist (which is dubious, given the changes in block and lot designations over time and the incorporation of these areas into an active streetbed, which usually resulted in records being discarded). The standard DOB data research approach is simply not applicable to this Worth Street Reconstruction evaluation effort.
- Nineteenth-century tax assessment records, beginning in 1808, the first year available, were reviewed at the New York City Municipal Archives in roughly 5-year intervals until Worth Street was constructed, ranging from the 1830s to the 1860s. Much of the project site already had been developed with houses by 1808, and so these data mostly were used to confirm ownership and, through 1820 when they were listed, tenants. Results of this research are included in Appendix A. Of note, Ward numbers were established by ca. 1838 and were used to cross-check lot and address locations.
- Selected city directory records pertaining to the former lots' occupants were reviewed, and are presented in Appendix A. Due to the large number of lots and the vast number of occupants living on these lots over the course of multiple decades, it was impractical to attempt to compile a complete listing of occupants for each former address. Instead, a sampling of occupants was included for each lot. The research began by compiling data from those city directories that provided occupants by address, such as Eliot's Improved Double Directory for 1812, and Doggett's Directory for 1851. Other directories that are available online in searchable format were consulted next, searching for street and address, including those on Google Books and ancestry.com, which resulted in what are believed to be relatively complete listings for each address (e.g. 1808, 1829, 1837, 1861, and 1865). Addresses were also searched on the newly released Fold3.com online database, which although more comprehensive in scope than other digital databases (there is at least one directory digitized for Manhattan from every year spanning 1786-1922), nonetheless had significantly inferior Optical Character Recognition (OCR) technology, often resulting in severely limited "hits" per address over the course of many years. A sampling of those "hits" was included for each former address, recognizing that the listings retrieved represent a significantly reduced percentage of the actual heads-of-households on the former lots at any given time.
- Federal censuses are available for Manhattan every ten years from 1790-1940 (except 1890), but the last year relevant for this study is 1860, as the final segment of Worth Street was constructed prior to 1870. Through 1840 only heads-of-households were listed, without indications of which residents were living together on the same lot (most former lots had multiple households in their buildings). Therefore the utility of these earlier censuses is limited, especially since the census taker frequently did not record residents in order of lots, but skipped around within blockfronts. The 1850 and 1860 censuses were reviewed, and a synopsis of this information is included in Appendix A, focusing on number of households and names and occupations of heads-of-households. Due to the volume of occupants on each former lot, usually including spouses, children, and frequently unrelated boarders or other tenants, it was impractical to list every resident and their characteristics for each year (some buildings had up to 30 households at any given time). Of note, only one relevant state census is available for Manhattan, from 1855, and due to the volume of the entries and the lack of an index or addresses it was not reviewed.
- Selected early American historic newspapers were searched online for information about the project site. These newspapers ranged in date from the mid-eighteenth through the nineteenth centuries.
- The *Minutes of the Common Council* and Stokes' *Iconography of Manhattan Island* were searched for relevant information about the project site.

- WPA utility maps made during the 1930s and updated in the 1970s, showing locations, characteristics, and depths of subsurface utilities, were provided by the DDC. These maps were supplemented by modern project surveys from the DDC which show utilities.
- Soil boring data for the surrounding blocks, including rock data maps, were provided by the DDC.
- Project plans were provided by the DDC.
- Previous archaeological sites and surveys were reviewed using data available from the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) and the LPC.
- Comparative data about other recent archaeological field investigations within city streets was provided by Christopher Ricciardi of Chrysalis Archaeological Consultants (Personal communication 1/8/2013).
- Several histories that included data about the Five Points area were reviewed in depth, including Elizabeth Blackmar's *Manhattan for Rent, 1785-1850* and Timothy Gilfoyle's *City of Eros: New York City Prostitution, and the Commercialization of Sex, 1790-1920*. Gilfoyle was consulted personally for additional data about the project site (Gilfoyle personal communication 2012).
- A site visit was conducted on November 16, 2012 (Photographs 1-10).

### III. BACKGROUND RESEARCH

#### A. FORMER HISTORIC DESIGNATIONS WITHIN THE MODERN APE

Although the modern APE consists solely of roadbeds and sidewalks, during the historic era the APE consisted of first farmland and later historic streets and lots that no longer exist today. Additionally, portions of the western end of the APE were under water of the former Collect Pond. The first step of the historic research for this study, therefore, was to identify the historic land designations within the modern APE street corridor.

As mentioned above, before Worth Street (formerly Anthony Street) was laid out, the land within the APE was associated first with farmland, and then with lots fronting eight different street alignments (Figures 3a-3c). Using data from Stokes (1915, Vol. 3) and the MBPO office, the names of the streets (both historic and current) and the dates they were laid out and modified are shown in Table 1 below.

**Table 1: Historic and Modern Street Designations Within the APE**

Historic street name	Modern/secondary street name	History
Anthony Street	Worth Street	Opened between Collect Street and Orange Street in 1818; widened between Little Water and Cross in 1833, buildings in triangle allegedly cleared; renamed Worth Street in 1855; widened between Hudson and Baxter in 1860, 20 feet on south side; section between Baxter Street and Chatham Square opened in 1868
Collect Street	Centre Street	Portion to Anthony Street opened in 1808; opened in 1817 through the former Collect Pond, 75 feet wide; renamed Centre Street in 1828
Little Water Street	Mission Place, now closed	Shown on maps by 1790s, sometimes as Water Street; renamed Mission Place in 1855
Cross Street	Park Street, now closed	Laid out prior to 1767 (probably 1751); widened in 1817; renamed Park Street in 1854
Orange Street	Baxter Street, portions now closed or realigned	Laid out prior to 1767 (probably 1751), renamed Baxter Street in 1854
Mulberry Street	Mulberry Street, portions now closed south of Worth Street	Laid out prior to 1767 (probably 1751)
Mott Street	Mott Street, portions now closed south of Worth Street	Laid out prior to 1767 (probably 1751)
Chatham Street	Park Row	Part of Kings Highway in the 18 <sup>th</sup> century; named Chatham Street in 1774; widened in 1836; named Park Row in 1886

Based on the dates that the streets were laid out and widened, the historic parcels or lots that overlapped the APE were determined (Figures 3a-3c). They include:

- The area within the Anthony/Worth Street roadbed not originally under water of the Collect from Collect/Centre Street to Orange Street, which included lots on the northwest side of Cross Street laid out by the mid-eighteenth century and lots on the northeast side of Little Water Street, probably laid out by the 1790s;
- A series of lots, formerly on the south side of Anthony/Worth Street between Centre and Little Water Street/Mission Place (including one address on Centre Street) which were established in ca. 1817 and eliminated in ca. 1860 when the Worth Street widening occurred (the Centre Street address pre-dated 1817);
- A series of lots, formerly on the south side of Anthony Street between Little Water and Orange Streets, which were established in ca. 1817 and supposedly eliminated in ca. 1833 when the “triangle” bounded by Anthony, Cross, and Little Water was cleared of buildings (inconsistencies in these dates are discussed further, below). Prior to 1817 these lots were part of the back yards of the lots fronting Cross Street to the southeast and Little Water Street to the southwest.
- The section of Worth Street from Orange Street to Chatham Street contained portions of lots formerly fronting Cross/Park, Orange/Baxter, Mulberry, Mott, and Chatham Streets prior to ca. 1860. Many of these lots were laid out in the eighteenth century, but did not receive addresses until the 1790s.

Lots established after ca. 1817 on the north side of Anthony/Worth Street between Centre and Orange Streets did not overlap the APE because the street was not subsequently widened on the north side, only the south side.

Table 2 lists the historic lots that were identified as overlapping the APE. The locations of the lots are shown on Figures 3a-c. As noted above, it was not always possible to determine former lot numbers, but where they are known they are listed. Addresses were established within this neighborhood at different times, with some streets being assigned numbers by the 1790s and others not assigned until the 1820s. Several streets had numbering changes over time; the most recent ones are listed in the table. Ward numbers were not established until 1838, and so do not apply to those lots that were eliminated prior to that date, specifically within the triangle bounded by Anthony, Cross, and Little Water Street.

**Table 2: Historic Lots Overlapping the APE**

Former Block	Former Lot	Former Address	Former Ward
160	7	72 or 74 Centre Street	189 (same as below)
160	7	136 Anthony/Worth Street	189 (same as above)
160	8	138 Anthony/Worth Street	1005
160	9	140 Anthony/Worth Street	1004
160	9	142 Anthony/Worth Street	1003
160	9	144 Anthony/Worth Street	1002
160	9	146 Anthony/Worth Street	1001
160	9	150 Anthony/Worth Street (7 Little Water Street/Mission Place)	1000
160	Part of 26	152, 154, 156, 158, 160 Anthony Street	None
160	Part of 26	Little Water Street, east side, addresses below 10, but inconsistent as to evens or odds	None
160	Part of 26	60, 62, 64, 66, 68, 70, 72, 74 Cross Street	None
161	unclear	81 Cross/Park Street	553
161	33	83 Cross/Park Street	552
161	34	85 Cross/Park Street	551
161	35	87 Cross/Park Street	550
161	36	89 Cross/Park Street	549
161	36	91 Cross/Park Street	549
161	25	19 Orange/Baxter Street	292
161	25?	21 Orange/Baxter Street	291

Former Block	Former Lot	Former Address	Former Ward
161	unclear	23 Orange/Baxter Street	290
161	unclear	25 Orange/Baxter Street	(553, same as 81 Cross/Park Street)
161	unclear	27 Orange/Baxter Street	(553, same as 81 Cross/Park Street)
161	27 ½	13 Mulberry Street	305
161	27	15 Mulberry Street	306
161	26 ½	17 Mulberry Street	307
161	26	19 Mulberry Street	308
161	41	21 Mulberry Street	309
161	40	23 Mulberry Street	310
161	39	25 Mulberry Street	311
161	6	6 Mulberry Street	389
161	7	8 Mulberry Street	388
161	57?/58	10 Mulberry Street	387
161	59	12 Mulberry Street	386
161	60?/61	14 Mulberry Street	385
161	61	16 Mulberry Street	384
161	54	1 Mott Street	662 (same as 174 Chatham)
161	54	3 Mott Street	391
161	53	5 Mott Street	392
161	unclear	160 Chatham Street	? (address only, part of adjacent lots)
161	1	162 Chatham Street	659
161	unclear	164 Chatham Street	? (address only, part of adjacent lots)
161	56	166 Chatham Street	660
161	unclear	168 Chatham Street	? (address only, part of adjacent lots)
161	unclear	170 Chatham Street	? (address only, part of adjacent lots)
161	55	172 Chatham Street	661
161	54	174 Chatham Street	662
161	unclear	176 Chatham Street	? (address only, part of adjacent lots)

## B. CURRENT CONDITIONS

### Surface conditions

The Worth Street APE includes the asphalt and concrete covered roadbed and the adjacent concrete sidewalks from the eastern edge of Centre Street to the western edge of Mott Street (Photographs 1-2). The roadbed is 40 feet wide from Centre Street to Baxter Street and from 40.2 to 40.5 feet wide from Baxter to Mott Street. The road carries two lanes of traffic in each direction. The width of the sidewalks on the north and south sides of the street varies by location, with some sidewalks as narrow as 10 feet and others as wide as 14.5 feet. From Centre to Baxter Street, the narrower sidewalk is on the north side, but from Baxter to Mott Street, the narrower sidewalk is on the south side. Despite these variations, the combined width of the roadbed and the adjacent sidewalks measures ca. 65 feet along the entire APE corridor.

Although the subgrade utilities and other underground features within the roadbed cannot be seen from the surface, there is considerable evidence of their existence. The asphalt paving is embedded with numerous manhole covers, gas and water conduit access covers, vents, and catch basins (Photographs 3-4). Portions of the roadbed that have been replaced are evident throughout the APE, and attest to past utility work, some of which appear to be relatively

recent based on the condition of the pavement (Photographs 5-6). The overall condition of the roadbed ranges from good to poor, depending on location.

There are additional subsurface utilities under the sidewalks, as well as vaults both for utility chambers and for access to adjacent basements (Photographs 7-8). Planters are located on the south sidewalk, while awnings extend over the north sidewalks near Mott Street (Photograph 9). The portion of the APE along the south sidewalk in front of the U.S. District Courthouse at Baxter Street was rebuilt in tandem with the construction of this building, which was dedicated in 2000 (Photograph 10). The remainder of the APE sidewalk has not been reconstructed in many years, and the condition ranges from good to poor, depending on location.

### Subsurface conditions

In addition to the current conditions observed during the site inspection, the review of utility maps provides a snapshot of expected subsurface conditions within the APE. The earliest utility maps were made by the WPA in 1939 and updated in 1971, and were provided by the DDC. Current project maps (DDC 2012, Figures 2a-c) present additional data about conditions since 1971. The different utilities expected under Worth Street are listed in Table 3 below, and include water, sewer, gas, electric, telephone, and steam lines. There may also be additional defunct resources, such as 1840s water pipes and 1850s sewer pipes, as well as municipal street cisterns or wells, which are not noted on these maps. Photographs 11-14 illustrate the condition of the APE streetbed in 1919-1920, before and after a reconstruction of the earlier granite block pavement and showing the now buried trolley lines.

**Table 3: Subsurface Utilities Within the APE**

<b>Resource and diameter, location within street, elevations/depths</b>	<b>Centre Street (el. 15.3') to Baxter Street (el. 18.8')</b>	<b>Baxter Street (el. 18.8') to Mulberry Street (el. 23.2')</b>	<b>Mulberry Street (el. 23.2') to Mott Street (el. 26.4)</b>
Pavement	Asphalt; Granite block over 6" concrete (laid 1922 and 1927)	Asphalt; Granite block over 6" concrete (laid 1919)	Asphalt; Granite block over 6" concrete (laid 1919)
Trolley lines	Double set of yokes and substructure embedded within granite block layer	Double set of yokes and substructure embedded within granite block layer	Double set of yokes and substructure embedded within granite block layer
Gas	6" on north side, crossing to south side near Centre, covered by 2'6"	6" on north side, covered by 2'6"	6" on north side, covered by 2'6"
Electrical	1-3" on north side; 16-3.5 and 2-3" on south side, covered by 2'	18-3" on south side; 1-10" on north side; Vault in center connected to HPP line under north sidewalk	18-3" on south side; 1-3" on north side covered by 1.5'
Telephone	16-2 ½" and 1-3" on north side, no depth given	16-2 ½" and 1-3" on north side; 1-3" and 8 2 ½" on south side/under south sidewalk; , no depth given	16-2 ½" and 1-3" on north side; unidentified SEC telephone on south side; , no depth given
Steam	8" main on south side, no depth given	8" main on south side, no depth given	N/A
Water	12" covered by 4'; 20" HP covered by 5'8", both on south side	12" covered by 4'(laid 1896) in center; 20" HP covered by 4'10", on south side	12" covered by 4'(laid 1886) in center; 20" HP covered by 4'5", on south side
Sewer	Center of streetbed; 4' x 2'8" (laid 1855); Invert el. 4.3' (Centre) to 2.4'(Baxter)	Center of streetbed; 15" (laid 1872); Invert el. 3.1' (Baxter) to 0.12'(Mulberry)	72" combined sewer, center/north side (laid 1901), invert el. 0.11-0.12

<b>Resource and diameter, location within street, elevations/depths</b>	<b>Centre Street (el. 15.3') to Baxter Street (el. 18.8')</b>	<b>Baxter Street (el. 18.8') to Mulberry Street (el. 23.2')</b>	<b>Mulberry Street (el. 23.2') to Mott Street (el. 26.4)</b>
Sidewalks	Hydrants on north side with pipes crossing to water mains on south side; lamp posts on both sides	Hydrants on both sides with pipes crossing to water mains on south side; lamp posts on both sides; 1-10" HPP on north side; Vault on south side at Mulberry	Hydrants on both sides with pipes crossing to water mains on south side; lamp posts on both sides; 1-10" HPP on north side
Catch basins	On north and south sides at Centre	N/A	N/A

### C. TOPOGRAPHY AND HYDROLOGY

Discerning the original topography of the Worth Street corridor is difficult to do except in general terms, because the first historic maps that indicate specific elevations were not produced until the second half of the nineteenth century, well after most of the grading and filling within the area had been complete. Further, early historic maps generally do not note topographic contour lines. For example, elevations of the different street intersections within the APE, as listed in the table within the previous section, have been noted as within a few inches of these numbers on maps from 1885 through the present (Robinson 1885 [see Figure 21]; Sanborn 1923, 1951; WPA 1939; DDC 2012 [Figures 2a-c]).

The Worth Street corridor APE traverses some areas on its western end that originally were under the waters of the Collect Pond, a natural freshwater body of water that existed in this part of Manhattan until it was filled after the turn of the nineteenth century. The boundaries of the Collect Pond shifted over time, as various modifications were made to divert the outlets of the water for industrial purposes. Accounts of the Collect Pond also differ as to its depth, which likely also varied over the years as the water was diverted and it was despoiled by human dumping of tannery and other wastes. Historic maps depict the Collect Pond in various configurations over the course of the eighteenth century, and even within a few years' difference of one another (e.g. Maerschalk 1755 [Figure 5], 1763; Holland 1757 [Figure 6], 1776; Ratzler 1766-67 [Figure 7]; Montresor 1775, 1776; British Headquarters 1782 [Figure 8]; Hills 1782; Goerck 1794; Taylor Roberts 1797). For example, the 1755 Maerschalk map (Figure 5) indicates an amorphously shaped body of water, yet the 1757 Holland map (Figure 6) shows a roughly circular shaped pond. Both maps, as well as the Ratzler 1766-67 map (Figure 7) and the 1782 British Headquarters map (Figure 8) however, suggest that some portion of the western end of the APE, from Centre Street east (perhaps to Little Water Street or further) was once within the Collect. Maps made by Viele in 1865 (Figure 17) and 1874 (Figure 19) further indicate that the Collect Pond once extended as far as the Five Points intersection at Worth and Baxter/Park Streets, and had an outlet running down the length of Baxter Street to Park Row. The later Bromley (1879 [Figure 20]) and Robinson (1885 [Figure 21]) maps continued to illustrate these former outlines shown on the Viele maps. The Viele maps likely were based on circa 1730s depictions (e.g. Lyne 1730, Carwitham 1730) that showed the Collect with its eastern projection and drainage. A detailed survey map of the Collect Pond from 1801 (Loss 1801 [Figure 9]), shows that by this time only certain sections of the APE from Centre Street to Little Water Street were under the Collect Pond waters (at depths of 0-5 feet), and that the remainder of the APE was on firm ground. Between 1801 and 1817, when Anthony Street was officially opened, the remainder of the Collect Pond was filled in.

The degree of grading and filling within the APE, to convert the natural landform of the area to its present urban condition, cannot be quantified precisely, but obviously both grading and filling had to occur to some degree to bring the area to today's relatively level landform. Clearly, the western end of the APE, in the vicinity of the Collect Pond, was filled in. Archaeological investigations just south of Worth Street at the Five Points site revealed an original land surface covered with shell up to 15 feet below the modern grade. This location was near Pearl Street in an area that had once been used for tanneries. On the block north of Worth Street between Centre and Baxter Streets, "bog" soil was found at ca. 7-15 feet below grade nearest to Worth Street, depending on location, which likely represented the bottom of the Collect Pond.

The eastern end of the Worth Street APE may have experienced more grading than filling. Historical records note that portions of Mulberry and Mott Streets were along a ridge, and the streets needed to be graded down, although the exact depth of grading activity is unclear. The 1757 Holland map (Figure 6) illustrates what appear to be bluffs in this general area. While these streets may have been lowered in elevation, the lots fronting them, being private property, may not have been lowered by the owners to the same degree as the streets. Ultimately, however, when Worth Street was extended from Baxter to Chatham Street, grading was likely necessary to create the level streetbed.

#### **D. SOILS**

The USDA soil survey for New York City maps the APE as traversing two soil mapping units. The western portion is mapped as "Pavement & buildings, wet substratum, 0 to 5 percent slopes," described as

Nearly level to gently sloping, highly urbanized areas with more than 80 percent of the surface covered by impervious pavement and buildings, over filled swamp, tidal marsh, or water; generally located in urban centers (USDA 2005:14).

The eastern end is mapped as "Pavement & buildings, outwash substratum, 0 to 5 percent slopes," described as

Nearly level to gently sloping, highly urbanized areas with more than 80 percent of the surface covered by impervious pavement and buildings, over glacial outwash; generally located in urban centers (USDA 2005:14).

According to files at the DDC, no soil borings have been undertaken within the Worth Street APE itself, but numerous soil borings have been completed on a number of adjoining city blocks, prior to construction of existing buildings. While results of these soil borings are not representative of specific conditions within the APE, there are some facets of these data that can be applied to the APE.

In terms of locating the former boundaries of the Collect Pond, soil borings can help delineate areas which were once under water. For example, as noted above, on the block north of Worth Street between Centre and Baxter Streets, "bog" soil was found at ca. 7-15 feet below grade in the borings closest to Worth Street, depending on location, which likely represented the bottom of the Collect Pond. This "bog" soil, or anything resembling bog (such as peat or organic silt) was not noted on any borings immediately south of Worth Street, which suggests either that the Collect Pond may not have extended this far south, or that subsequent grading and filling destroyed this stratum.

The depth of fill soil noted in soil borings also helps indicate the degree to which the original landscape was either filled in, disturbed from earthmoving, or both. Most soil borings were located within former building lots, and recorded fill ranged from ca. 5-25 feet below grade, depending on location. Those few borings located within sidewalks noted fill ranging from ca. 3.5-15 feet below grade. While all soil borings indicated a mantle of fill over natural soils, the significant variability of the extent of fill suggests that it is difficult to extrapolate specific conditions at any given location based on these data. Bedrock is very deep in this part of Manhattan, ca. 130 feet below grade.

#### **E. ARCHAEOLOGICAL SITES WITHIN A ONE MILE RADIUS**

Research conducted using data from the NYSOPRHP, the LPC, and the library of HPI revealed numerous archaeological sites have been documented within an approximately one mile radius of the APE. The closest documented site is the Five Points site, located immediately to the south of Worth Street, on the block formerly bounded by Worth Street, Baxter Street, and Pearl Street. Those sites within a one mile radius (in Manhattan) are listed in Table 4, below.

**Table 4: Archaeological Sites Within One Mile of the APE**

<b>NYSM or NYSOPRHP Site Number</b>	<b>Site Name/Description</b>	<b>Location</b>	<b>Site Type/Time Period</b>
NYSM 4059	Shell Point	near Canal St.	Unknown Precontact
NYSM 4060	N/A	Lower East Side vicinity	Unknown Precontact
A06101.006981	Pearl Street, Worth Street, Five Points Area	straddles Cardinal Hayes Plaza between Pearl and Worth Streets	19 <sup>th</sup> century
A06101.000604	209 Water Street	South Street Seaport area	c. 1775-1800
A06101.000623	Telco Block	South Street Seaport area	c. 1740-1775
A06101.001283	Barclay's Bank	Financial District	1750s-1820s
A06101.001284	Assay Site	Financial District	Revolutionary era
A06101.001272	64 Pearl Street	Financial District	Late 17 <sup>th</sup> century
A06101.001282	Broad Street Plaza	Financial District	17 <sup>th</sup> century-modern
A06101.001271	175 Water Street	near South Street Seaport	c. 1740-1780
A06101.006763	Schermerhorn Row	South Street Seaport area	1780-1810
A06101.001286	Sullivan Street Historic Site	Sullivan Street (NYU campus)	Early 19 <sup>th</sup> century resources
A06101.017265	Spring Street Presbyterian Church Cemetery/Vaults	244-266 Spring St	Burials, 19 <sup>th</sup> century
A06101.015708	97 Orchard Street	97 Orchard Street	School privy
A06010.007671	Broome Street Historic Site	576 Broome Street	Unknown
A06101.018212	50 Bayard	Bowery Historic District	19 <sup>th</sup> century
A06101.017777	145-147 Mulberry St former pianoforte factory	Chinatown and Little Italy Historic District	19 <sup>th</sup> century
A06101.001304	City Hall Park	City Hall Park	18 <sup>th</sup> -19 <sup>th</sup> century
A06101.013335	Tweed Courthouse Area Deposits	City Hall Park	Burials, structures, deposits, 19 <sup>th</sup> century
A06101.006980	African Burial Ground	North of City Hall Park	18 <sup>th</sup> -19 <sup>th</sup> century
A06101.015825	Block 100, Lot 1	New York Downtown Hospital	19 <sup>th</sup> century
A06101.015801	WTC- Vesey Street Site	Vesey Street	Unknown
A06101.018000	WTC-VSC Ship	Vehicle Security Center/World Trade Center	18 <sup>th</sup> or early 19 <sup>th</sup> century ship
A06101.000503	<i>Tyger</i>	Greenwich and Dey Streets	Ship, ca. 1613
A06101.017931	Historic well beneath Corbin Building	Fulton Street area	
A06101.012569	Worth Street Historic Site	Worth Street and Lafayette Street	19 <sup>th</sup> century
A06101.016117	Columbus Park Pavilion cistern	Columbus Park, north of Worth Street	19 <sup>th</sup> century
	7 Hanover Square	Financial District	Late 17 <sup>th</sup> century
	Old Slip and Cruger's Wharf	Financial District	1690-1800
	Stadt Huys Site	Financial District	17 <sup>th</sup> -19 <sup>th</sup> centuries

There have been numerous archaeological studies completed for Lower Manhattan, too many to list here. Most of the archaeological sites in the above table were discovered as part of specific investigations. However, the archaeological studies that were most pertinent in terms of comparing expected results for this project were those



that were located in the immediate vicinity of the APE, and those that were located within streetbeds in Lower Manhattan.

Several significant archaeological investigations were completed for the Foley Square/Five Points project, and these about the Worth Street corridor. These include Phase IA Archaeological Documentary Studies (or their equivalent) for two areas within Foley Square (Ingle et al. 1990; Geismar 1993), and subsequent archaeological investigations for some parts of these large sites, including the federal courthouse site immediately adjacent to the APE on the south side of Worth Street, and the tunnel extending under Pearl Street from the courthouse site (Yamin et al. 1995; John Milner Associates 1993; Yamin 2000). More recently, work was completed within the northern part of Columbus Park, a block north of the APE (Loorya and Ricciardi 2005, 2007a). Streetbed studies include, but are not limited to, those by Salwen and Yamin (1990); Historical Perspectives (2007); Loorya and Ricciardi (2007b); and McDonald (2010).

## **F. HISTORY OF THE PROJECT SITE**

The following section describes the general history of the Worth Street corridor during the eighteenth and nineteenth centuries. Complete histories of each historic lot are too lengthy to be included in this section, given the size of the APE and the large number of historic lots (ca. 60) that overlapped the APE before the different sections of Worth Street were created during the early and mid-nineteenth century. However, data pertaining to individual lot histories is presented in Appendix A, which does provide a snapshot of the owners and a sample of occupants for each parcel over time. Because so much has been written about the history and archaeology of the Five Points neighborhood and the area around the former Collect Pond in the past (e.g. Ingle et al. 1990; Geismar 1993, Yamin et al. 1995; Yamin 2000), this summary focuses mainly on conditions within the APE corridor itself. Street names are generally referenced according to historic nomenclature of the period under discussion.

### Seventeenth and eighteenth centuries

Long before Worth Street (originally called Anthony Street) was created, the corridor it traverses was farmland, marshland, and part of the Collect Pond. Stokes noted, in his section on Original Grants and Farms, that there were three tracts of land devised in the 1600s and 1700s that include the APE (1928, Volume 6). The following synopsis of these farm histories is taken from Stokes and from Tract Reports on file at the Municipal Archives.

The western end of Worth Street just east of what is now Centre Street was granted to Anthony Rutgers in 1731 and 1733, and included all of the Collect Pond and marshes surrounding it. A condition of the grant was that the pond be drained within one year, but that had yet to occur when Rutgers died in 1746. After his death, the land was divided and passed to Rutgers' daughter Mary Barclay and her husband Henry Barclay. Following Henry Barclay's death in 1764, the land passed to Anthony Barclay, who held it until 1791. At this point, the waters of the Collect Pond, which had still not been drained, were deeded to the City of New York. This transaction included what is now the northern side of Worth Street between Centre Street and Little Water Street, and a portion of the south side of Worth Street between the same two streets. Local dentist Leonard Fisher purchased the area that became the southeast corner of Worth and Centre Streets from Anthony Barclay in 1791. Andrew Stockholm and Henry Brooks, who ran a tanyard along the shore of the Collect Pond, purchased the remaining section on what is now the south side of Worth Street east of the City's land and extending to Little Water Street.

The section of the Worth Street APE from Little Water to Mott Street was granted to Paulus Schrick in 1653, who in 1662 conveyed the same tract to Johannes Megapolensis and his son-in-law Cornelius Van Ruyven. The section from Mott Street to Chatham Street fell within land granted to William Beekman in 1656 and later purchased by Johannes Megapolensis and Cornelius Van Ruyven in 1661. After Johannes Megapolensis died in 1669, Cornelius Van Ruyven sold the land to Wolfert Webber in 1670. Wolfert Webber sold various parcels within the tract to his sons-in-law Philip Minthorne and Jacques Fountain from 1699-1713. In 1715, Jacques Fountain conveyed his portions back to Philip Minthorne, who held the entire tract as one entity again. Philip Minthorne died in ca. 1728, and the land then passed to his son John Minthorne, who passed away some time prior to 1751. In 1751, the land was sold by Jacob Read, the second husband of John Minthorne's widow, to John Kingston. In conjunction with this sale, a map dated November 21, 1751 was made by Francis Maerschallck of "The Kingston Draught" (a redrafted facsimile is reproduced in Tract Report 931). This map showed the boundaries of the tract, indicated the presence of streets through the tract including Little Water, Cross, Orange, Mulberry, Mott, and Chatham Streets,

and also showed that a number of individual lots had been established on either side of Orange Street north of Cross Street, some of which overlapped the APE.

It is presumed that prior to 1751 there were farm houses located within these large tracts described above. According to Stokes, the exact locations of these dwellings are not known (1928, Vol. 6:111). A map made by Grim in 1813 (Figure 4) shows the conditions of the APE in 1742-44. The map depicts the farm buildings belonging to John Minthorne on the northwest side of what was later known as Chatham Street and now Park Row, and the surrounding land used for agricultural purposes or otherwise undeveloped. The portion of the Worth Street APE between Mulberry and Mott Streets falls within the area depicted with buildings on the Grim map. No additional historic maps or surveys were located that might provide more specific land-use details from this period in the APE, including those in the Manuscript Division of the New York Public Library's Bancker Collection.

During the eighteenth century, the area around the Collect Pond became an industrial hub, with tanneries, slaughterhouses, furnaces, and potteries located predominantly on the southern and eastern shores. In proximity to the Worth Street APE, there was a cluster of tanneries located on Orange Street north of Pearl Street. Most of these buildings were situated off the APE, as shown on the 1755 Maerschalc and 1757 Holland maps (Figures 5 and 6, respectively). However, an 1801 survey of the Collect Pond and vicinity (Figure 9) does illustrate a "Tannery Workshop" overlapping the APE immediately adjacent to the pond and west of the line of Little Water Street. The map also shows that depths of the Collect Pond within the APE ranged from 0-5 feet.

By at least the 1750s, when streets had been established in the APE vicinity, structures began to be shown on maps (e.g. Maerschalc 1755, Holland 1757), especially along Chatham Street, which as part of "High Road to Boston" was a commercial corridor, and to a lesser extent, Mulberry Mott, Orange and Cross Streets. Orange Street in particular provided access to the Collect Pond and the slaughterhouse on its shoreline, and the cluster of tannery buildings was located along its western side. The famous "Tea Water Pump," where local residents obtained fresh drinking water, was located on the north side of Chatham Street west of Orange Street.

Historic maps do suggest some development within the APE corridor, at the northwest corner of Mott and Chatham Streets, along the west side of Mulberry Street, and near the intersection of Cross and Orange Streets. However, it is difficult to determine the early occupants of the buildings along these streets, as city directories do not exist for this period (and even into the 1780s did not have much if any coverage for this part of the city). Addresses that could pinpoint exact locations of buildings along the street were not assigned until the 1790s at the earliest, and the 1820s for some streets like Anthony and Cross Streets. Further, the ownership of lots was often by absentee landlords.

Development increased in the APE vicinity during the second half of the eighteenth century as street fronts filled up with buildings over time. Historic maps from these years (e.g. Maerschalc 1763; Ratzler 1766-67 [Figure 7]; Holland 1776; Montresor 1776; British Headquarters 1782 [Figure 8]; Taylor-Roberts 1797) generally do not depict specific buildings along the neighborhood streets, although some maps do indicate bands along the street frontages suggesting multiple structures across a number of lots. Blackmar (1989:92), writing about this area, notes that from ca. 1790-1820, streets in the APE vicinity, particularly Mulberry and Orange Streets, became a convenient location for modest trade houses, shops, and some manufactories, including for example a comb making business listed at 23 Mulberry Street in 1794 (*New York Daily Advertiser* Oct 4, 1794). The original series of buildings, constructed during the colonial period, many of which were still standing, were frequently purchased by absentee landlords and subdivided for greater occupancy. Tenants in the neighborhood included grocers, tavernkeepers, boardinghouse keepers, along with working class individuals and their families, often characterized by people from multiple households living together at a single address.

### Nineteenth century

Archival materials available for the early nineteenth century allow greater understanding of specific use of the former lots within the APE. Beginning in 1808, tax assessment records show that nearly the entire APE was filled with structures at this time, although the lack of addresses or ward numbers along Cross Street and Orange Street prior to the 1810s precluded identifying individual occupants on those frontages (Appendix A). A sense of the neighborhood makeup can be gleaned from the city directory listings beginning in this period, which generally note a mixture of working class residents, of which the large majority were renters or leaseholders. In many cases business owners (such as grocers, bakers, and other storekeepers) lived on the property, as did their workers, along

with other families and boarders. Lots often had two houses on them to maximize tenancy and rental income, one in front along the street and one in back, with a small yard in between. Federal census records from this period, while unable to pinpoint exact residents due to a lack of addresses, nonetheless show that the neighborhood (the Sixth Ward) was home to households of people of all ages, with combinations of free whites, free blacks, and some slaves frequently living together. While some residents stayed at one address for a period of time, most were relatively transient, moving frequently as yearly leases expired. Buildings that contained certain types of businesses as well as residential accommodations often housed different people from the same profession (grocers, bakers, etc.) over a number of years.

Newspaper advertisements from the period attest to the considerable construction that had occurred by this period, and the active real estate market. One representative classified listing for a lot within the APE provides a detailed synopsis of the kinds of buildings found in the neighborhood:

For sale, the unexpired lease of a house and back building, No. 25 Mulberry Street. The Lot is 25 by 75 feet; the front house is 21 by 14 feet, contains a cellar and cellar kitchen, one room on the first and two rooms on the second floor. The back house is 14 by 33 feet, two stories high, and contains four rooms, a cellar and cellar kitchen. Said houses have eight fire places and many conveniences for families. As the proprietor is about leaving the city, he will dispose of them on low terms for cash or good paper. For further particulars apply on the premises (*New York Daily Advertiser* January 26, 1803).

Newspaper advertisements from the early nineteenth century also give a sense of the labor economy that existed at the time. One APE address in particular, 6 Mulberry Street, home and workplace to baker William Englehart, among others, appears to have housed a number of different kinds of workers, few of them wishing to stay at in a location with presumably unpleasant conditions. A sampling of newspaper advertisements from a short period of years note what appear to be a woman looking for sewing and childcare work, a black slave or indentured servant for sale, and a white runaway apprentice:

Wants a situation – as seamstress, or to take the care of children, or both together if required – a WOMAN well qualified for the former situation, being competent to every sort of needle work, or for the latter, being habituated to the care of little ones. For her capability and character, she can produce the best recommendations, and would have no objection to go a few miles in the country. A pecuniary consideration is not so much the object as an agreeable family. Enquire at Mr. Engleharts, No. 6, Mulberry Street (*New York Morning Chronicle* July 6, 1803).

For sale, about 13 years time of a Black Girl, 19 years of age; she is healthy, stout, sober and honest. For terms of sale etc., enquire at No. 6 Mulberry street (*New York Mercantile Advertiser* January 27, 1806).

Five Dollars Reward. Ran away from the subscriber, on Sunday morning the 22<sup>nd</sup> inst. An apprentice boy named John Munger, about 15 years of age, about 4 feet 6 inches high, had on when he went away a blue nankeen jacket and trousers a black hat and shoes. Whoever will return him to the subscriber at 6 Mulberry street shall receive the above reward and all reasonable charges paid. All masters of vessels and others are cautioned against harbouring said boy at their peril. William Englehart. (*New York Mercantile Advertiser*, July 1, 1806).

The APE also contained a significant commercial strip along Chatham Street, a main thoroughfare that was a natural shopping destination. A newspaper advertisement indicated the details of one such building, at 160 Chatham Street within the APE:

To let, for one or more years, from the 1<sup>st</sup> of May next, and the stock of Dry Goods on hand, to be disposed of on accommodating terms, that large, almost new, and well finished brick front HOUSE and STORE, No. 160 Chatham street, being a most excellent stand for the dry good business, and now occupied as such. The house contains seven rooms, four of which with fire places, besides one of the handsomest and best regulated store rooms in the city, about 20 feet wide by 30 feet deep, finished in a grand style; further a cellar for carpeting, wood cellar, kitchen

with bake oven, yard, cistern, and every other requisite. Apply on the premises. (*New York Commercial Advertiser* March 11, 1811).

Perhaps the greatest change to the APE and vicinity came in 1817, when Anthony Street (now Worth Street) was created from Collect Street (now Centre Street) to the intersection of Cross and Orange Streets. With the Collect Pond finally filled in, it was time to extend the street network across the former waterway, linking the east and west sides of the neighborhood. A survey prepared just prior to the street opening (Ludlam 1817, Figure 10) shows that the new roadway required the taking of various individually held properties. On the western end, between Collect and Little Water Streets, the roadway traversed land owned by the corporation (formerly part of the Collect Pond and recently landfilled) and Aaron Stockholm, a former tannery owner. From Little Water Street to Cross and Orange Streets, the roadway ran across city lots belonging to John R. Livingston fronting Little Water Street (tax records from 1815 suggest they contained houses, albeit unlabeled on the map) and a series of city lots owned by different people fronting Cross Street, with houses.

The creation of Anthony Street spurred two iconic landmarks: (1) the intersection of Anthony, Cross and Orange Street almost immediately became known as “Five Points;” and (2) the triangular shaped parcel bounded by the three streets on the west of the intersection, which with its now truncated lots became a hub for slum housing and prostitution. Blackmar (1989:173) notes that by the 1830s the Five Points neighborhood was one of the most densely populated areas of the city. She writes:

When landlords found they could not attract “respectable” tenants, they had turned the houses over to leaseholders who operated them as brothels, gambling houses, and taverns, thus producing “commercial rents” that far exceeded what the houses would generate solely as multitenant houses Blackmar (1989:173).

In his book, *City of Eros: New York City, Prostitution, and the Commercialization of Sex, 1790-1920*, Timothy J. Gilfoyle (1992) has written extensively about prostitution in New York City, and specifically about the Five Points area. Additionally, Gilfoyle was kind enough to provide additional data, not included in his book, about specific addresses listed in municipal records as having evidence of brothels from the 1820s-1860s, including a number of lots in the APE (Gilfoyle personal communication 2012). Appendix A includes those addresses that could be specifically linked to brothels in the APE, but is likely only a small percentage of the actual incidences, as many of Gilfoyle’s listings did not have specific addresses (only street names and cross streets). These data only represent the instances that were reported to the authorities and it is assumed that many more examples went undocumented.

Locations within the APE identified by Gilfoyle as supporting prostitution during one or more years include:

- 136, 138, 140, 142, 144, 146, 148, 150, 152, 154, and 156 Anthony Street;
- 60, 62, 74, and 76 Cross Street;
- 85, 87, and 89 Cross Street;
- 23, 25, and 27 Orange Street;
- 21 Mulberry Street; and
- numerous locations along Centre, Anthony, Little Water, Cross, and Orange Streets that may correspond to APE locations but do not list specific addresses.

Gilfoyle notes that many of the large landowners who held property within the APE were also making money from the use of those lots for brothels. In particular, Gilfoyle identifies APE owners John R. Livingston (Anthony, Cross and Little Water Streets), Leonard Fisher (Centre and Anthony streets), James Ridgeway (Anthony and Little Water streets), and Elijah Valentine (Cross Street) who owned multiple lots supporting brothels. The degree to which these landowners were involved and profited from these illicit businesses is worth illustrating through several passages from Gilfoyle:

John R. Livingston in 1788 gained control of land in what later became Five Points. After 1800, Livingston steadily purchased property, some from family members, in the area around the Collect Pond. Throughout the 1820s and 1830s he bought and sold land in the heart of the neighborhood. By 1828, Livingston had come to control at least five brothels on Anthony Street near Paradise Square. From 1820 to 1850, Livingston was listed as the owner/occupant of more than thirty

documented houses of prostitution (many outside Five Points). Among his tenants were some of the best-known madams in the city. Livingston's ownership of so many establishments gave his madams greater flexibility in their operations. If neighbors complained, or the watch harassed, or business declined, prostitutes moved to other Livingston owned brothels (Gilfoyle 1992:43-44).

The Fisher family, first Leonard, a wealthy "gentleman," and later his namesake son, a dentist with wealth estimated at \$100,000 in 1845, controlled a stretch of brothels along Centre Street during the 1830s. According to an 1836 police court trial, Leonard Fisher's wife personally and actively rented the brothels to known prostitutes and madams (Gilfoyle 1992: 45).

Prostitution was also an avenue of upward mobility for less affluent property holders. James Ridgeway, a house carpenter residing just north of Five Points, began buying property on Anthony and Little Water streets in 1812; between 1821 and 1835, he made at least eleven separate purchases in the heart of Five Points. And in 1850, his estate contained at least eight houses of prostitution. While Ridgeway's bonanza was partly attributable to a construction boom, a significant portion of his financial estate was derived from the toil of the prostitutes he housed and protected (Gilfoyle 1992:45).

Numerous grocers and saloonkeepers rented their upper floors to prostitutes and then supplied them with liquor. Throughout the antebellum period, disorderly houses were sometimes saloons downstairs and brothels upstairs. Elijah Valentine, for example, was a Mulberry Street grocer who in 1826 controlled five houses of prostitution on nearby Cross Street (Gilfoyle 1992:167).

Review of individual lot histories (Appendix A) confirms that many of the addresses noted by Gilfoyle as supporting brothels also contained groceries, saloons or taverns (usually noted as porterhouses, coffeehouses, or liquors). Many of these lots had a female tenant listed in the city directories, many of who were labeled "widows." Gilfoyle (1992:72) stresses that many brothel owners camouflaged their occupations by posing as widows or by operating "female boardinghouses." However, many of the addresses also listed other residents on the lot, who may or may not have been associated with the use of the building for prostitution. The numbers of tenants occupying any particular building on a lot was great enough that for most addresses, there was a range of occupancies at any given time.

Again, newspaper articles help fill in some of the blanks left by other records, as they noted the types of activities occurring in the neighborhood during the first quarter of the nineteenth century. The types of announcements were both sensational and mundane. Some of the more lurid postings dealt with murder, death and suicide, frequently by overdoses of laudanum. A few examples include the following, many of which occurred on the APE lots identified as brothels:

On Friday last a Coroner's inquest was held on the body of a female child, about 4 months old, at No. 68 Cross street. It appeared by the testimony, that the mother of the child was in the habit of leaving it alone a whole day at a time; that once she threw it in the street, and that the whole of her conduct towards this infant was unnatural and inhuman in the extreme. As there were no marks of violence on the body, and it appearing by witnesses that the child had been sick, the Jury returned a verdict of death by the visitation of God, and by the neglect of the mother. The father is a man of good character – the mother an abandoned wretch. (*New York National Advocate* July 21, 1819).

83 Cross Street, house of John H. Minuse. Inquest held on the body of Eleanor Wintersgale, an Irish woman, aged 49 years. Overdose of laudanum. (*New York Evening Post* August 25, 1821).

Catharine Watkins, suicide by overdose of laudanum, at the house of Hannah Lewis, corner of Anthony and Little Water streets (*New York Spectator* May 18, 1821).

Suicide – About four o'clock Thursday afternoon, a colored woman threw herself out of a window of the three-story house 150 Anthony street N.Y. The wretched being came to the ground headforemost, and was completely dashed to pieces. A coroner's inquest sat upon the body, and a

verdict returned, “that the deceased came to her death in a fit of mental derangement.” The suicide was addicted to liquor, and early in the morning had pawned her last gown for half a dollar, with which she purchased rum (*Connecticut Courant* August 11, 1829).

During this time, lots within the APE continued to be bought, sold, tenanted and re-tenanted year after year. The portion of the APE overlapping the former lots along Mulberry, Mott, and Chatham streets was less populated by brothels (although there was one address recorded by Gilfoyle on Mulberry Street) and retained more of a commercial character. Returning to the lot at 6 Mulberry Street, owned for a time by baker William Englehart and discussed above, newspaper advertisements continued to announce its use as a bakery through the 1820s. In 1818 when George Englehart listed the property for sale or lease, it was described as containing a house, a bake house, and a lot (*New York Mercantile Advertiser* February 10, 1818). The following year, a new baker had moved in and was already soliciting business:

New Years Notice. Uzal P. Ward, informs his friends and the public in general, that he has commenced Baking his NEW YEARS CAKE at No. 6 Mulberry-st. where he has on hand a constant supply and of first quality, which he intends to sell for the low price of 1s 4d per lb; the second quality is per lb –all made of good materials. Likewise he has on hand, Loaf Bread, of the first quality, eight ounces, heavier than the present assize of Bread, for the low price of 1 shilling. Families and grocers can be supplied by sending their addresses at No. 6 Mulberry Street. UZAL P. WARD hopes by unremitting attention to meet with a liberal share of public patronage. (*New York Mercantile Advertiser* December 28, 1819).

Although Ward had vacated the bakery by 1827, another baker, Charles Persinger, had continued the New Year’s cake tradition and was advertising them still (*Evening Post* December 27, 1827). Meanwhile, on Chatham Street, merchants continued to advertise their wares, including boots, shoes, and clothing, on lots within the APE (*New York Daily Advertiser* February 9, 1820).

The reputation of the Five Points neighborhood already had become cemented in the public eye by the 1820s, as containing a high density of slum housing, brothels, and mixed race tenancies, stoking fears of amalgamation. Much was written, frequently in sensationalist prose, about the vices of the area. Outsiders were both titillated and outraged at conditions. Tourists were advised to visit as part of their New York City experience. A well-known image of Five Points in 1827 (Figure 11) depicts the hurly burly of activity that characterized the area. Reformers and moralists, by the late 1820s, seized upon the triangle of land bounded by Anthony, Cross, and Little Water Streets, and containing numerous brothels, as the worst of the offending blocks, and argued that these streets should be widened and the buildings razed in order to rid the neighborhood of an embarrassment. As Blackmar (1989:175) recounts, opposition from landholders and leaseholders was profound: their profits depended on these buildings and their activities. For several years the arguments continued, but at last in 1833 the order was given to clear the triangle (Blackmar 1989:176).

But were the buildings in the notorious triangle actually removed? Sources are conflicting. Tax assessment records, beginning in 1833, no longer listed any of the triangle-fronting addresses, indicating that the buildings were gone. Tax maps (see Figures 3a-c) show the triangle as empty in 1838, as do historic maps (e.g. Colton 1836 [Figure 12]; Dripps 1852 [Figure 13]; Perris 1853 [Figures 14a-b]). Official street opening data on file at the MBPO indicates Anthony Street was widened between Little Water and Orange Street in 1833. Yet city directories continued to indicate the addresses in question existed in street numbering surveys (without a change in sequence from earlier years), and various listings on these lots continued to be published during the ensuing decades, albeit with lesser frequency than in earlier years. And Gilfoyle’s brothel data note several addresses on Anthony and Cross Streets as having citations through the early 1850s. It seems likely, considering these discrepancies, that perhaps some structures remained on the triangle until just prior to 1860, when the remainder of Anthony Street (now renamed Worth Street), from Centre Street to Orange Street, was widened on the south side, officially eliminating the lot at 72/74 Centre Street at the corner of Worth Street, and shaving 20 feet off the northern side of the remaining lots on the south side of Worth Street. A widely cited view of Five Points published in 1859 (Figure 16) shows the triangle as vacant – and by this date perhaps it actually was!

From the 1830s through the mid-1860s, the Five Points neighborhood continued to support high densities of tenants, businesses, and vice. City directories and census records from 1850 and 1860 suggest that most, if not all buildings

had multiple households at any given time – from 1 to 16 households at most addresses, and perhaps as many as 30 households within several buildings on larger lots, such as 10 Mulberry Street. The difficulty, of course, in tracing the precise occupants in any particular year, is that the only resources that listed addresses were city directories and tax records, which did not indicate every resident, or even every head of household. Comparing census records with city directories illustrates that many people, especially immigrants, went unlisted in directories, especially those with difficult to spell names; minorities were just as unlikely to appear in directories. Census records for back buildings on lots, which frequently housed immigrants and minorities, were difficult to assign to a particular lot because occupants could not be cross checked in directories to ascertain the addresses. For the most part, however, residents of Five Points toiled at working class professions.

Historic maps illustrate the degree to which the APE lots were developed during this period (Colton 1836 [Figure 12]; Dripps 1852 [Figure 13]; Perris 1853 [Figure 14a-b], 1857 [Figure 15a-b]; Harrison 1867 [Figure 18]). Appendix A indicates that on many APE lots, the use of properties for taverns, groceries, and boardinghouses increased, with brothels existing on many of the lots fronting the Five Points intersection. Even Mulberry Street was not exempt from debauchery. A particularly lurid newspaper account in 1857 revealed that Mr. Theodore L. Tompkins of Hoboken was murdered in the “low drinking house where disreputable women were kept, at No. 8 Mulberry street.” After a dispute about “treating the women” some Germans assaulted the three friends from Hoboken. Tompkins died from a fractured skull and the others were badly hurt. Barkeeper Ferdinand Simon, Mrs. Mitchell (the keeper of the den), and boarder Theresa Markler were arrested for murder (*Barre Gazette* August 7, 1857).

By and large, however, prostitution declined in the Five Points area after the 1850s, due in no small part to an evangelical reform movement that began in the early 1850s (the famous Five Points Mission opened at the site of the “Old Brewery” across from the triangle on Cross Street in 1853; a corner of the building is shown on Figure 16) and resulted in the closure of a number of brothels after this period. Guidebooks to brothels in New York City after the mid-1850s no longer listed many addresses in Five Points (Gilfoyle personal communication 2012).

After the Civil War, the last segment of Worth Street was built, extending the street at the Five Points intersection to Chatham Street on the east. The creation of these two new blocks of Worth Street necessitated seizing land and razing structures within the proposed roadway from numerous lot owners fronting Baxter (formerly Orange), Park (formerly Cross), Mulberry, Mott, and Chatham Streets: lots that were packed with buildings. The two new blocks of Worth Street opened legally in 1868. By the 1870s, trolley lines had been installed in the streetbed, allowing additional transport through the neighborhood (Bromley 1879 [Figure 20], Robinson 1885 [Figure 21]).

Although the Five Points neighborhood continued to undergo numerous changes during the remainder of the nineteenth century and the twentieth century, the history of the APE essentially stops in 1868, when the last leg of Worth Street was built. Since 1868 there have been no additional road widenings for Worth Street, and so use of the APE has been limited to its role as a street and sidewalks. As noted above, there are numerous subgrade utilities within Worth Street, the earliest of which was installed in 1842 when Croton Water was piped through the neighborhood. Other utilities include additional water lines and hydrants, sewer lines (from 1855, 1872 and 1901), gas lines, telephone lines, electrical lines, and steam lines. The pavement includes layers of concrete, granite blocks, and asphalt.

## G. SUMMARY OF ARCHIVAL RESULTS

The archival research pertaining to the ca. 60 historic lots and the neighborhood that comprises the APE revealed that prior to the 1750s, the area was part of several farms, and a portion of the western end of the APE was partially under the Collect Pond. At least one tannery building was located within the APE in this area. The first city streets were opened through the APE vicinity in the 1750s, including Cross, Orange, Mulberry, and Mott Streets. Chatham Street was part of the Kings Highway and in place even earlier. After the Collect Pond was filled following the turn of the nineteenth century, Collect Street was opened as far north as the APE in 1808 and Anthony Street between Collect and Cross/Orange Streets was opened in 1817.

Occupation data was compiled for each of the ca. 60 historic lots from late eighteenth century through ca. 1868, when the eastern stretch of Worth Street was opened. Summaries of occupation data for the lots are presented in Appendix A. Due to the large number of lots within the APE, and the limitations of the archival resources, as

described in the Methodology section, these summaries, by definition, are incomplete. However, the data collected represents the types of occupancies experienced on each of the lots. At any given time, just about every lot supported multiple households and occupants, and these occupants changed very frequently. Therefore, it is neither possible nor particularly useful to attempt to trace individuals on a lot over a span of time with the hopes that potential archaeological resources might be linked to that specific person or even that specific household. Rather, the history of each lot needs to be reviewed with the intent of identifying trends in occupants or businesses that may provide a longer term picture of each address.

Table 5, below, presents some of the more obvious trends for each lot, based on the information from Appendix A. The information indicates that while many occupants were transient, the types of occupants or businesses frequently endured over a period of time. Some of the recognizable characteristics among the lots include the presence of grocers, inn keepers or boardinghouse keepers, taverns or porterhouses, brothels, bakeries, or commercial properties. It should be assumed that all lots also included residents in varying numbers. Some specific groups, such as Jews, Italians, Irish, or African-Americans could be determined based on census records and are noted in locations where there seemed to be a concentration of these individuals. With few exceptions, most owners of the lots did not live on their properties.

**Table 5: Summary of Nineteenth-Century Occupation Data Trends Within APE Lots**

<b>Former Address</b>	<b>Summary of occupation data trends</b>
72 or 74 Centre Street	Grocers, inn keepers, brothel
136 Anthony/Worth Street	Grocers, inn keepers, brothel
138 Anthony/Worth Street	Brothel
140 Anthony/Worth Street	Grocers, porterhouse, brothel
142 Anthony/Worth Street	Tavern, porterhouse, brothel
144 Anthony/Worth Street	Porterhouse, boardinghouse, brothel
146 Anthony/Worth Street	Grocers, tavern, boardinghouse, brothel
150 Anthony/Worth Street (7 Little Water Street/Mission Place)	Brothel
152, 154, 156, 158, 160 Anthony Street	Brothels
Little Water Street, east side, addresses below 10, but inconsistent as to evens or odds	Cannot link addresses but probably brothels
60, 62, 64, 66, 68, 70, 72, 74 Cross Street	Most had brothels
81 Cross/Park Street	Grocers
83 Cross/Park Street	Grocers, boardinghouse, tavern, some Italian musicians at least by 1850s
85 Cross/Park Street	Grocers, porterhouse, taverns, brothel, some Italian musicians at least by 1850s
87 Cross/Park Street	Boardinghouse, brothel, some Italian musicians at least by 1850s
89 Cross/Park Street	Porterhouse, brothel, some African-American occupants
91 Cross/Park Street	Most occupants unclear, possibly some Italian musicians at least by 1850s
19 Orange/Baxter Street	Grocers
21 Orange/Baxter Street	Grocers
23 Orange/Baxter Street	Tailors, physician, grocers, tavern, brothel
25 Orange/Baxter Street	Grocers, porterhouse, tavern, brothel, some African-American occupants
27 Orange/Baxter Street	Grocers, porterhouse, brothel
13 Mulberry Street	Mix of working class occupants
15 Mulberry Street	Mix of working class occupants
17 Mulberry Street	Mix of Jewish and Irish immigrants
19 Mulberry Street	Mix of working class occupants, mostly African-Americans at least by 1850s
21 Mulberry Street	Tavern, brothel, back building with possible African-American occupants at least by 1850s



Former Address	Summary of occupation data trends
23 Mulberry Street	Mix of working class occupants
25 Mulberry Street	Mix of working class occupants
6 Mulberry Street	Mix of working class occupants, bakers
8 Mulberry Street	Mix of working class occupants, very high occupancy at least by 1850s
10 Mulberry Street	Cabinet making shop, mix of working class occupants, very high occupancy at least by 1850s
12 Mulberry Street	Mix of working class occupants
14 Mulberry Street	Mix of working class occupants, Jewish occupants at least by 1850s
16 Mulberry Street	Mix of working class occupants, Jewish occupants
1 Mott Street	Commercial property (including feather store) with some residents
3 Mott Street	Mix of working class occupants
5 Mott Street	Mix of working class occupants
160 Chatham Street	Commercial property (including dry goods, shoes) with some residents
162 Chatham Street	Commercial property (including dry goods) with some residents
164 Chatham Street	Commercial property (including hatter, thread and needles) with some residents
166 Chatham Street	Commercial property (including dry goods, carpets, caps/hatters) with some residents
168 Chatham Street	Commercial property (including dry goods, feather store, watches, mattresses, curled hair, liquors) with some residents
170 Chatham Street	Commercial property (including dry goods, boots and shoes, math instruments, engraver, glasses) with some residents
172 Chatham Street	Commercial property (including dry goods, shoes, thread and needles, printers) with some residents
174 Chatham Street	Commercial property (including dry goods, clothing, drawing instruments) with some residents
176 Chatham Street	Commercial property (including confectioner, milliner, tailor, saddler, trunk maker, clothing) with some residents

## H. POTENTIAL FOR ARCHAEOLOGICAL RESOURCES SURVIVAL

There are two questions to address with regard to potential archaeological resources within the APE.

1. The first question focuses on the types of archaeological resources that once were located within the APE.
2. The second question focuses on whether these archaeological resources could have survived later disturbances to the APE.

As mentioned above, the archival research has revealed that prior to the 1750s the APE was located within several farms, and part of the APE was under the water of the Collect Pond. Historic maps suggest that buildings associated with the farms likely were situated near eastern end of the APE, probably between Mulberry and Mott Streets. Although the bulk of early tanneries from the eighteenth century were located south of the APE, there is evidence that at least one tannery workshop extended as far north as Worth Street. After streets were laid out through the area in the 1750s, individual lots were created within blocks that then contained residential and commercial buildings. These buildings fronted Centre, Anthony, Little Water, and Cross Streets on the western end and Cross, Orange, Mulberry, Mott, and Chatham Streets on the eastern end of the APE corridor.

Expected historical period archaeological resources within the APE could include remains of early farm buildings and associated refuse deposits, which could also be found in shaft features such as wells, privies, and cisterns. Tannery related resources might include deeply buried strata of organic soil, pits, and debris related to this industry. Resources on historic lots could include remains of residential and commercial buildings (including taverns and brothels), trash deposits, which also could be found in shaft features such as privies and cisterns (few wells, which were more expensive to sink, have been discovered on historic lots in this working class area, suggesting that they also are less likely to be found here). A number of lots contained bake houses, the below-ground evidence of which might also be recovered.

The Five Points archaeological site, just south of Worth Street and immediately abutting the APE, yielded 50 backyard features. Numerous professional papers (including a session at the 29<sup>th</sup> Annual Meeting of the Society for Historical Archaeology, Cincinnati 1996) as well as an entire issue of *Historical Archaeology* have been devoted to the archaeological discoveries made within these fourteen lots. Archaeologists found that the interconnectedness and subsequent development of the area actually enabled the preservation of these important archaeological sites. Excavations were undertaken within the rear yards of historic lots. Some features were found only 4-5 feet below the existing ground surface, and a number of cellar floors and sunken courtyards were found ca. 10 feet below the existing grade, under layers of later demolition debris and overburden. Many of the shaft features were found under the cellars and/or truncated below this depth. Although no wells were found, there were many stone lined privies and a few cisterns, some of which were wood lined. A number of the shaft features had not been filled until ca. 1875, many years after the installation of water and sewer lines under adjacent streets, suggesting that these working class tenements either were not hooked up to city resources until decades after they became available, or else continued to use their back yard shaft features as a supplement to indoor plumbing. There was also a brick and stone bake oven/house identified. Excavations also found what was believed to be an early ground surface along the shores of the Collect Pond and covered with a layer of shell, at ca. 15 feet below grade. Last, although tannery resources were predicted for this block, only several areas produced soils thought to be associated with tannery work, including peat strata containing leather and bark remnants extending to ca. 14 feet below grade (Yamin et al. 1995; John Milner Associates 1993; Yamin 2000, 2001a, 2000b).

An associated archaeological investigation for a tunnel running from the Five Points site under Pearl Street is also worth reviewing, because of its similarity to the APE conditions. Results of this investigation revealed soils and features associated with tannery activities (including a vat, bark trench, and liming pit, as well as a tannery hook and butchered animal remains) located at various locations, some just outside of a deep sewer trench. The soil was found at ca. 13 feet below the existing street level. The deeper sewer trench, next to the tannery deposit, extended to ca. 18 feet below the existing street level. The report for the project recommended that any future projects in the vicinity of the former Collect Pond with expected impacts greater than 12 feet below grade assess the potential for tannery related archaeological resources (Yamin et al. 1995).

Data from several other archaeological investigations located within city streets and sidewalks in Lower Manhattan also provide useful comparative data. Results of a number of studies have shown that archaeological resources can still survive beneath these areas, even if there has been subsequent disturbance from buried utility lines.

At the Sullivan Street site on the NYU campus archaeologists found a total of five privies, three cisterns, one well, and two "other" features. All of the truncated features were found between 5-9 feet below the modern street elevation, underlying subsequent fill and construction episodes. With the exception of the well, which extended another 20 feet in depth, these truncated features ranged from 1-7 feet in depth. Each of these significant features was found in the location where Sullivan Street had cut through former backyards. The Sullivan Street resources were particularly extensive in part because there had never been a deep sewer line installed within the streetbed, limiting the degree of disturbance (Salwen and Yamin 1990). Research conducted on the site by Jean Howson also found that although there was a City policy in place that encouraged residents to connect their dwellings into the public sewer system, many continued to utilize their privies for a decade or more after the public sewer was installed (Howson 1992-3:142-143).

More recently, a number of important finds have been recovered beneath city streets in downtown Manhattan by Chrysalis Archaeological Consultants. Under Wall Street, sections of early wooden water pipes were found at ca. 4 feet below the existing street grade, and a possible cellar storeroom was found at ca. 7 feet below the existing street grade (Loorya and Ricciardi 2007b). Within Fulton Street, among other resources a stone wall was found at ca. 7

feet below the street with a stone well under the wall at ca. 10 feet below street. The well is thought to date to around 1700, before Fulton Street was created and the area was farmland. Christopher Ricciardi, principal at Chrysalis, indicated that excavations beneath Fulton Street, Beekman Street, and Peck Slip have all revealed significant archaeological resources that had not been disturbed by later utility work. Archaeological deposits have been found both within shaft features and as discrete deposits not enclosed by shafts. A number of water mains dating to the turn of the nineteenth century also have been found. Ricciardi stressed that the excavation for deeply buried sewers had not eliminated the presence of archaeological resources, as the trenches surrounding the sewers were quite narrow, and archaeological resources were found only a few inches from the sewer trench in Fulton Street (Ricciardi personal communication 1/8/2013).

Results of these archaeological investigations indicate that historic period archaeological remains can still be found beneath city streets, even if there is disturbance from later impacts, such as utility lines. Under Worth Street, sewer mains are the most deeply buried, extending to depths of ca. 11 feet below grade at Centre Street to ca. 26 feet below grade at Mott Street. Comparing results of nearby excavations with the Worth Street APE suggests that while archaeological resources may be present beneath the sewer trench nearest Centre Street, moving eastward it is much less likely that resources would be found under the sewer trenches. Other utilities are buried more shallowly – water lines are ca. 4-6 feet below grade, and gas lines are ca. 2.5 feet below grade – and the likelihood is greater that archaeological resources could be found beneath these utilities.

#### IV. CONCLUSIONS

Results of this Phase IA Archaeological Documentary Study have revealed a long history of occupation throughout the APE. There are almost no areas of the APE that were not used during the eighteenth and/or nineteenth centuries, either for farm buildings, tannery locations, residences, commercial structures, or some combination thereof. Occupation data (Appendix A) shows that most post-1750s structures within the APE contained multiple occupants and households, which increased as the neighborhood became more densely settled during the nineteenth century. Although turnover of occupants was high within most APE structures, the types of occupants or businesses within these structures often endured over multiple years. As noted above, some of the recognizable characteristics among the lots include the presence of grocers, inn keepers or boardinghouse keepers, taverns or porterhouses, brothels, bakeries, or commercial properties, with additional residents in varying numbers.

These structures and their lots within the APE corridor were demolished and capped at different times. The first leg of Anthony [Worth] Street, from Collect to Orange and Cross Streets, was laid out in 1817, and extended over lots fronting Little Water and Cross Streets (Ludlam 1817; Figure 10). Buildings and yard areas were affected, with buildings demolished and lots capped by the streetwork. Although likely already demolished by 1817, the tannery workshop west of Little Water Street and shown on the 1801 Loss map (Figure 9) would have fallen within this area as well. There were two episodes of street widening along this stretch of Anthony/Worth Street, one in 1833, from Little Water to Cross Streets, and one in 1860 from Centre to Little Water Streets. In both cases, the street was widened 20 feet on the south side, necessitating removal of buildings then fronting Anthony/Worth Street. Last, the section of Worth Street from the Five Points intersection at Park and Baxter Streets to Chatham Street legally was opened in 1868, again necessitating the demolition of numerous structures and capping of yard areas on lots fronting Park, Baxter, Mulberry, Mott, and Chatham Streets. Figures 22a-c illustrate the locations of historic lots overlaid on top of the modern APE.

While most, if not all, of the APE was once occupied, the degree of later disturbance has eliminated some areas from archaeological sensitivity. Specifically, those sections of the APE where deeply buried sewers and their associated trenches are located, generally in the center of the streetbeds, may be considered too disturbed to retain archaeological sensitivity. However, the diameter of the sewers ranges from 15 inches to 72 inches, depending on location, and as archaeological monitoring in other streets in Lower Manhattan has discovered, often the trenches in which the sewers were laid were quite narrow, only slightly wider than the sewers themselves. Within the Worth Street APE corridor, the approximate locations of these sewers are indicated on Figures 23a-c, although it is assumed that the actual placements may vary slightly from their mapped locations. Additionally, based on prior studies and a review of the documentary literature, it is estimated that roughly the upper 2 feet in the APE have been disturbed by multiple episodes of road regulating and paving. The remainder of the APE, below the ca. 2 foot depth and on either side of the sewer trenches, may still contain archaeological resources below the ca. 2-foot depth,

depending on location and the degree of additional vertical disturbance, either from documented or undocumented previous excavations within the APE.

## V. RECOMMENDATIONS

Based on the above conclusions, HPI recommends that archaeological field investigations within the APE consist of archaeological monitoring in conjunction with project construction, rather than pre-construction archaeological testing. Draft guidelines addressing the use of archaeological monitoring on urban sites (NYAC/PANYC 2002), as well as LPC guidelines (2002) indicate that monitoring is appropriate where archaeological testing is found to be not feasible. Within those streetbeds in Lower Manhattan that have also been identified as having archaeological sensitivity, monitoring has been the preferred method of archaeological field study.

Within the APE, where large amounts of pavement, soil and other overburden will need to be removed before reaching the archaeological resource zone, it will be most practical (and cost effective) to undertake these excavations in tandem with project construction, which can provide the large-scale excavation and soil removal operations necessary, shore up the site to facilitate deep excavation, and provide dewatering equipment if the water table interferes with archaeological resource recovery. OSHA regulations require stepping or shoring if excavations extend below 4 feet.

Although HPI has identified all areas of archaeological sensitivity within the APE, it is likely that only certain parts of this large expanse of sensitivity will be impacted by the planned project. At a minimum, it is expected that installation of the new 36-inch diameter steel water main at depths of ca. 7 feet below the existing street level throughout the length of the APE, and which is to be located just outside of the existing deep disturbance from earlier sewer trenches, will require archaeological monitoring. Depending on the depths of other planned project-related infrastructure components, additional archaeological monitoring may be required in those locations. Shallower reconstruction efforts, such as installation of new sidewalk paving if not extending below 2 feet in depth, may not require archaeological monitoring.

Taking these variables into account, prior to any excavation within the Worth Street Reconstruction APE, an archaeological monitoring plan should be developed by the archaeological consultant in consultation with LPC. The monitoring plan should be prepared according to applicable archaeological standards (NYAC/PANYC 2002; LPC 2002; CEQR 2012). RPA-certified professional archaeologists, with an understanding of and experience in urban archaeological excavation techniques, would be required to be part of the archaeological team.

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1810 Available at the New York Public Library and [www.ancestry.com](http://www.ancestry.com).

1820 Available at the New York Public Library and [www.ancestry.com](http://www.ancestry.com).

1830 Available at the New York Public Library and [www.ancestry.com](http://www.ancestry.com).

1840 Available at the New York Public Library and [www.ancestry.com](http://www.ancestry.com).

1850 Available at the New York Public Library and [www.ancestry.com](http://www.ancestry.com).

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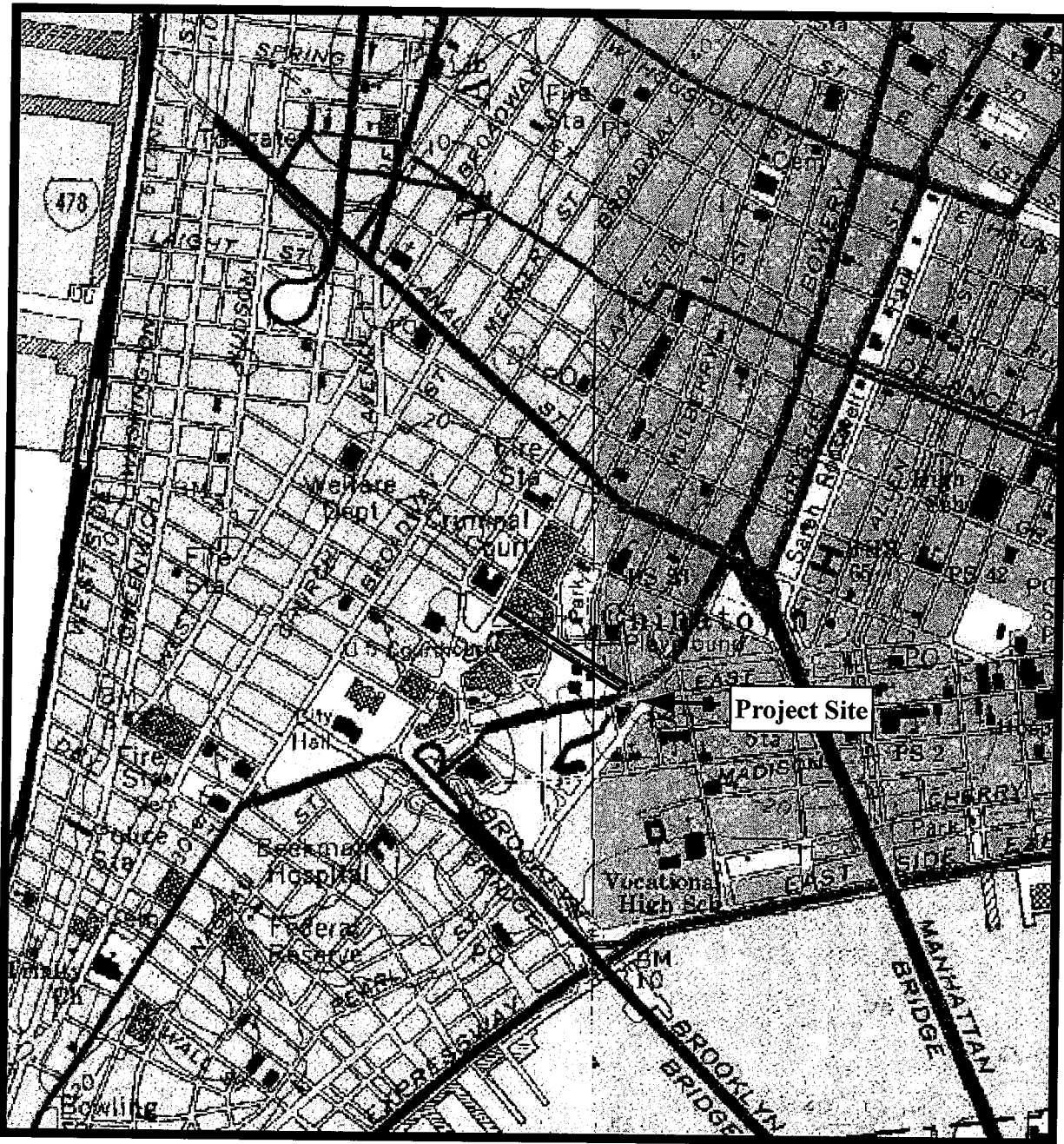
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 New York, New York

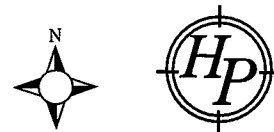


Figure 1: Project site on *Jersey City, N.J.-N.Y. and Brooklyn, N.Y. 7.5 Minute Quadrangles* (U.S.G.S. 1981).

0 1000 2000 3000 4000 5000 FEET

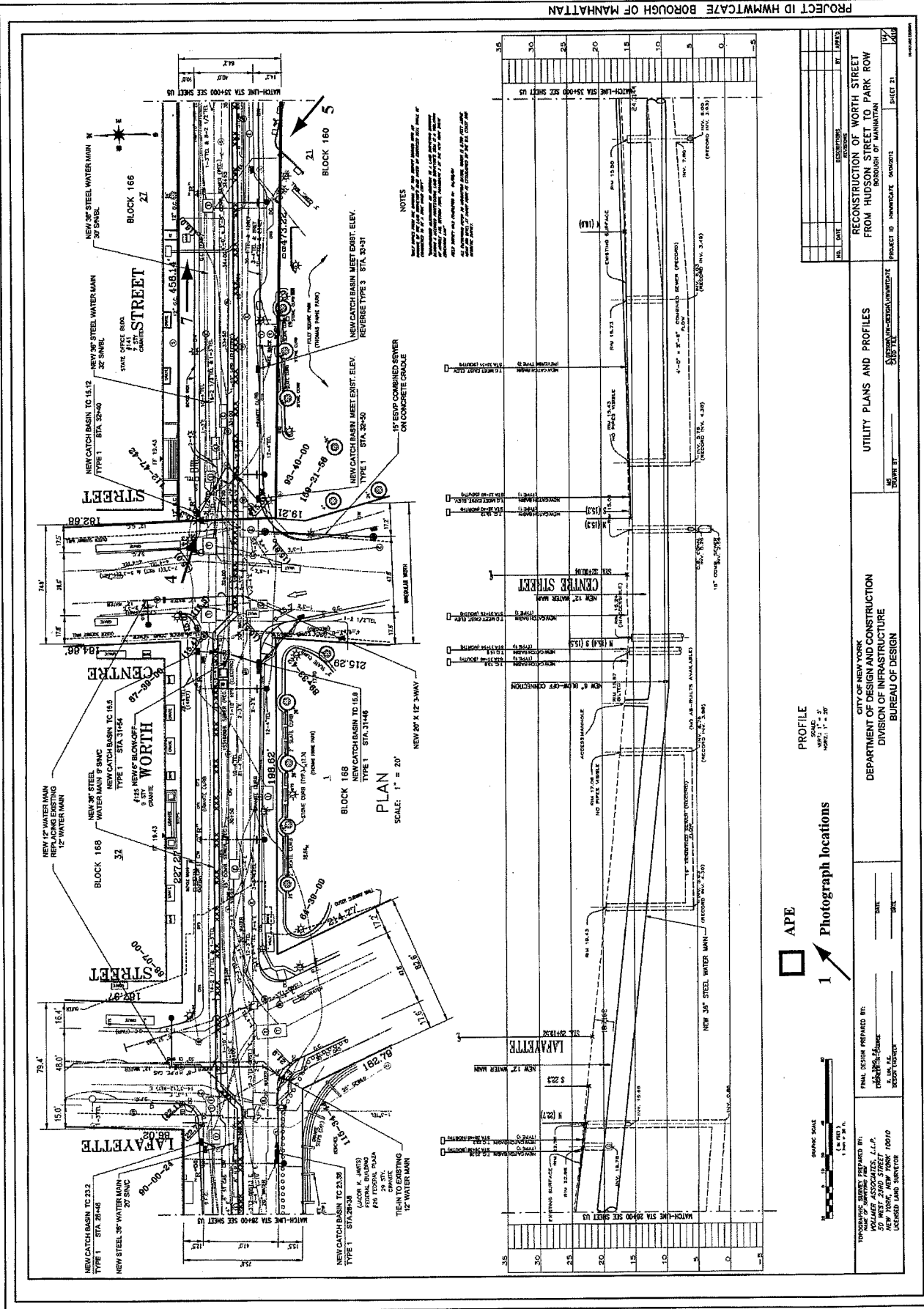


Figure 2a: Western portion of project site and photograph locations on Utility Plans and Profiles survey map (DDC 2012).

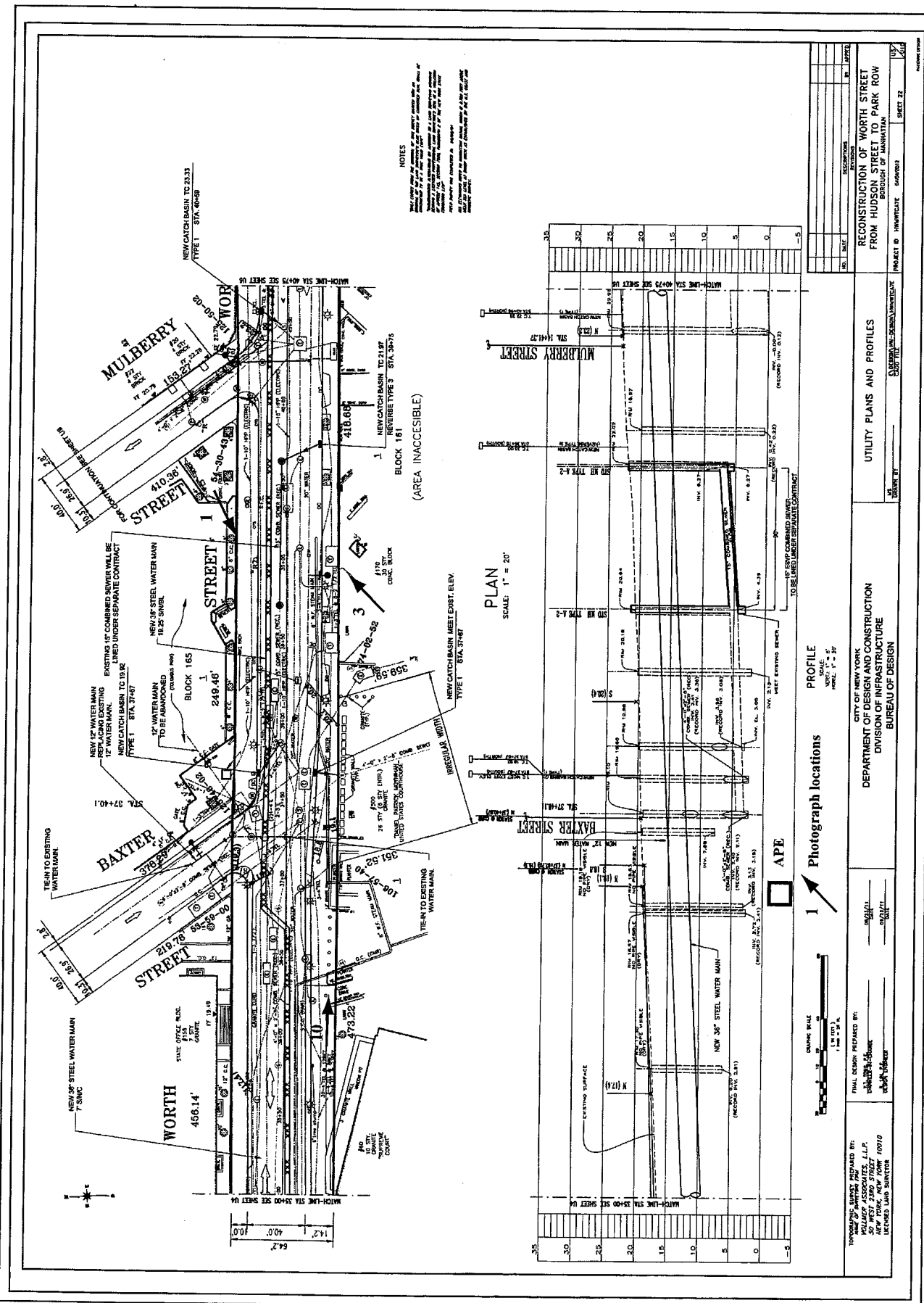
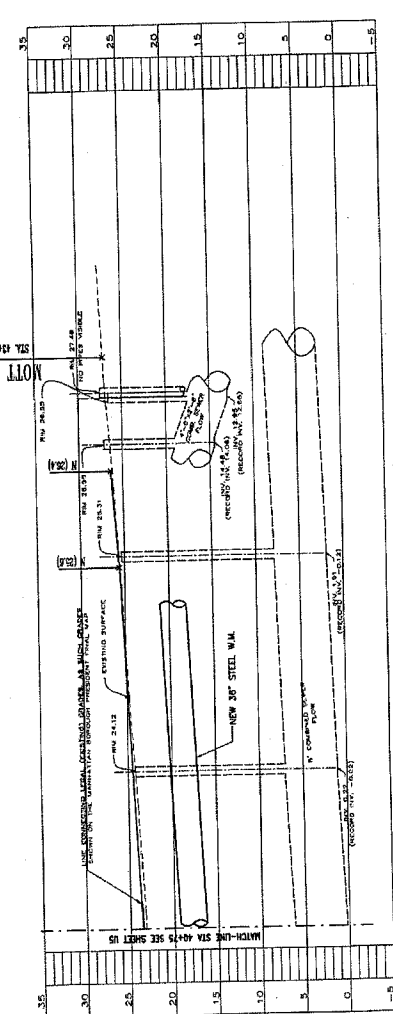
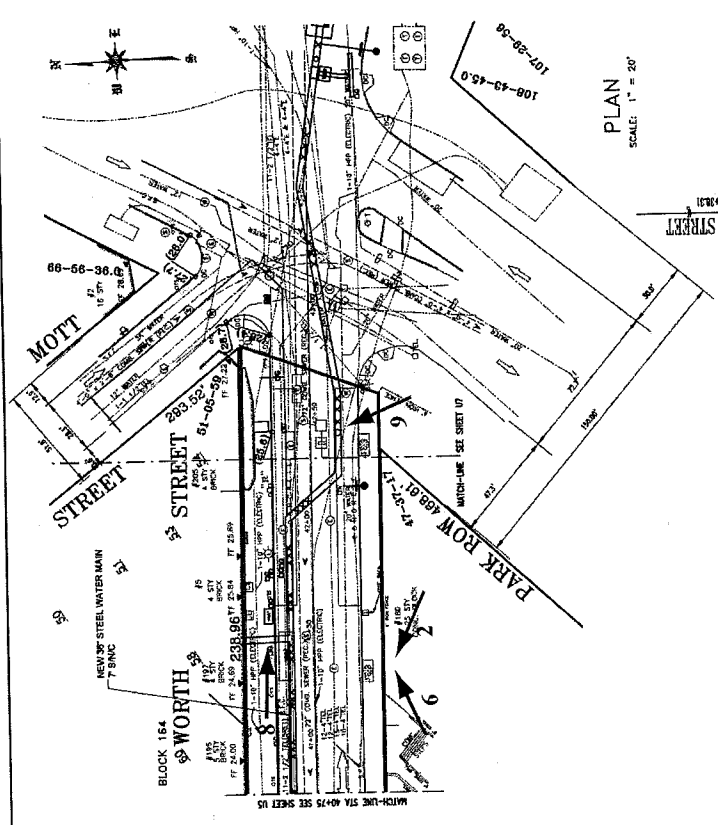


Figure 2b: Central portion of project site and photograph locations on Utility Plans and Profiles survey map (DDC 2012).



**NOTES**

1. ALL UTILITIES SHOWN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY DATA. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF NEW YORK AND THE STATE OF NEW YORK.

3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AND STREETS AT ALL TIMES DURING CONSTRUCTION.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES NOT TO BE REMOVED.

5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE DRAINAGE AND EROSION CONTROL MEASURES THROUGHOUT CONSTRUCTION.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL AREAS TO ORIGINAL OR BETTER CONDITION AFTER COMPLETION OF WORK.



1 Photograph locations

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 SCALE: 1" = 20'

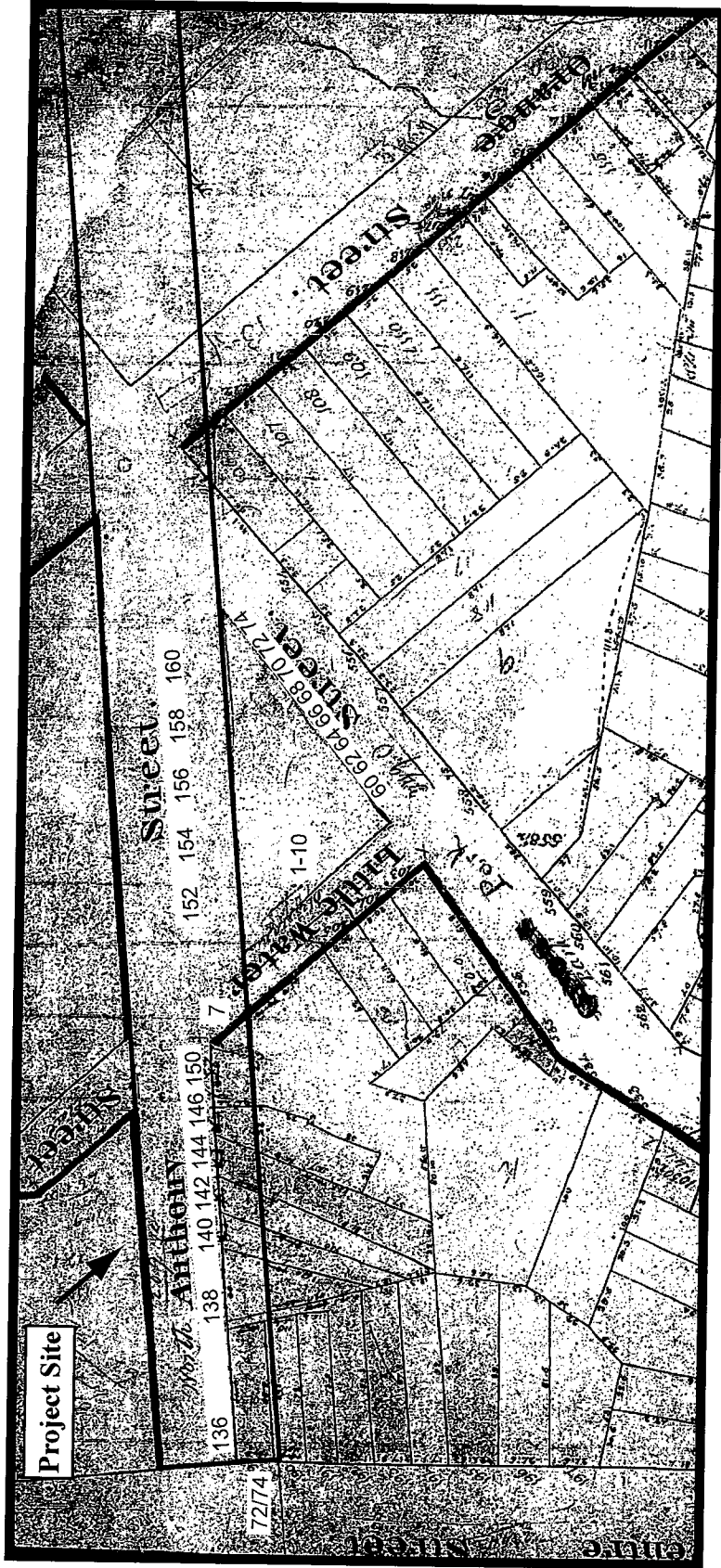
FINAL DESIGN PREPARED BY:  
 VOLLMER ASSOCIATES, L.L.P.  
 50 WEST 29TH STREET, 10TH FLOOR  
 NEW YORK, NY 10001  
 DIRECTOR: DAVID TUNNICLIFFE

CITY OF NEW YORK  
 DEPARTMENT OF DESIGN AND CONSTRUCTION  
 DIVISION OF INFRASTRUCTURE  
 BUREAU OF DESIGN

UTILITY PLANS AND PROFILES  
 SHEET NO. 23  
 PROJECT NO. 100-43-45.0

RECONSTRUCTION OF WORTH STREET  
 FROM HUDSON STREET TO PARK ROW  
 BOROUGH OF MANHATTAN  
 PROJECT NO. 100-43-45.0  
 SHEET 23

Figure 2c: Eastern portion of project site and photograph locations on Utility Plans and Profiles survey map (DDC 2012).

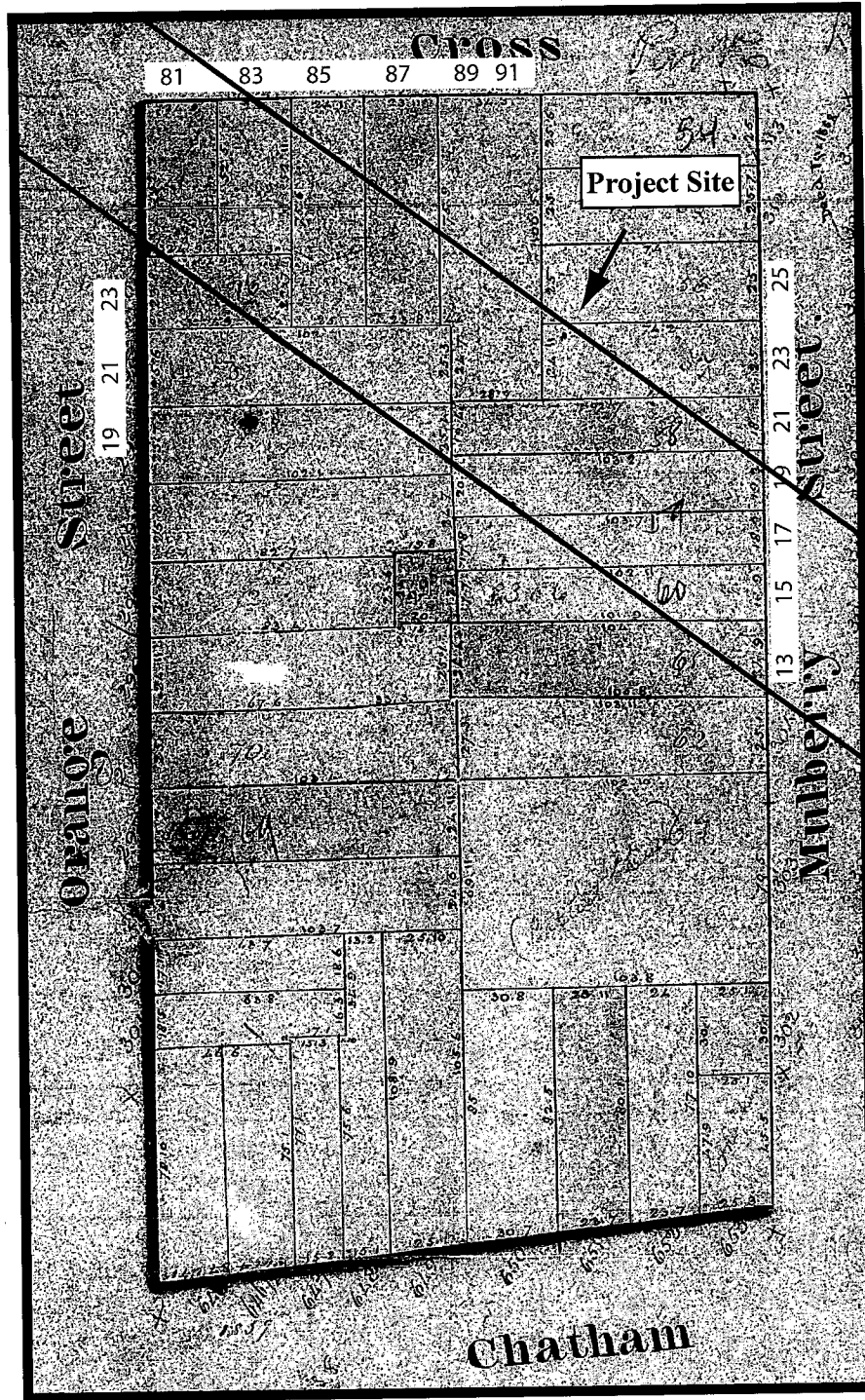


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 Worth Street Reconstruction from Centre Street to Mott Street  
 New York, New York

Figure 3a: Western portion of project site on tax map for former Block 160 (1838-1871).  
 Former addresses are marked in red.



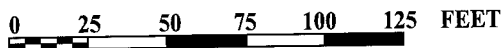




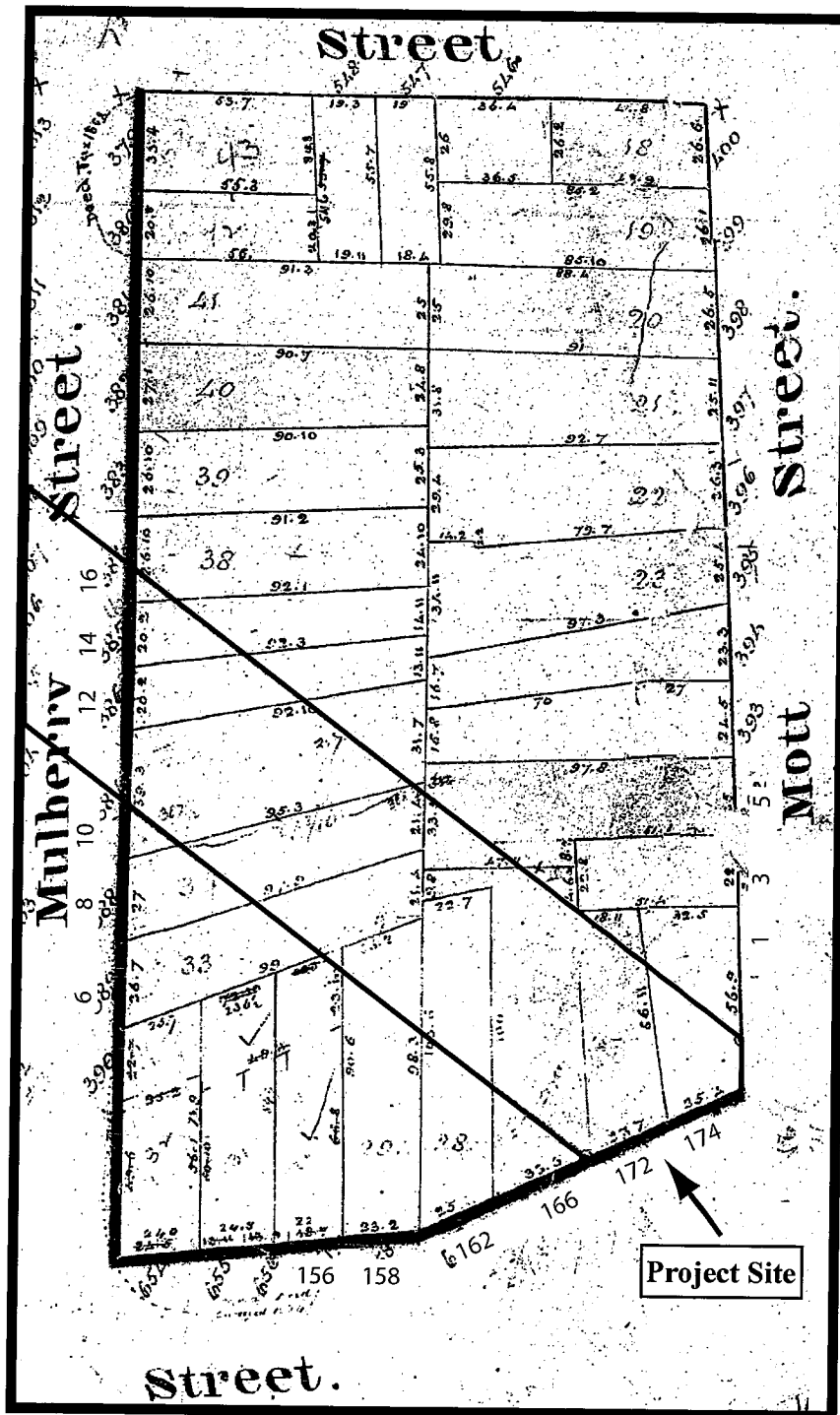
Phase IA Archaeological Documentary Study  
 Worth Street Reconstruction from Centre Street to Mott Street  
 New York, New York



Figure 3b: Central portion of project site on tax map for former Block 161 (1838-1871).  
 Former addresses are marked in red.







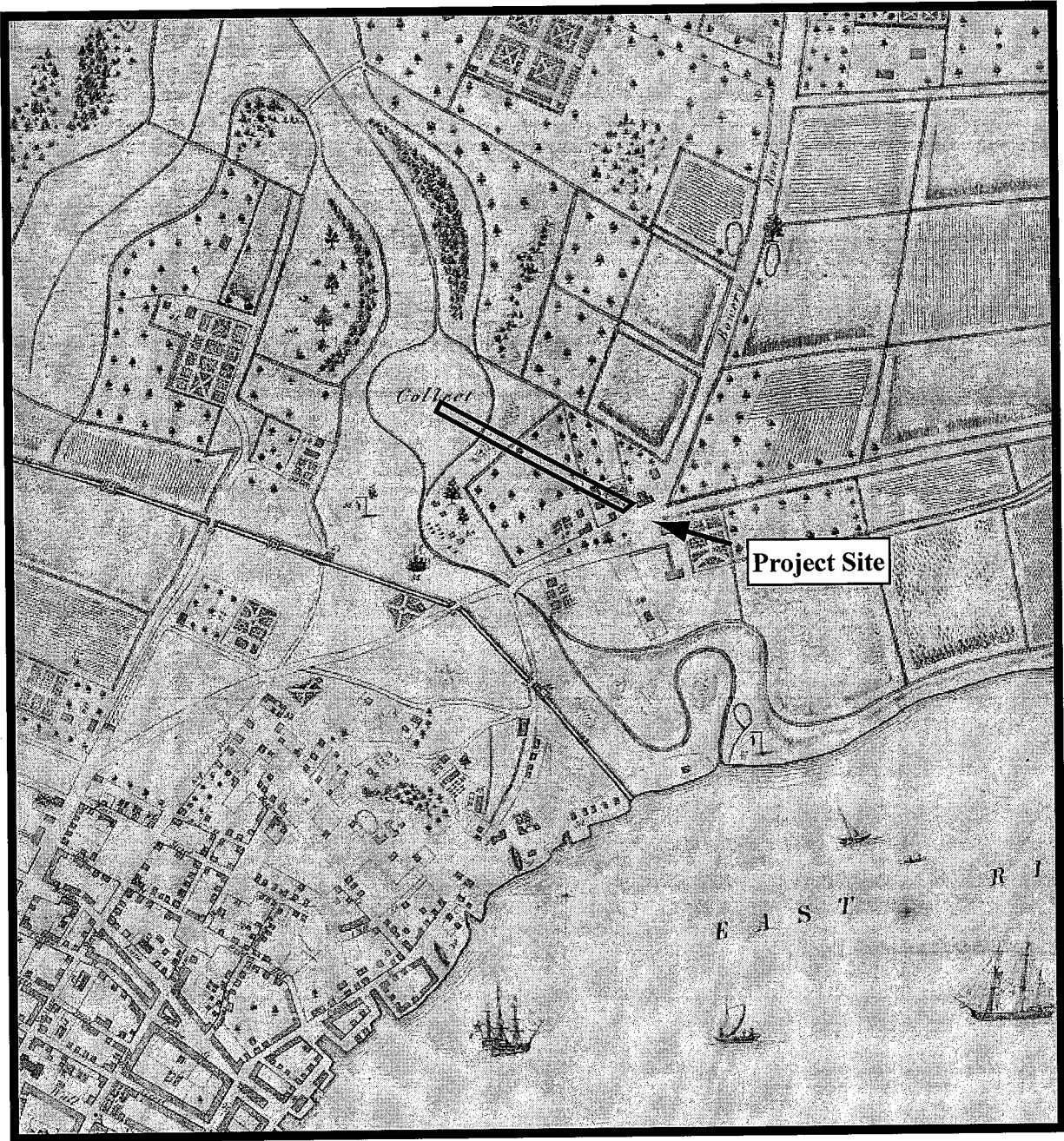
Phase IA Archaeological Documentary Study  
 Worth Street Reconstruction from Centre Street to Mott Street  
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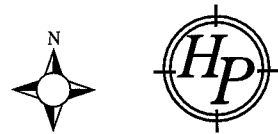
Figure 3c: Eastern portion of project site on tax map for former Block 161 (1838-1871). Former addresses are marked in red.

0 25 50 75 100 125 FEET





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**Figure 4: Project site on *A plan of the city and environs of New York: as they were in the years 1742-1743 and 1744* (Grim 1813).**

0 400 800 1200 1600 2000 FEET



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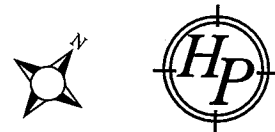
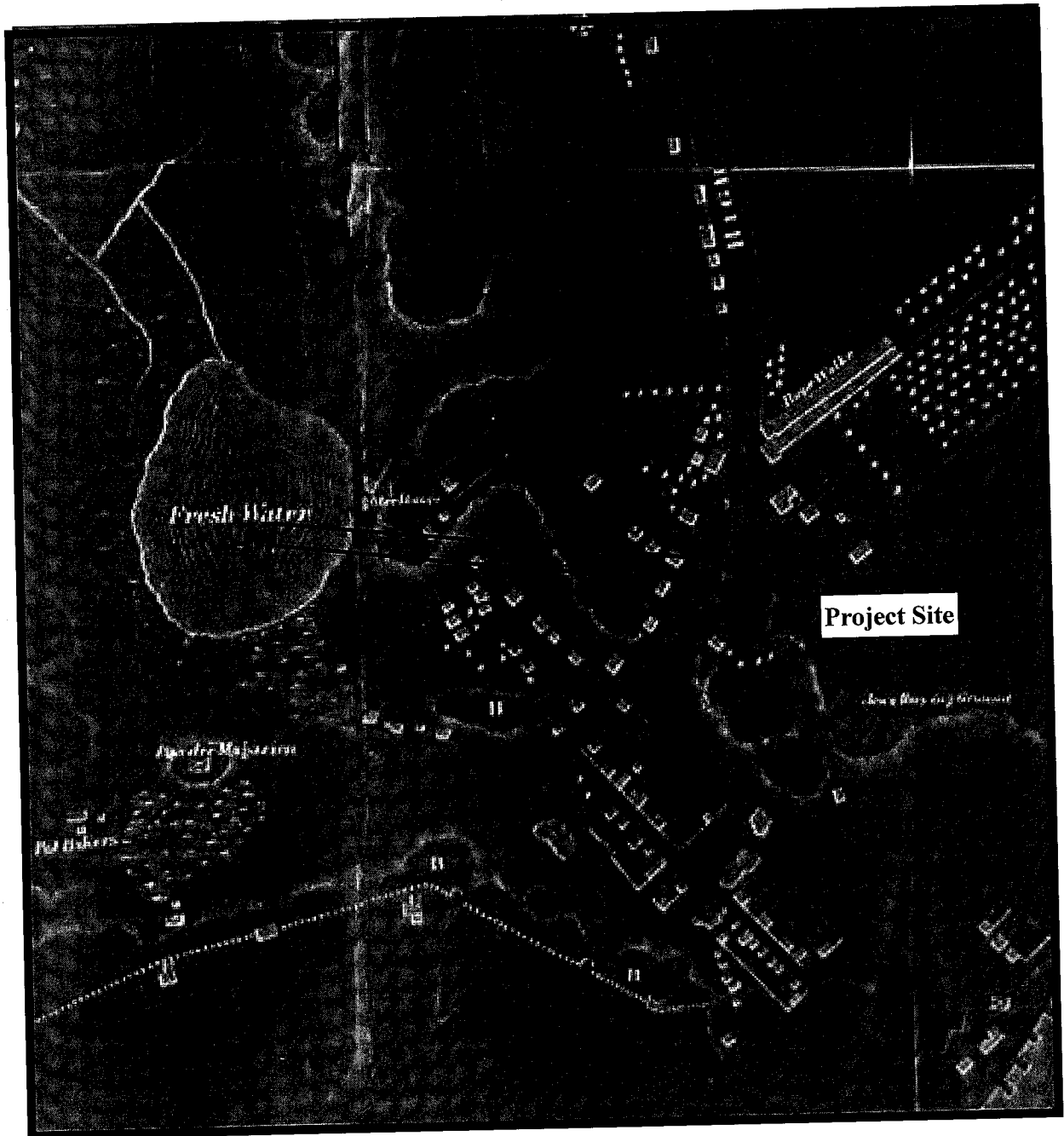


Figure 5: Project site on *A plan of the city of New York from an actual survey* (Maerschalc 1755).





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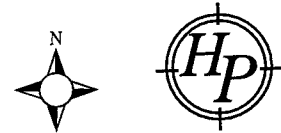
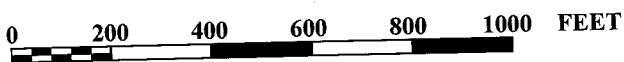
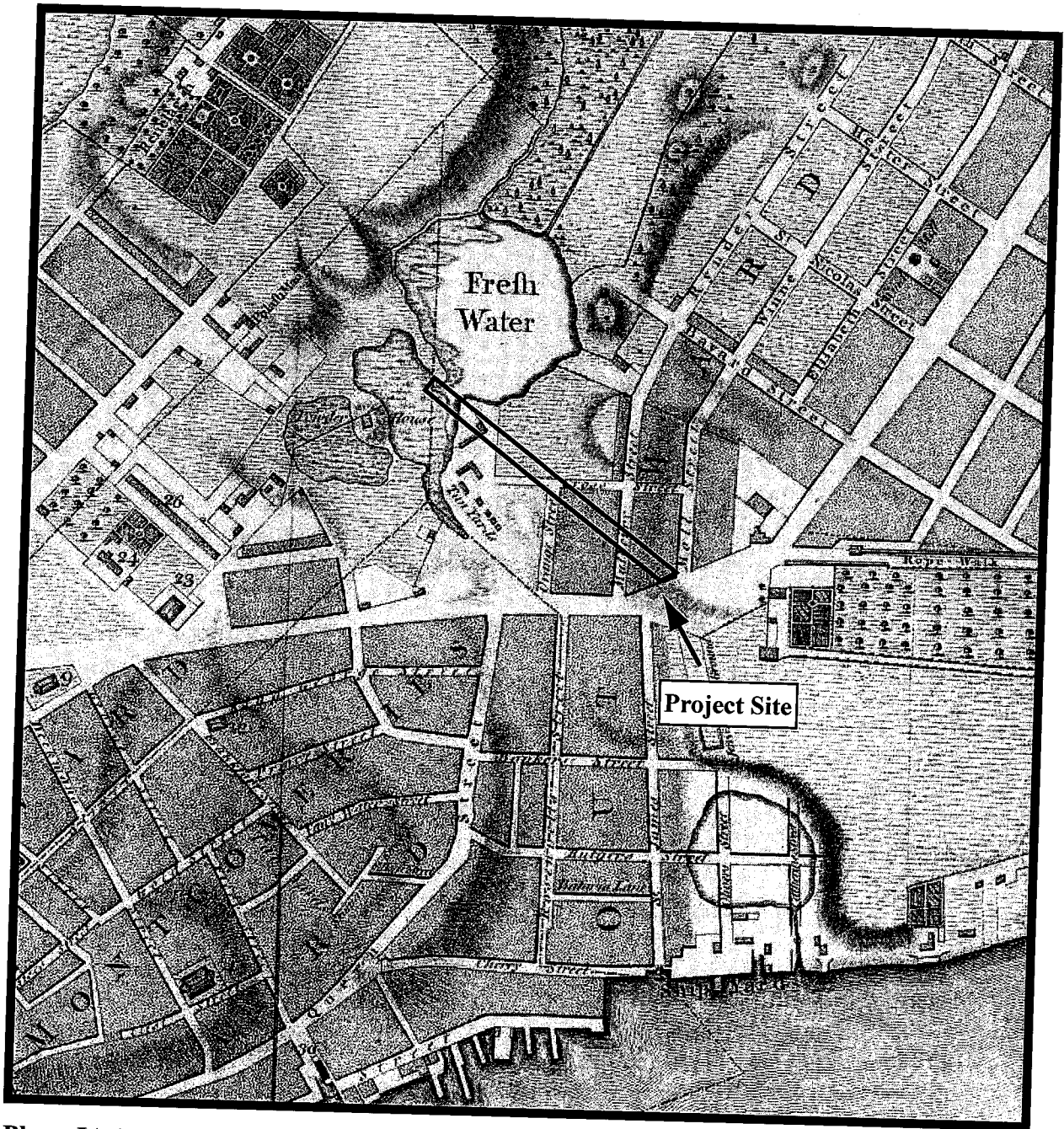


Figure 6: Project site on *A Plan of the North East Environs of the City of New-York* (Holland 1757).



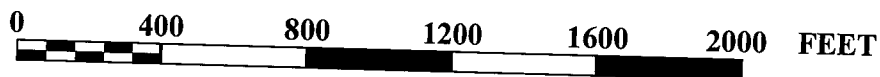




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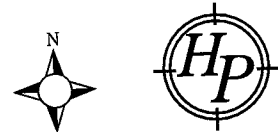


**Figure 7: Project site on *The Plan of the City of New York in North America* (Ratzer 1766-67).**

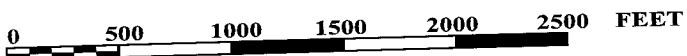


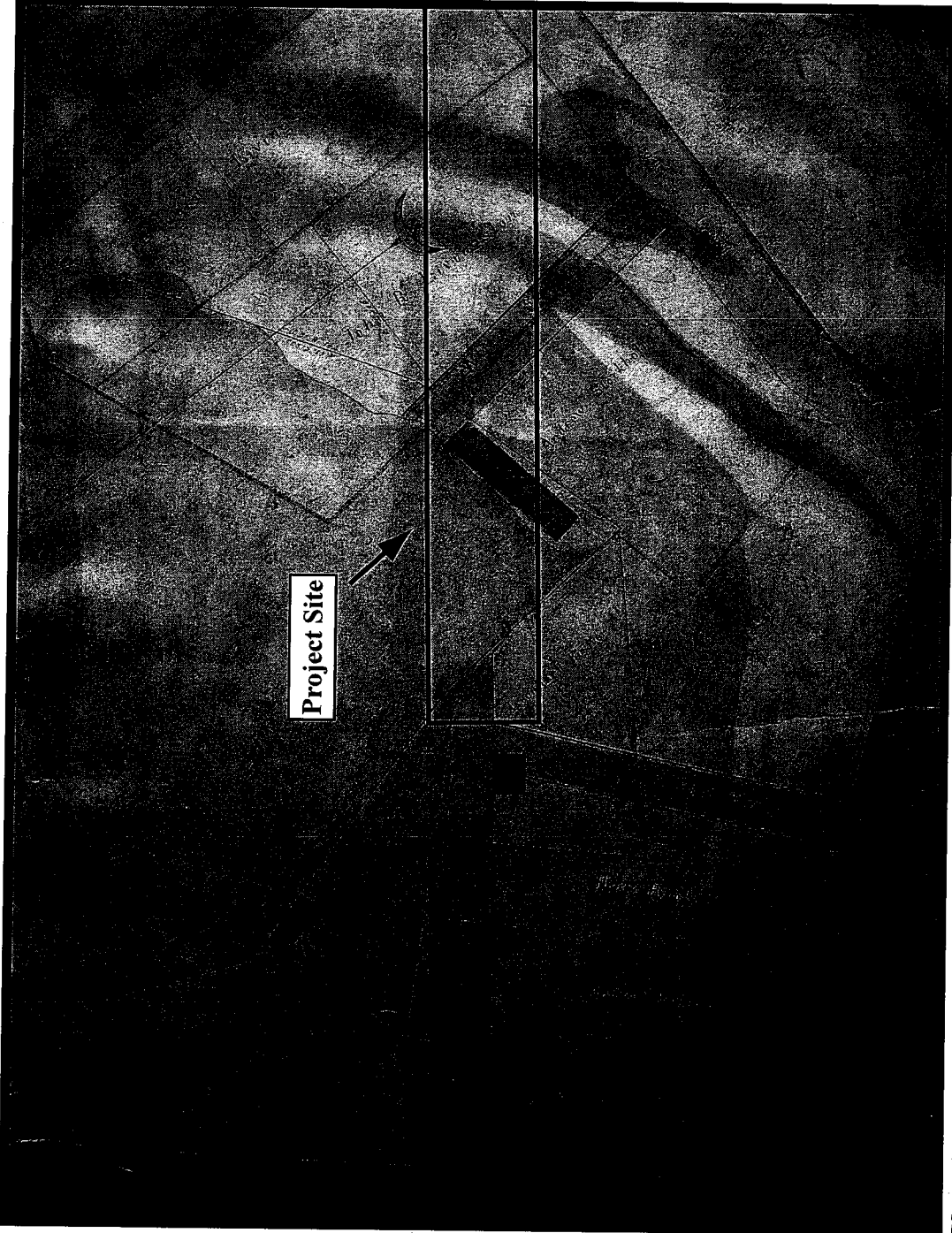


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Worth Street Reconstruction from Centre Street to Mott Street  
New York, New York**



**Figure 8: Project site on *The British Headquarters Map* (1782?).**





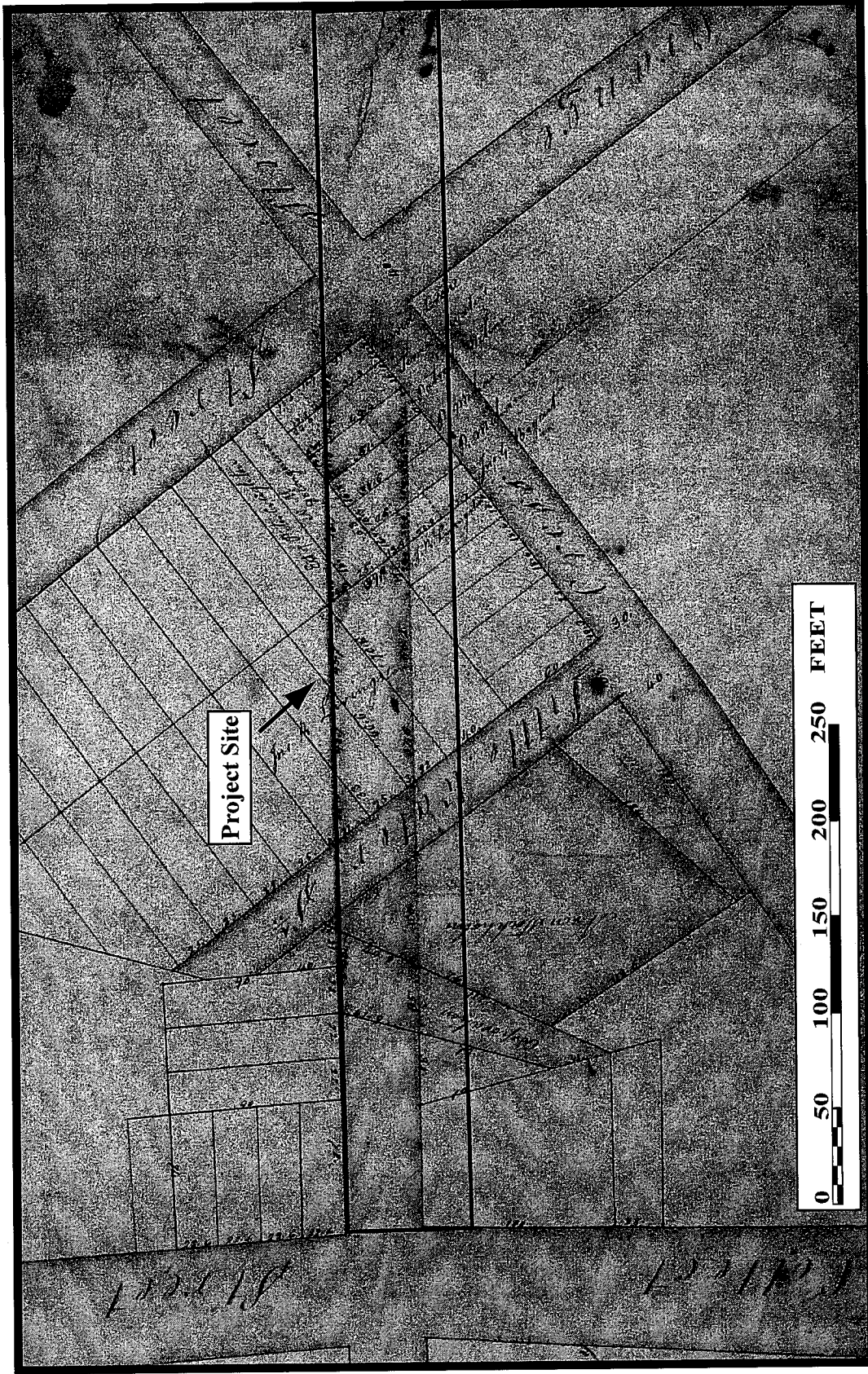
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Worth Street Reconstruction from Centre Street to Mott Street  
New York, New York



Figure 9: Western portion of project site on *Fresh Water Pond* in the *City of New York* (Loss 1801).





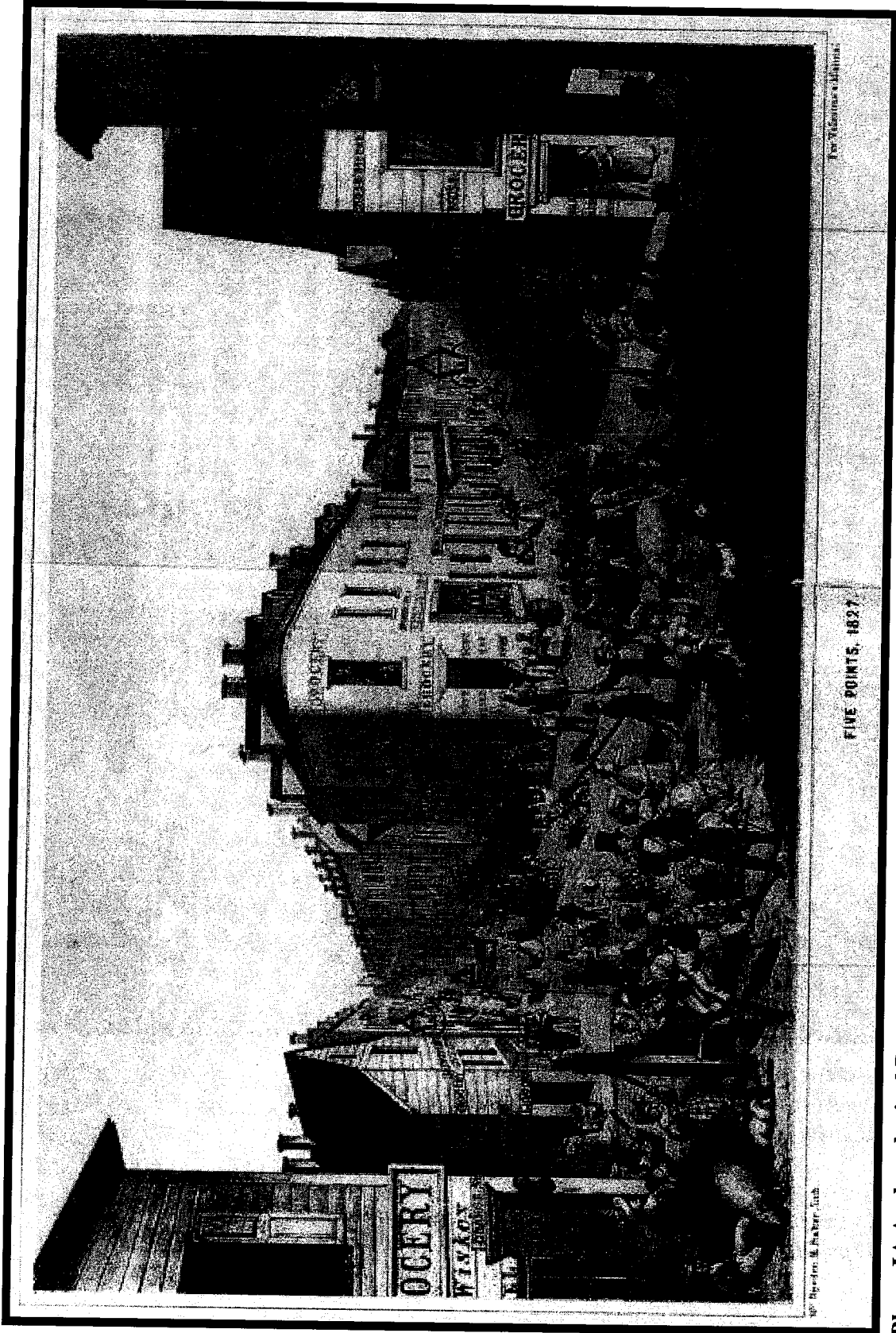


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 New York, New York



Figure 10: Western portion of project site on *A Map of the Property Required for the Purpose of Opening Anthony Street between Collect and Orange Streets* (Ludlam 1817).

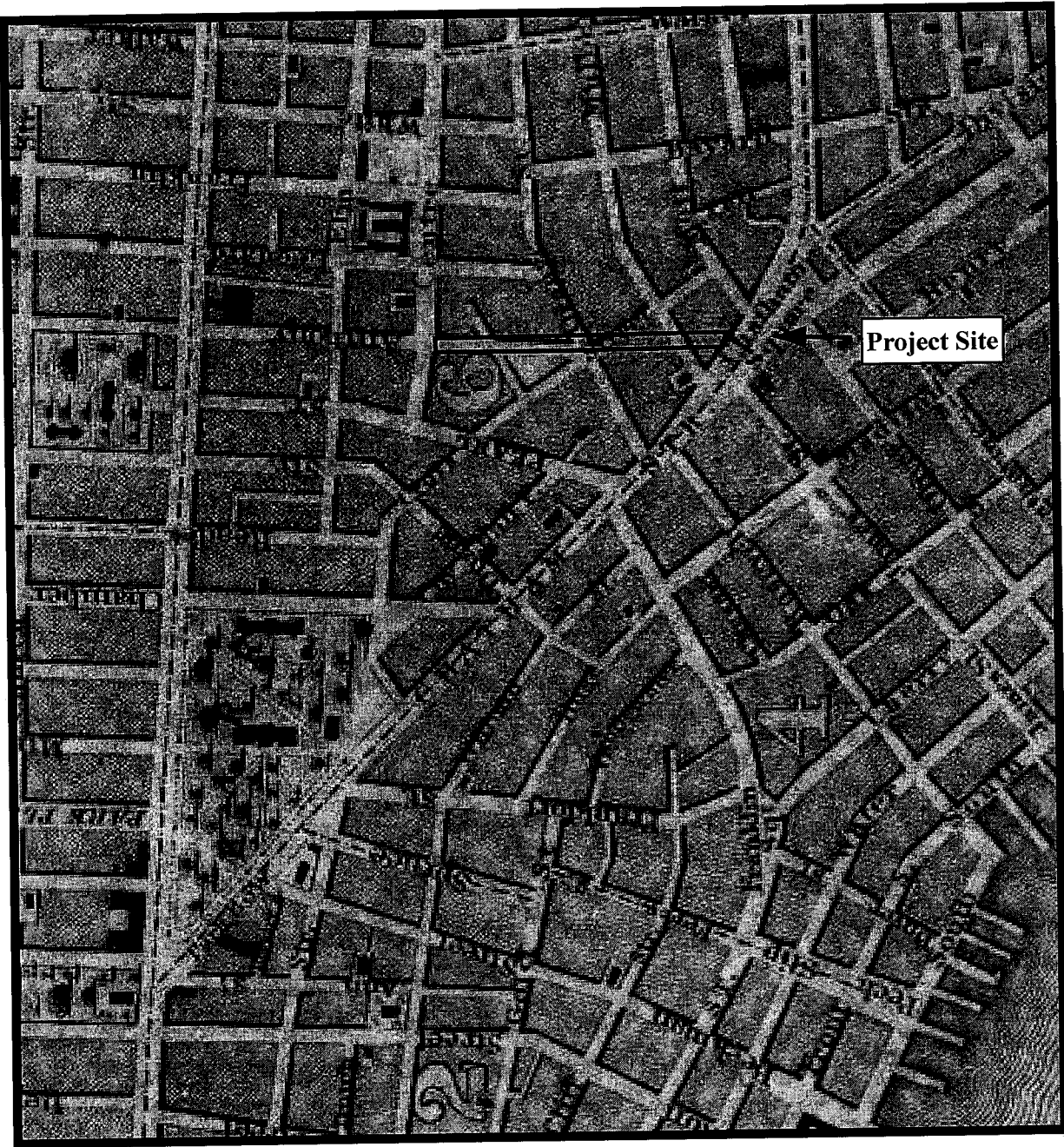




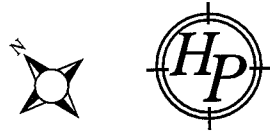
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Figure 11: Five Points, 1827 (City of New York 1855). Project site is along Anthony Street in left foreground and background.

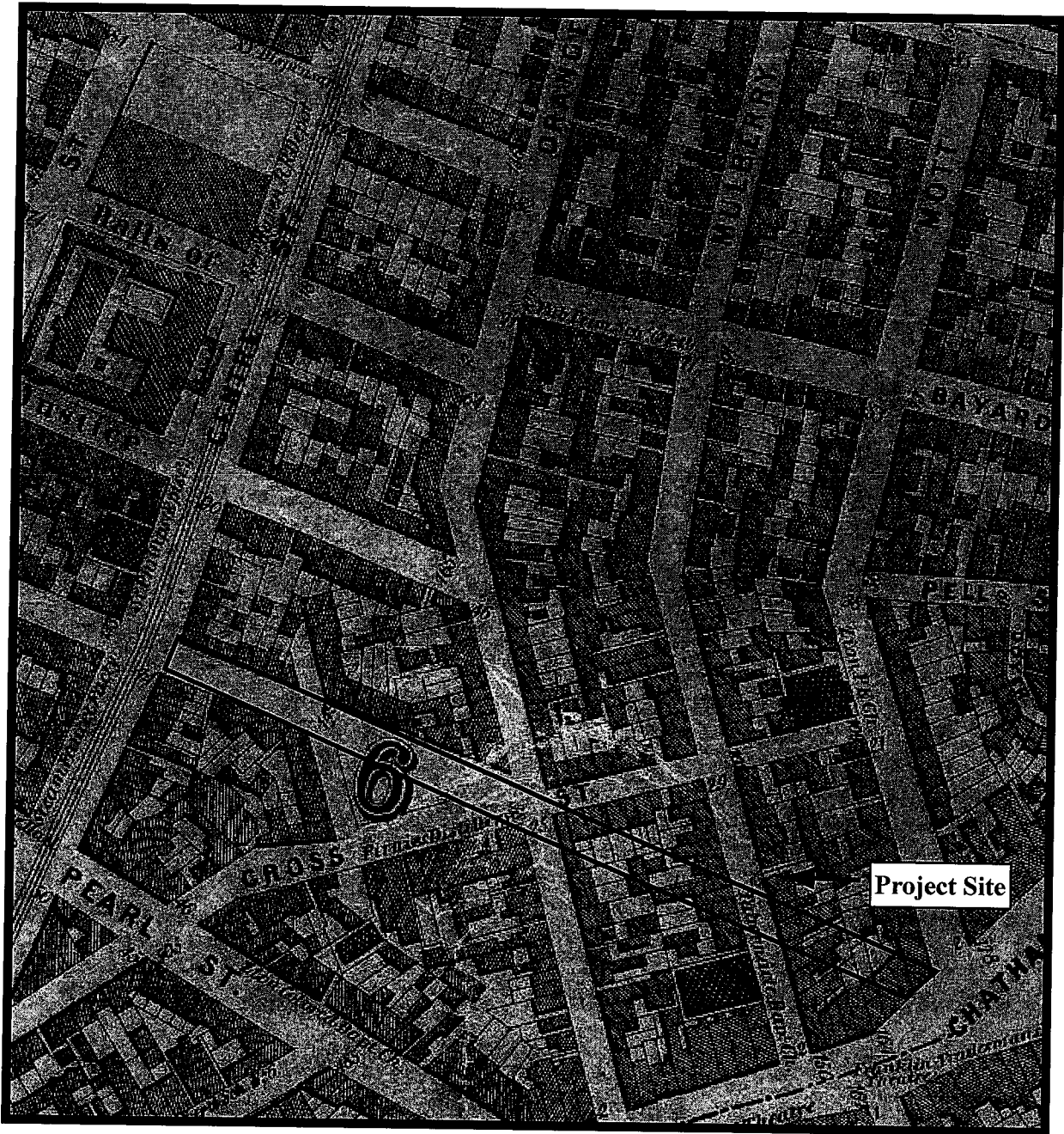


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**Figure 12: Project site on *Topographical Map of the City and Country of New York, and the Adjacent Country* (Colton 1836).**





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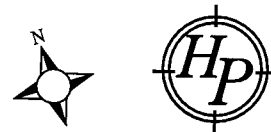
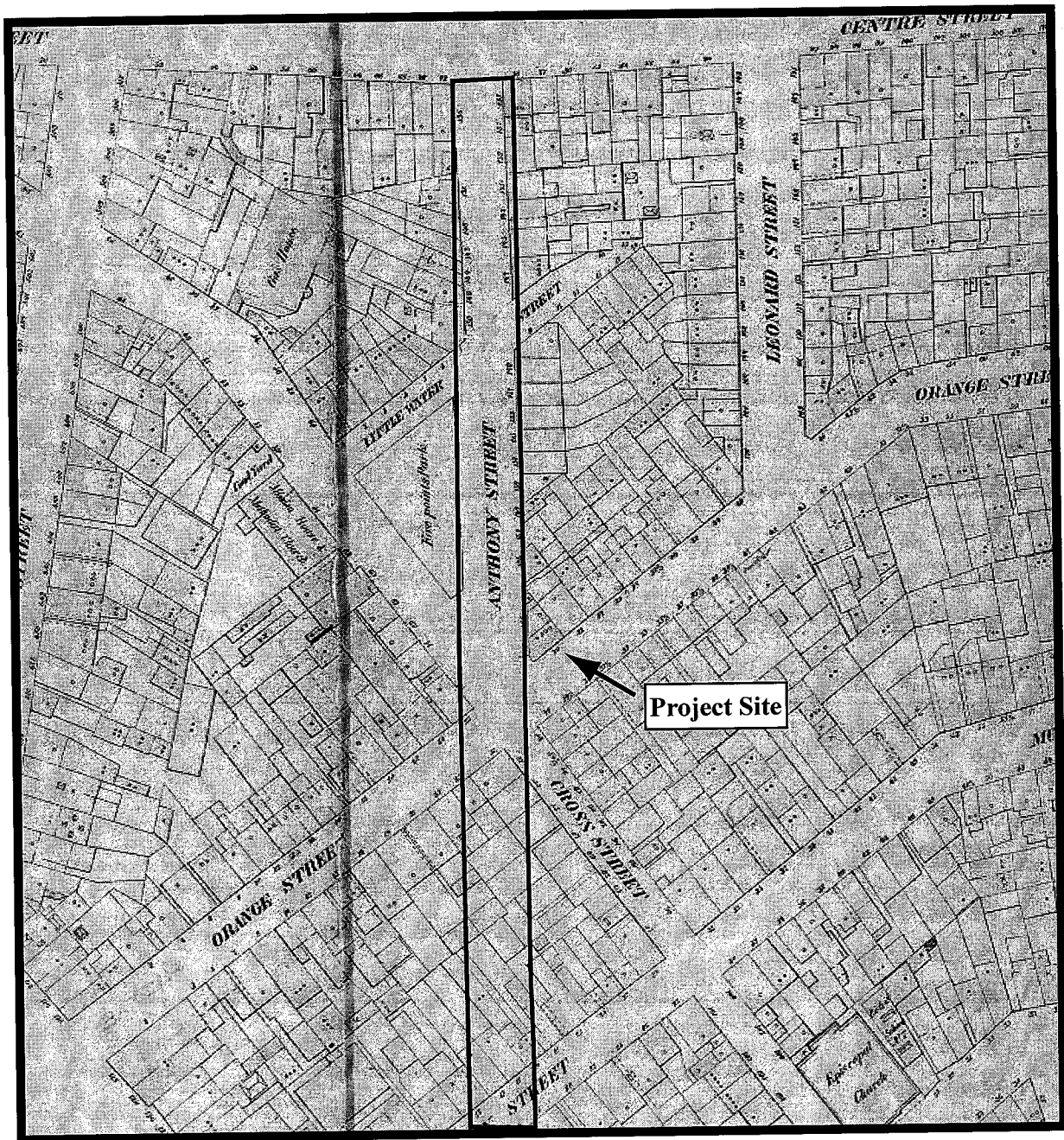


Figure 13: Project site on *Map of the City of New York Extending Northward to 50th Street* (Dripps 1852).

0 100 200 300 400 500 FEET





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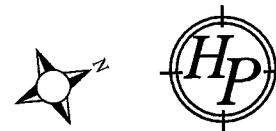
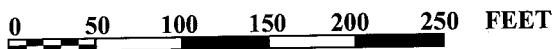
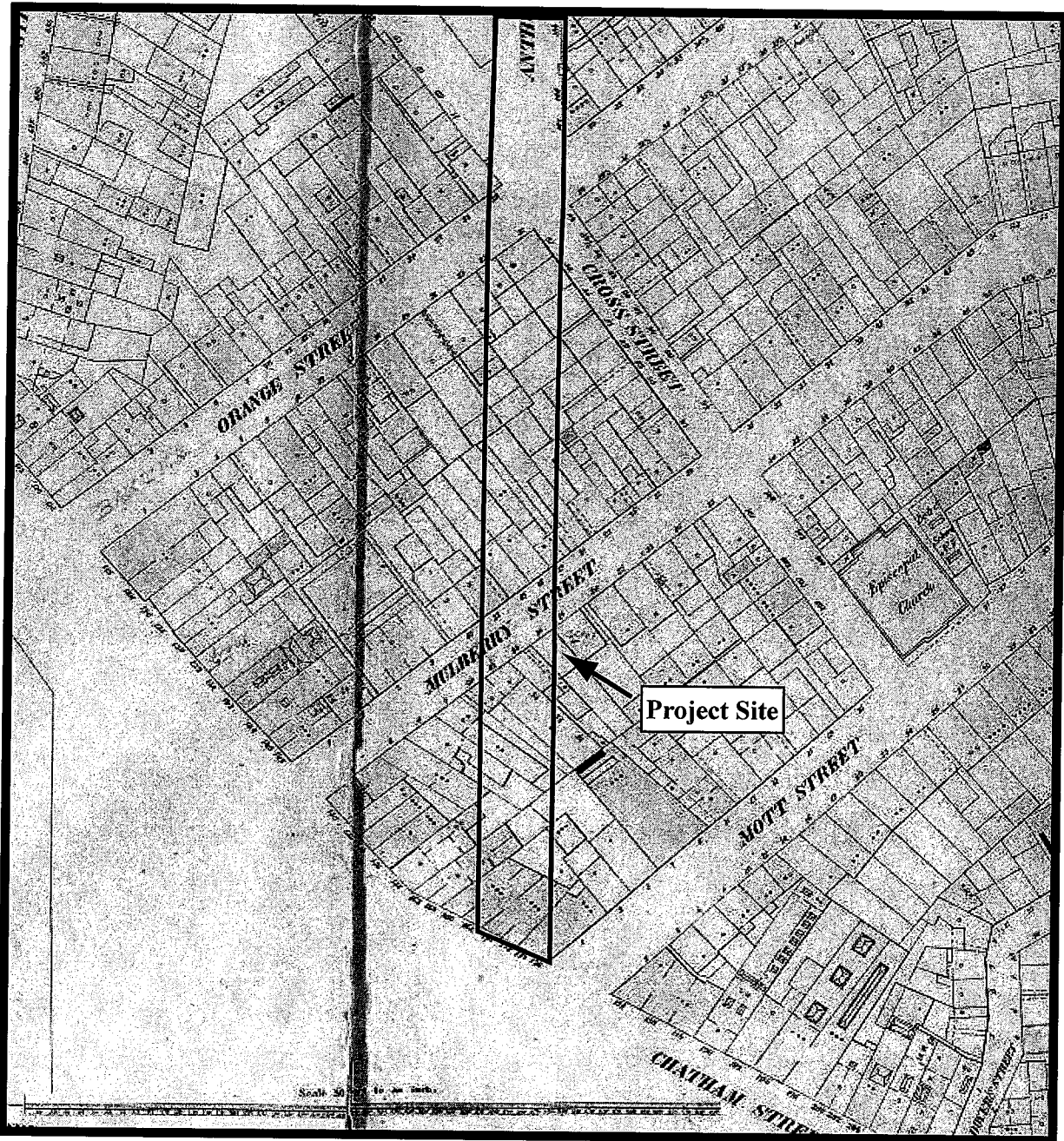
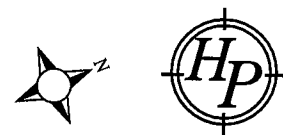


Figure 14a: Western portion of project site on *Maps of the City of New York* (Perris 1853).



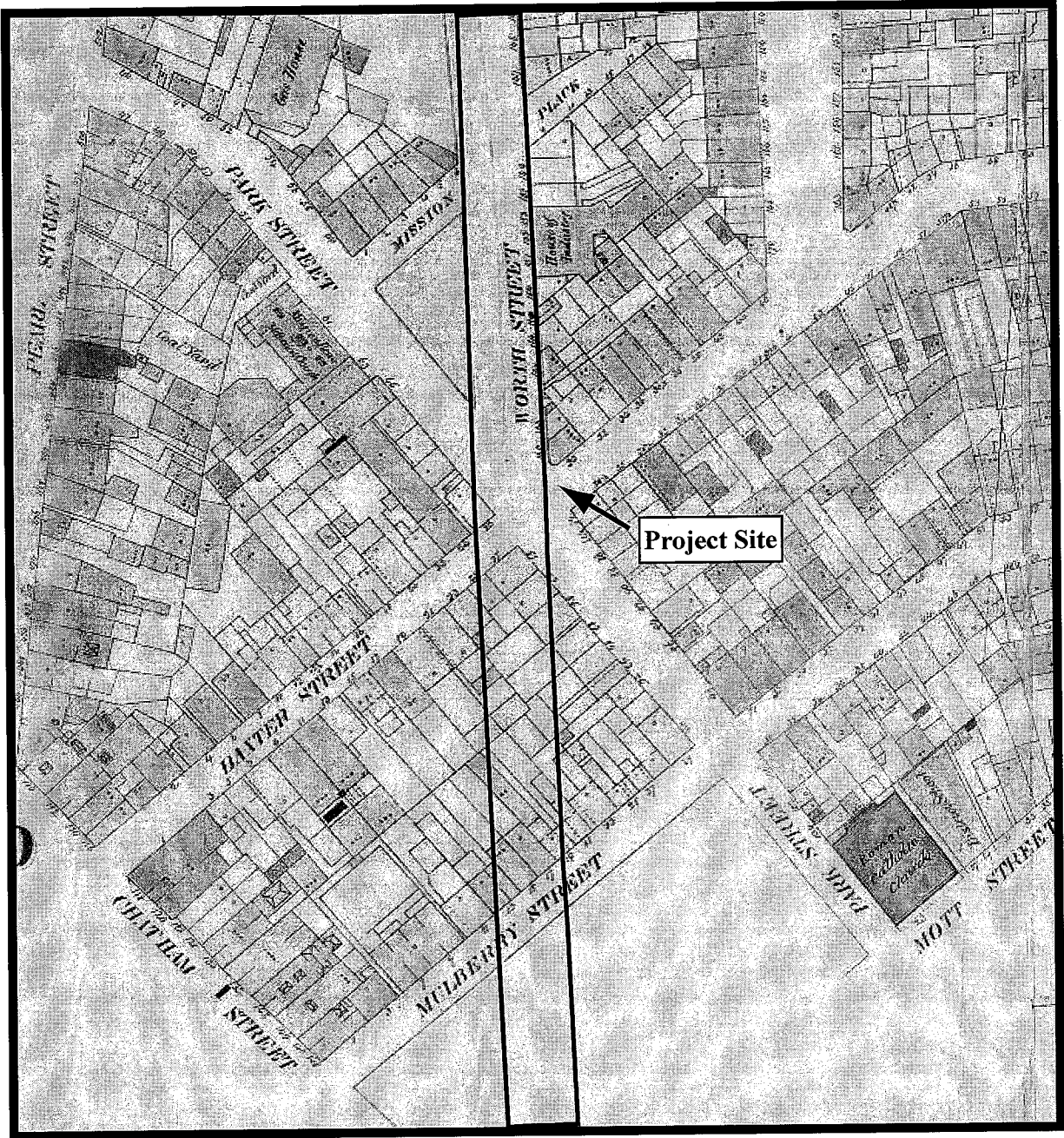


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 Worth Street Reconstruction from Centre Street to Mott Street  
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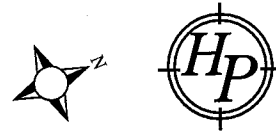


**Figure 14b: Eastern portion of project site on *Maps of the City of New York* (Perris 1853).**

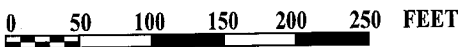
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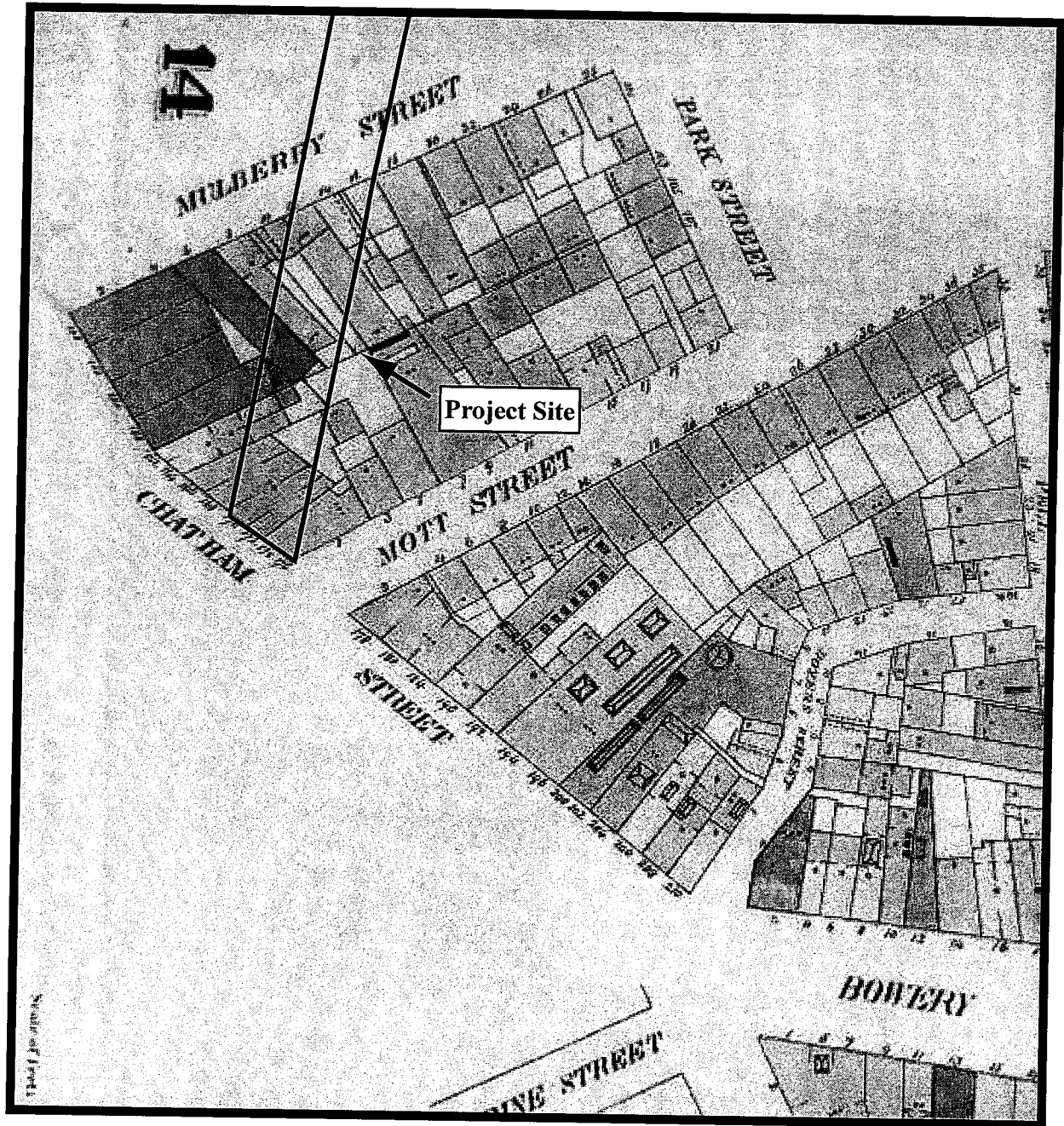
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**Figure 15a: Western portion of project site on *Maps of the City of New York* (Perris 1857).**







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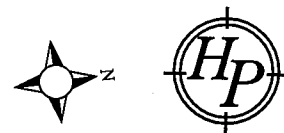
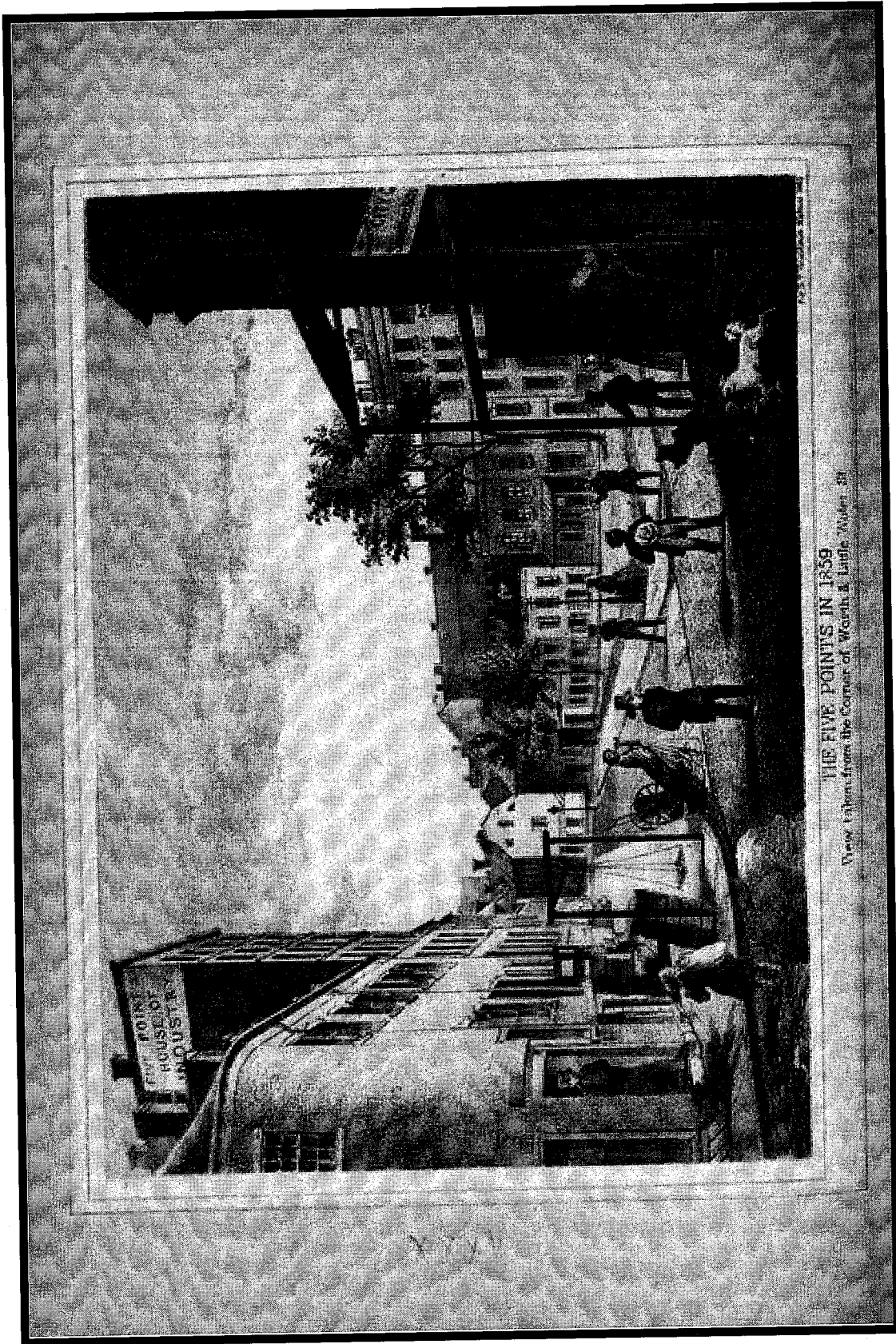


Figure 15b: Eastern portion of project site on *Maps of the City of New York* (Perris 1857).



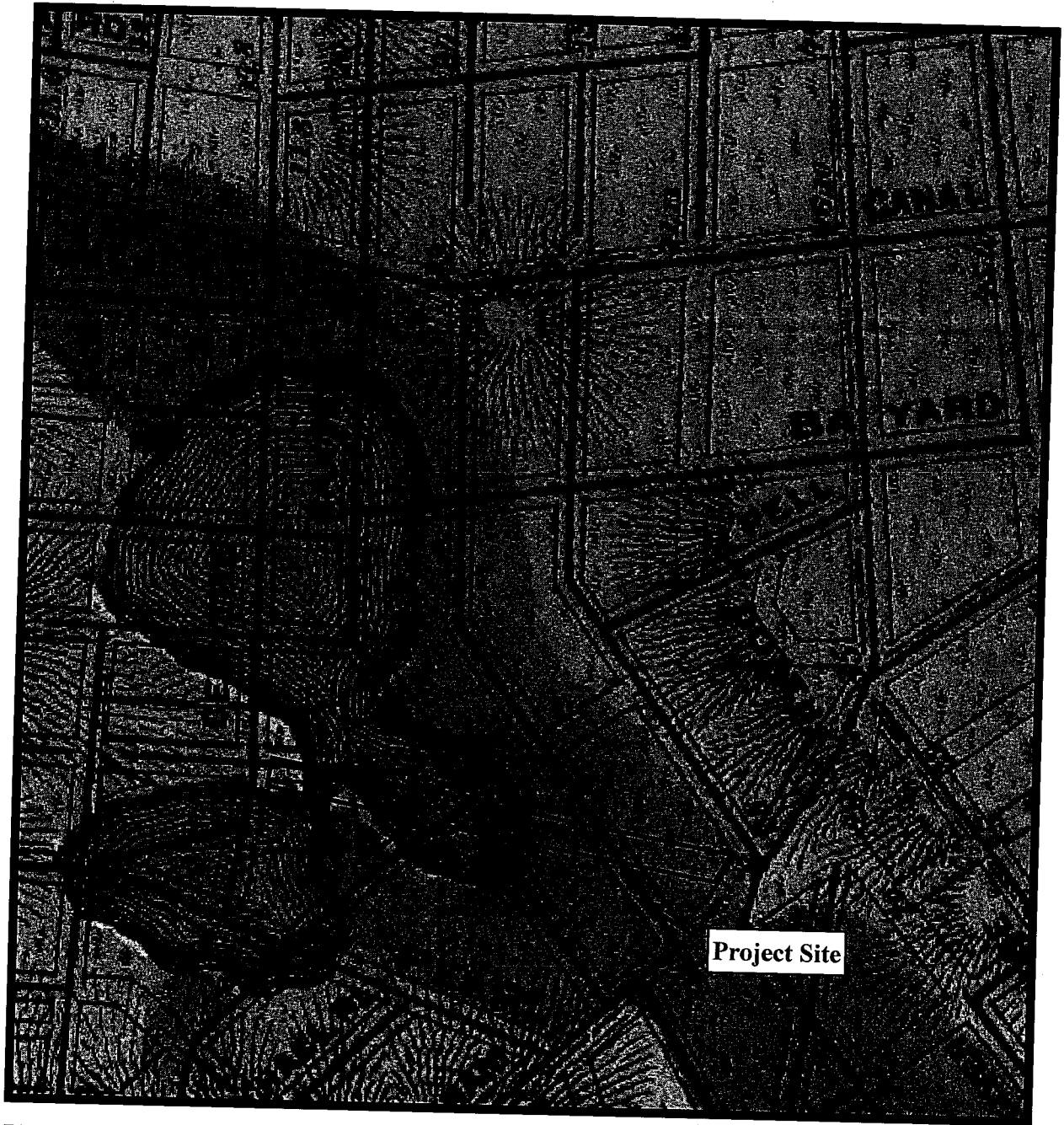


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Figure 16: *The Five Points in 1859, View taken from the Corner of Worth & Little Water St. (Emmett Collection).*





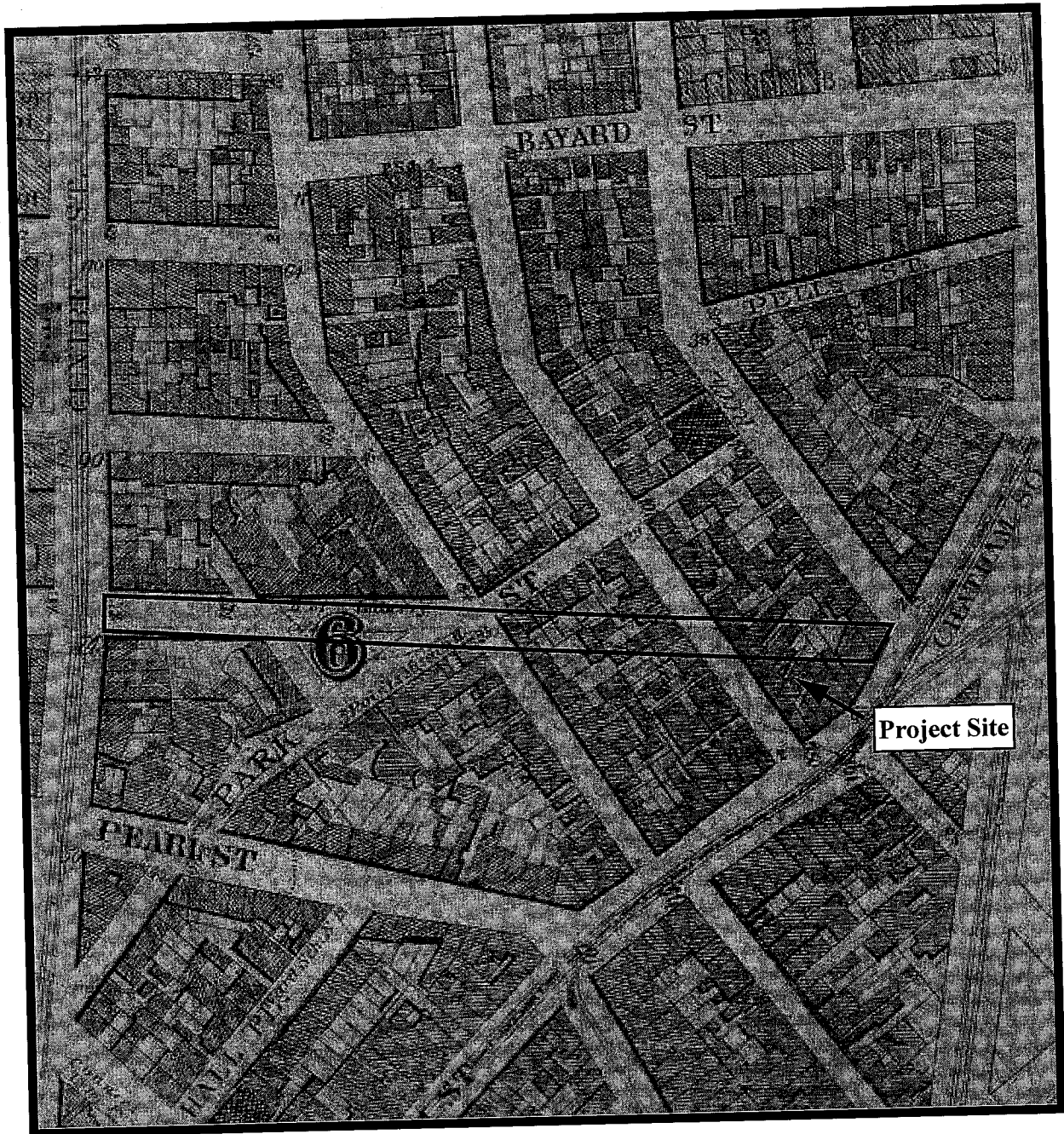


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Figure 17: Project site on *Sanitary and Topographic Atlas of the City of New York* (Viele 1865).

0 200 400 600 800 1000 FEET



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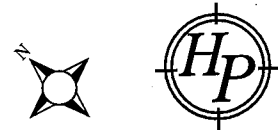
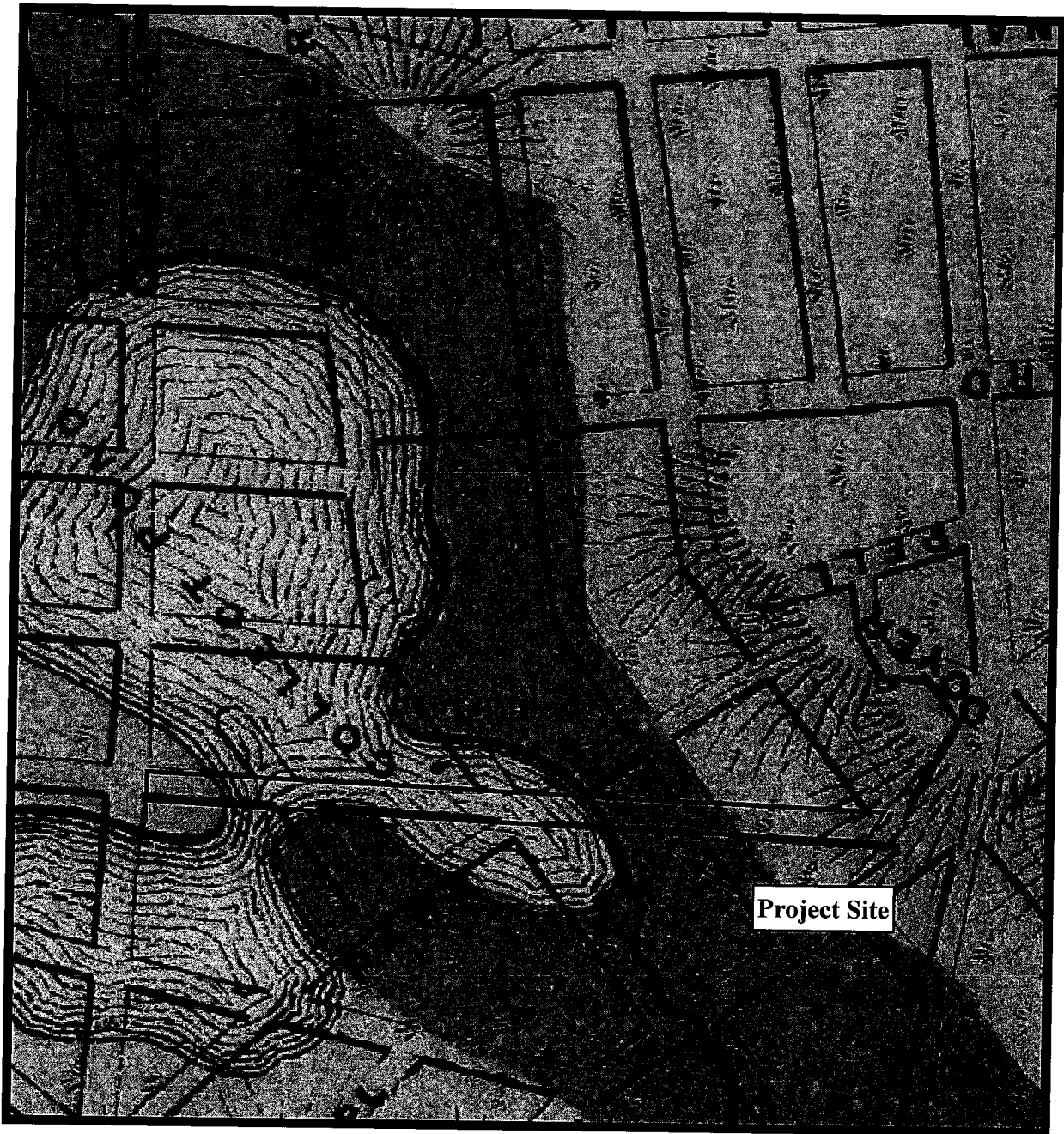


Figure 18: Project site on *Map of New York and Vicinity*. (Harrison 1867).

0 100 200 300 400 500 FEET



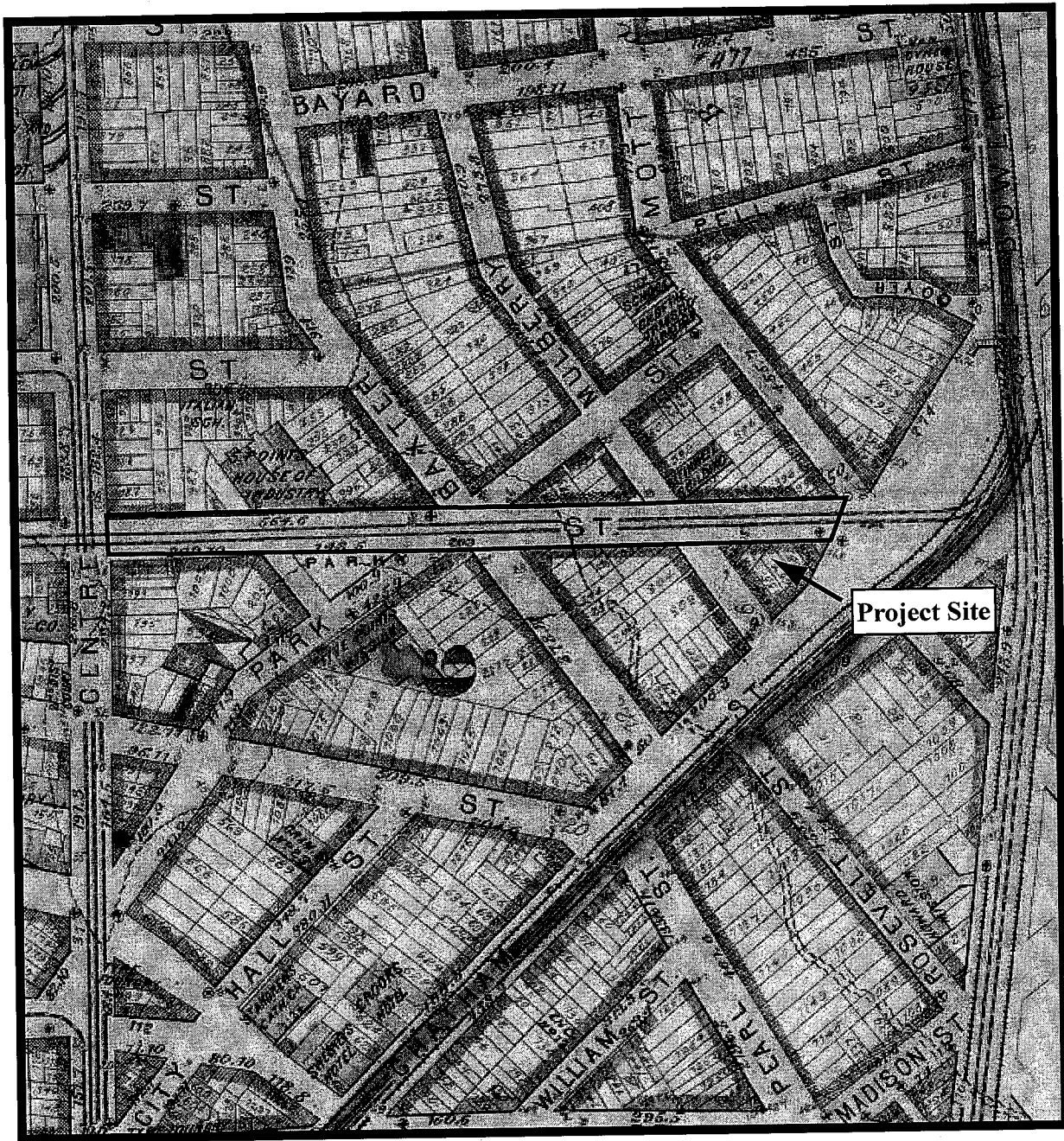
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New York, New York



Figure 19: Project site on *Topographical Atlas of the City of New York including the Annexed Territory* (Viele 1874).

0 100 200 300 400 500 FEET





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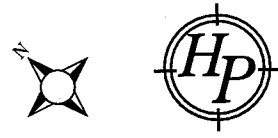
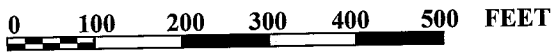
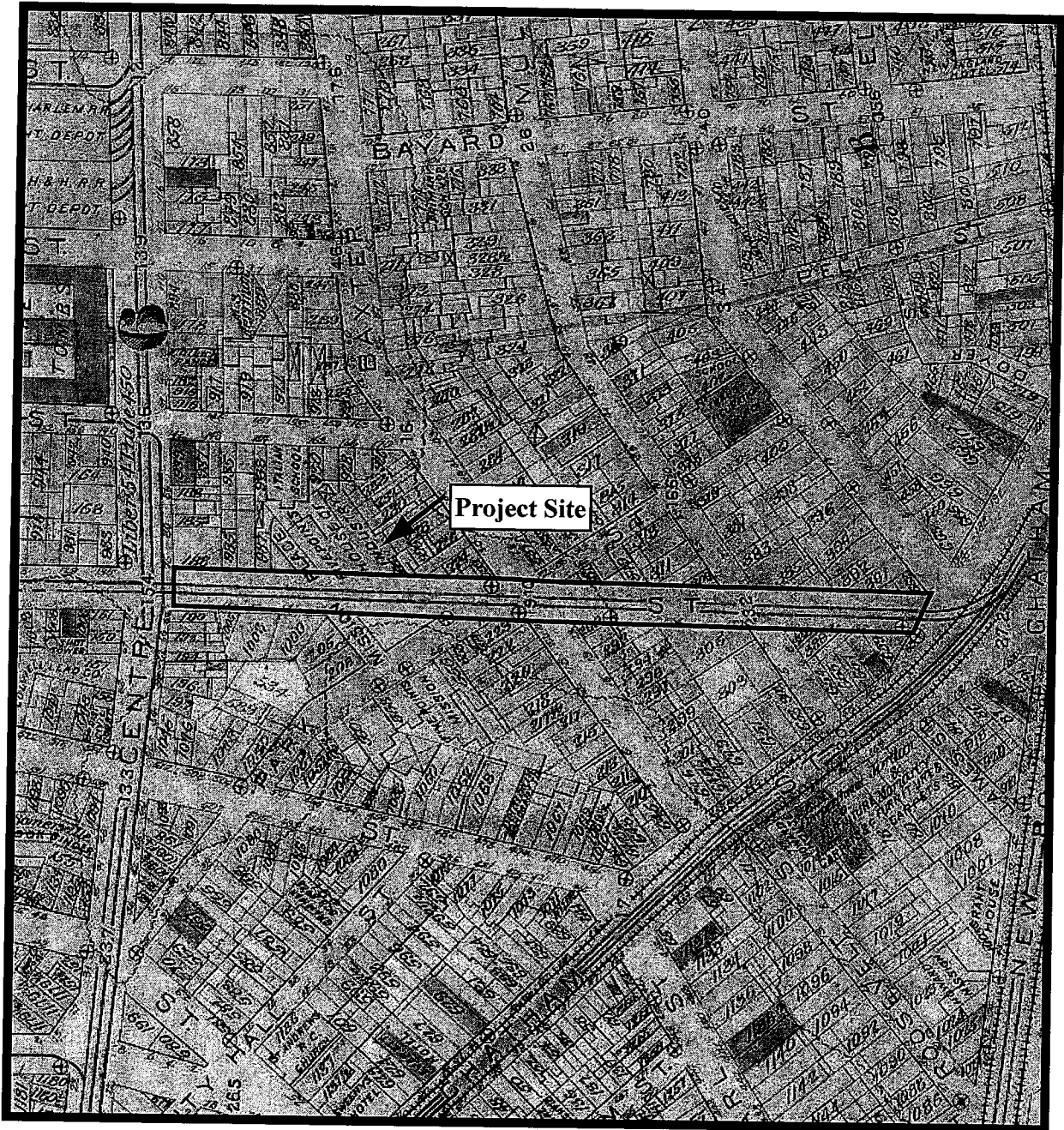
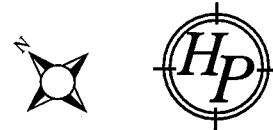


Figure 20: Project site on *Atlas of the Entire City of New York* (Bromley 1879).





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**Figure 21: Project site on *Atlas of the City of New York* (Robinson 1885).**

0 100 200 300 400 500 FEET

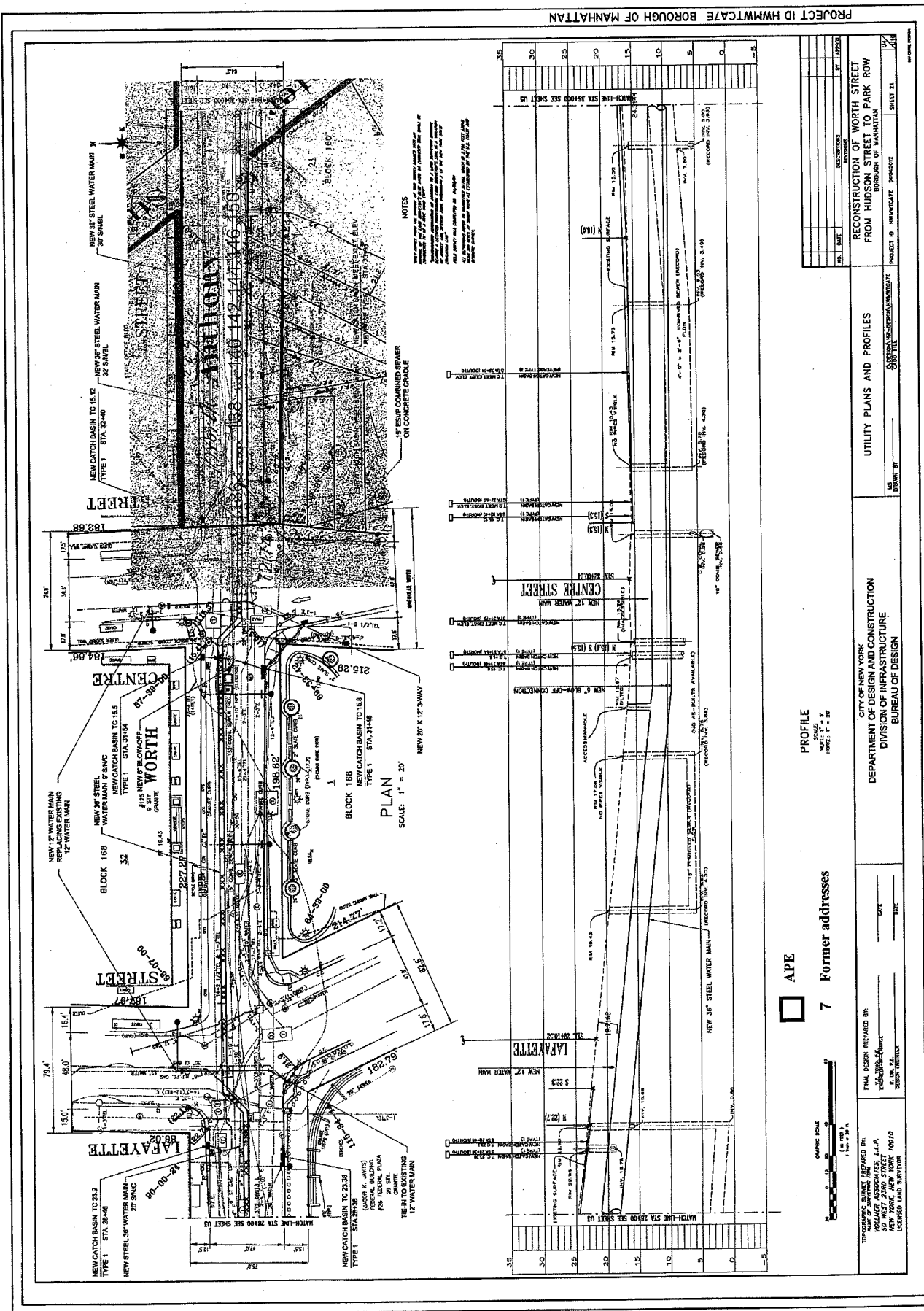


Figure 22a: Western portion of project site, overlay of historic lots on Utility Plans and Profiles survey map (DDC 2012).

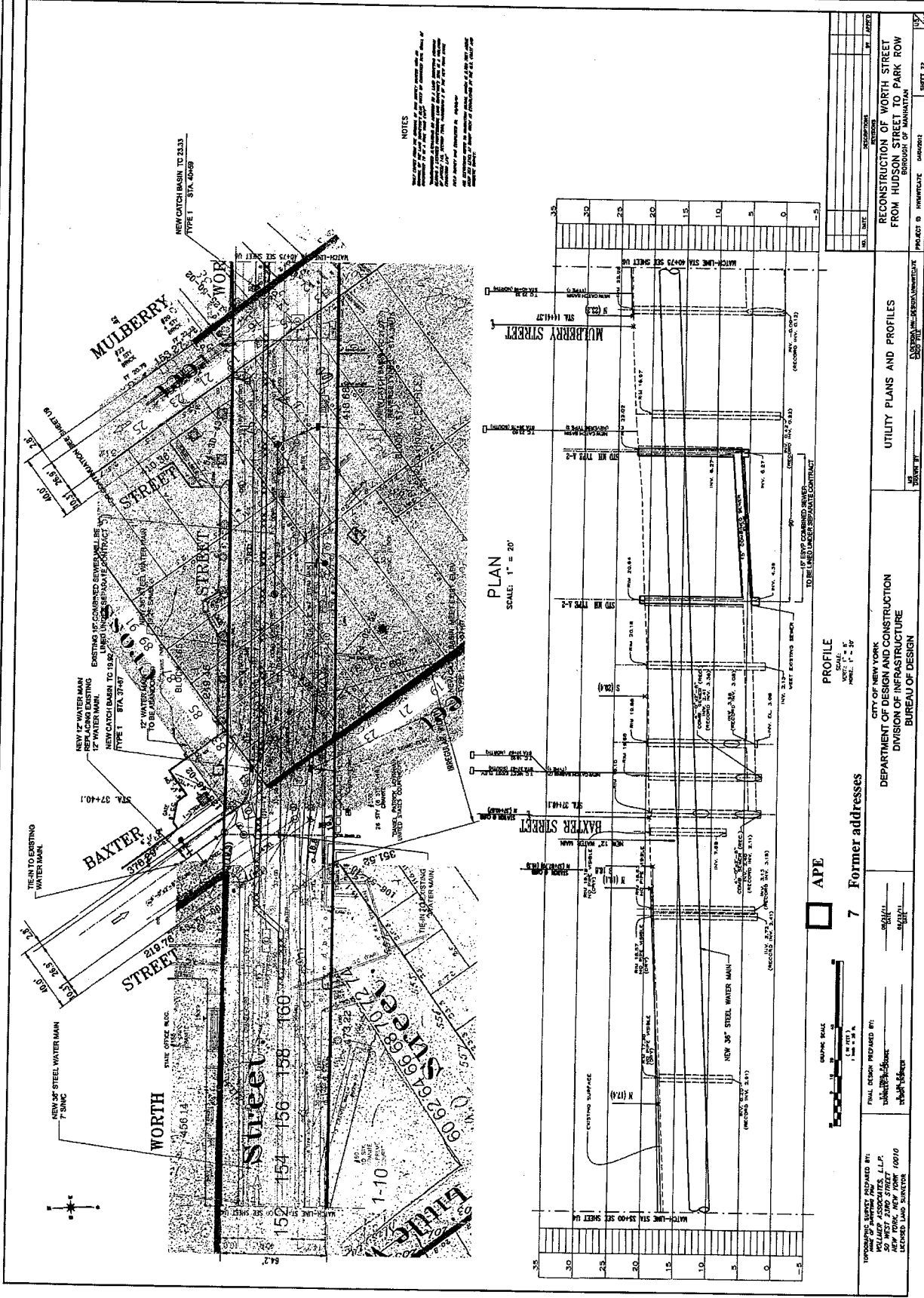


Figure 22b: Central portion of project site, overlay of historic lots on Utility Plans and Profiles survey map (DDC 2012).

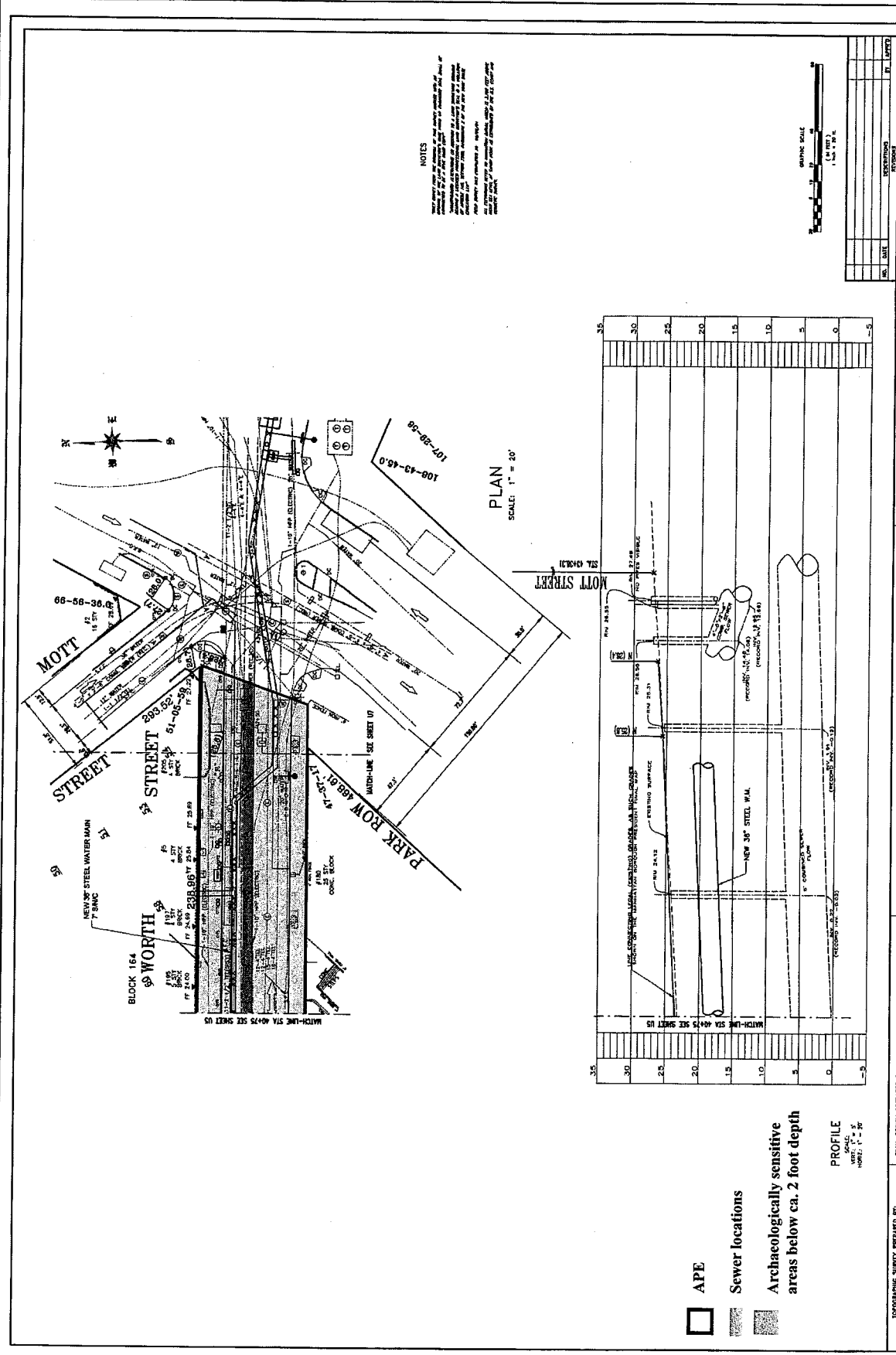






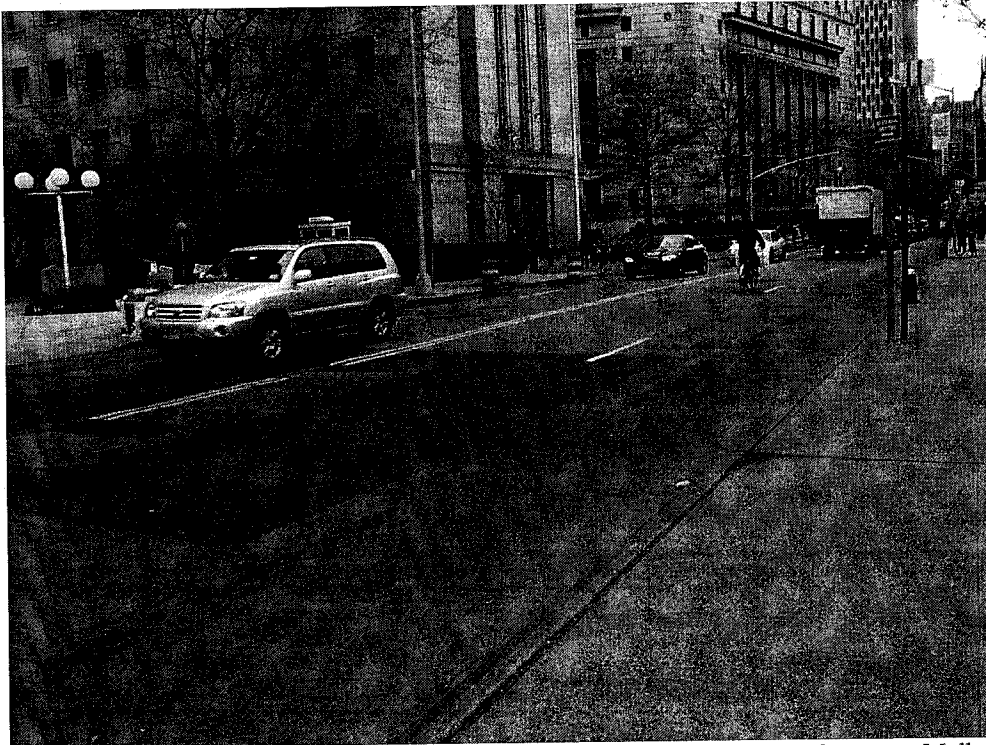




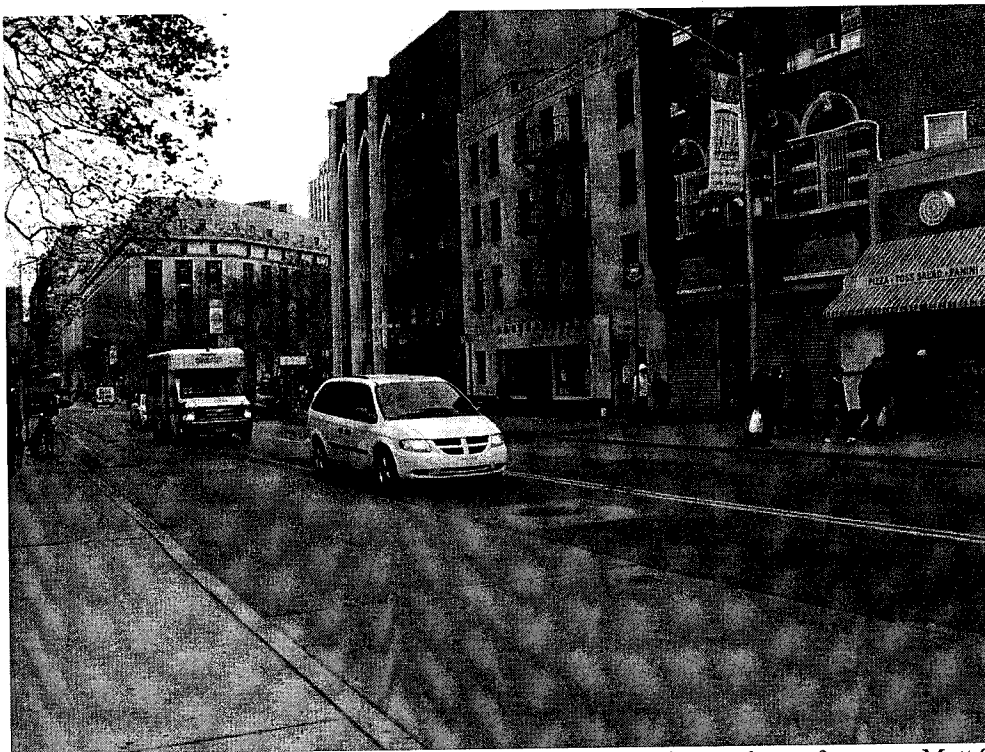


TORONTO SURVEY PREPARED BY: NAME OF SURVEYOR: J. J. L. L. L. NO. WEST 23RD STREET, NEW YORK, N.Y. 10011 LICENSED LAND SURVEYOR		FINAL DESIGN PREPARED BY: NAME OF SURVEYOR: J. J. L. L. L. NO. WEST 23RD STREET, NEW YORK, N.Y. 10011 LICENSED LAND SURVEYOR	
CITY OF NEW YORK DEPARTMENT OF DESIGN AND CONSTRUCTION DIVISION OF INFRASTRUCTURE BUREAU OF DESIGN		UTILITY PLANS AND PROFILES	
PROJECT NO. 100-101-101-101 DATE: 04/24/2012		RECONSTRUCTION OF WORTH STREET FROM HUDSON STREET TO PARK ROW BOROUGH OF MANHATTAN	
SHEET NO. 100-101-101-101		SHEET 23	

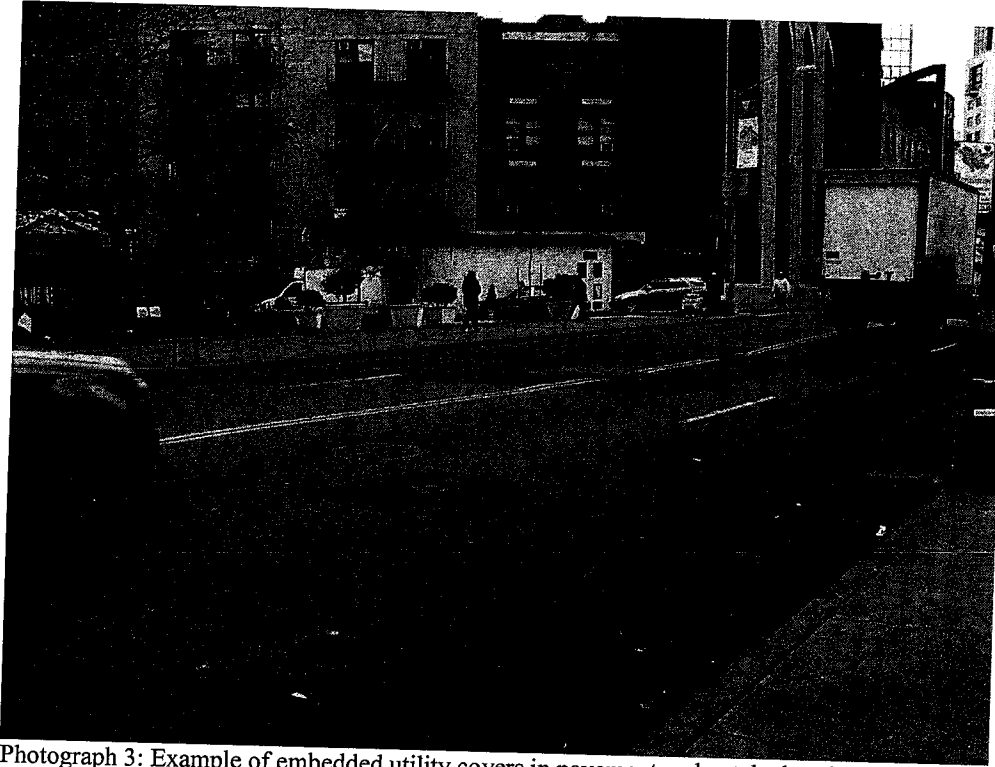
Figure 23c: Eastern portion of project site, location of Archaeologically Sensitive Areas on Utility Plans and Profiles survey map (DDC 2012).



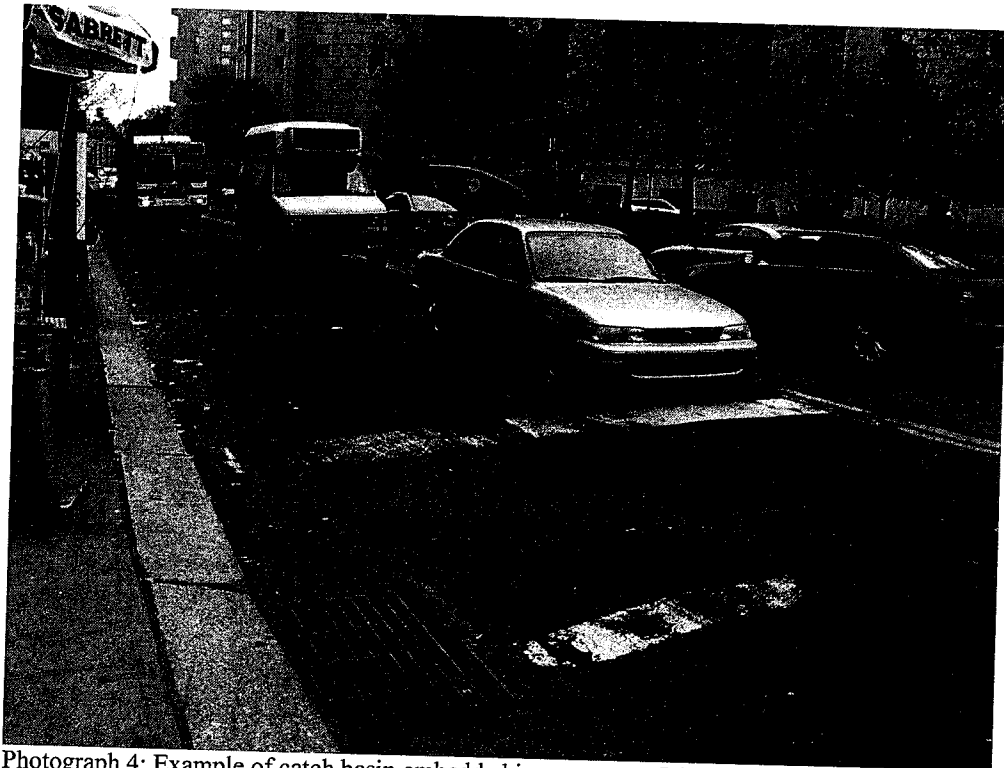
Photograph 1: Worth Street APE current conditions. View looking southwest from near Mulberry Street intersection.



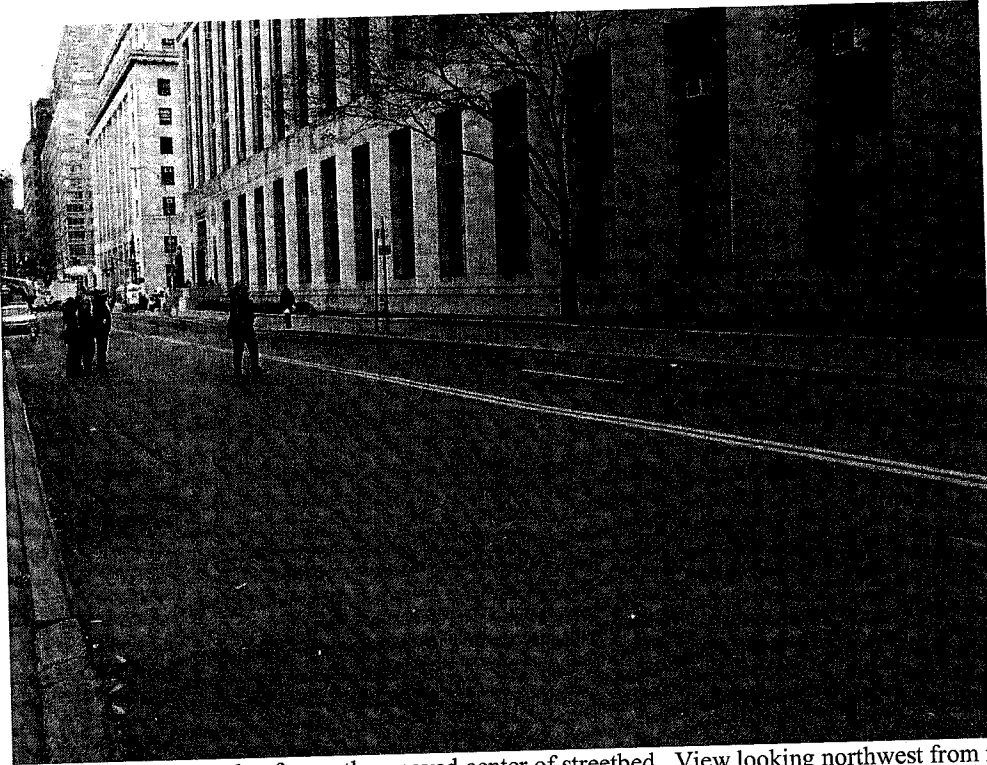
Photograph 2: Worth Street APE current conditions. View looking northwest from near Mott Street intersection.



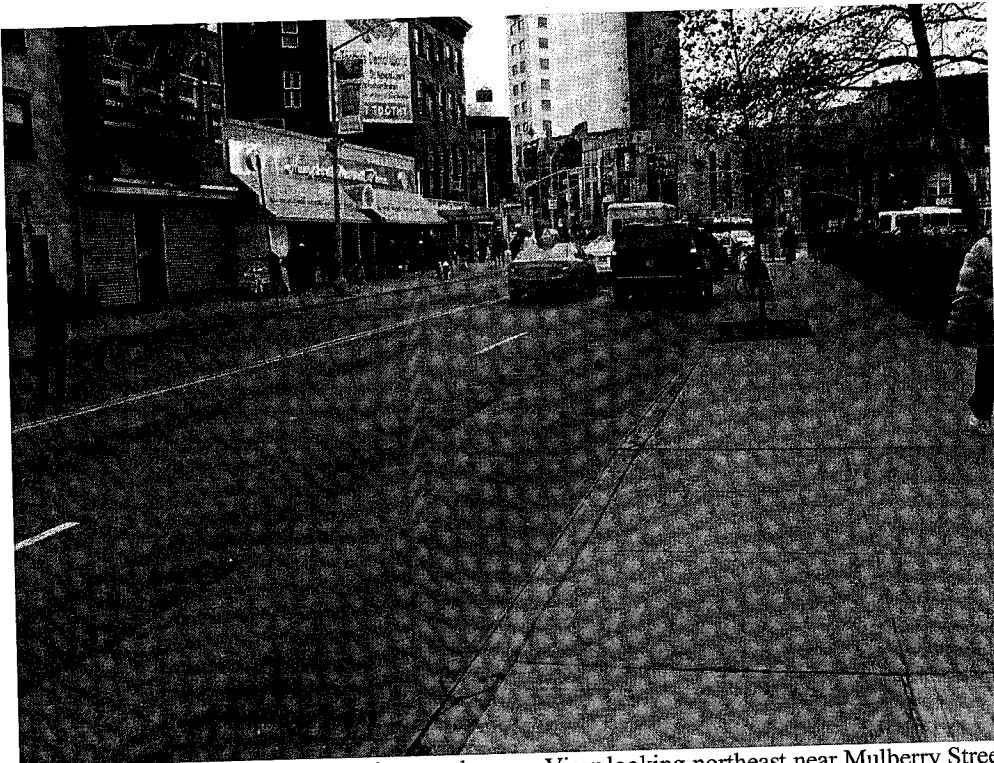
Photograph 3: Example of embedded utility covers in pavement and patched asphalt. View looking northeast with Mulberry Street in background.



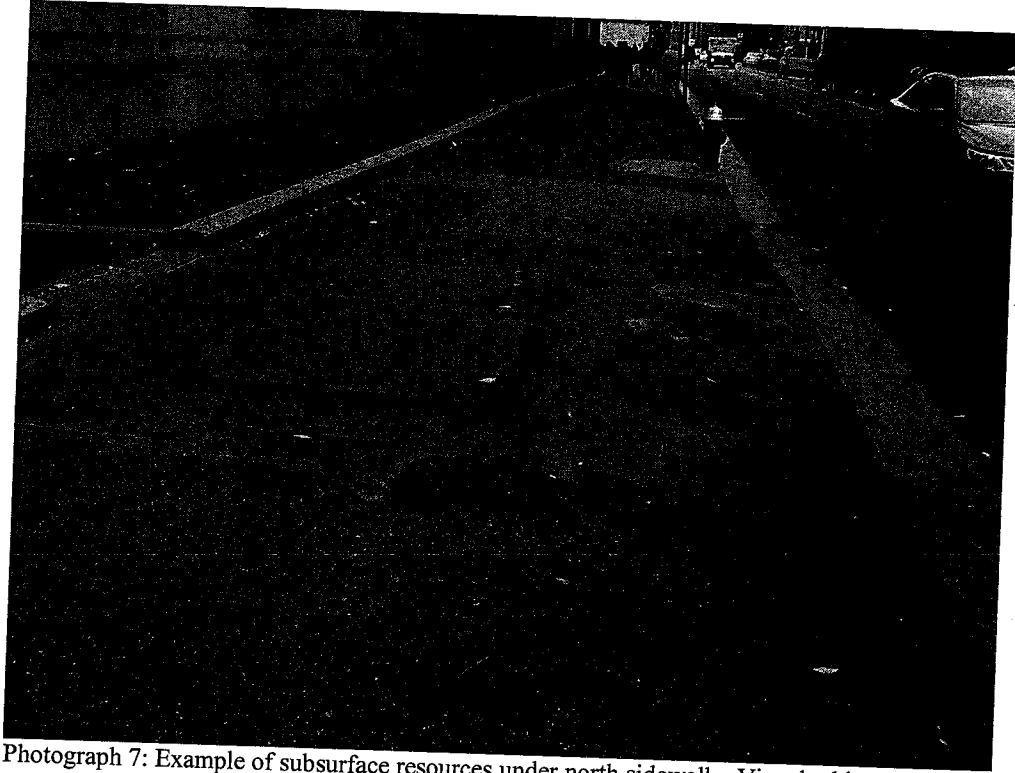
Photograph 4: Example of catch basin embedded in pavement. View looking southeast from near Centre Street intersection.



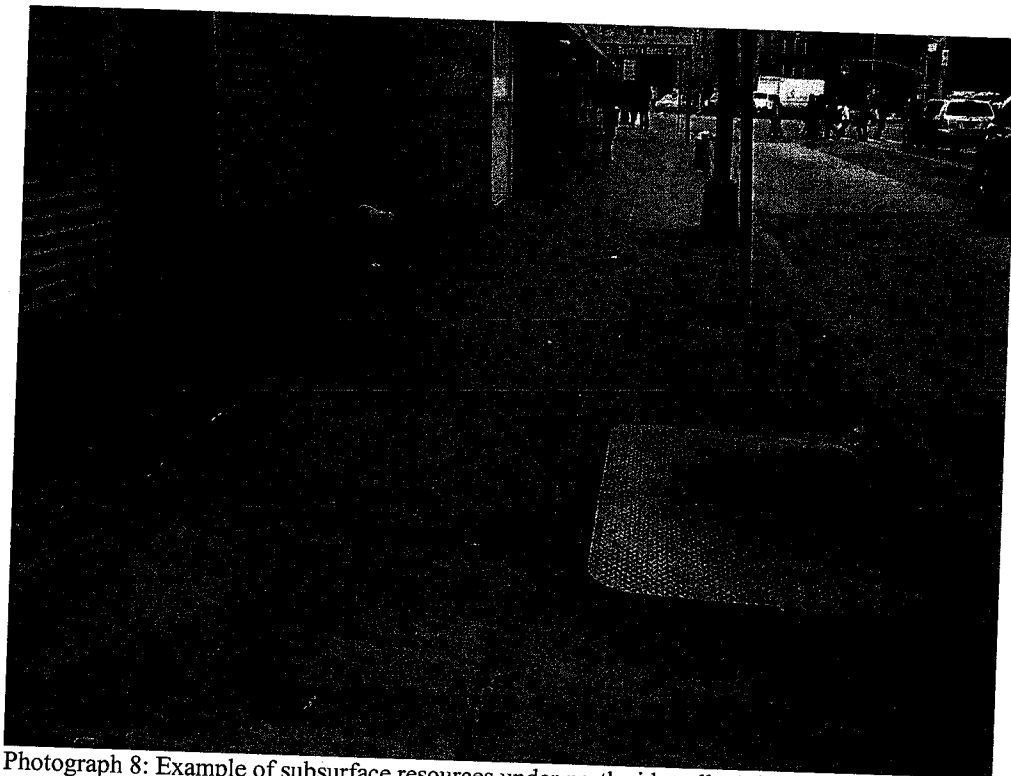
Photograph 5: Example of recently repaved center of streetbed. View looking northwest from near Baxter Street intersection.



Photograph 6: Example of strips of repaved areas. View looking northeast near Mulberry Street intersection.



Photograph 7: Example of subsurface resources under north sidewalk. View looking east between Centre and Baxter Streets.



Photograph 8: Example of subsurface resources under north sidewalk. View looking east between Mulberry and Mott Streets.

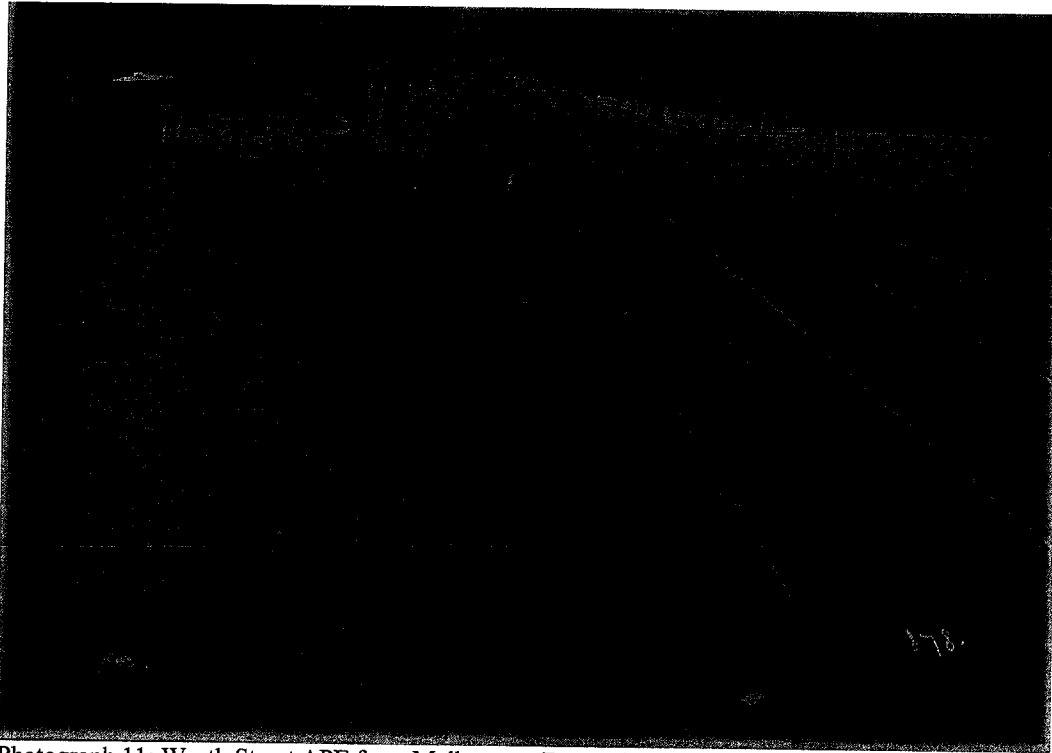


Photograph 9: Awnings extending into sidewalk. View looking northwest from near Mott Street intersection.

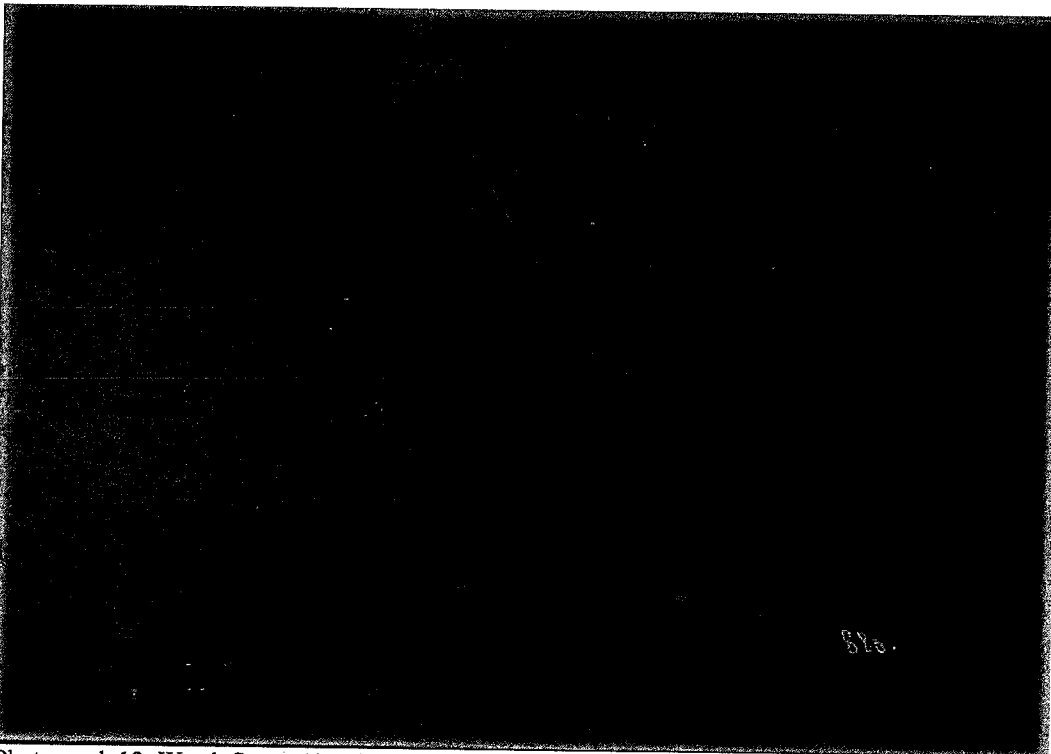


Photograph 10: Sidewalk in front of U.S. District Courthouse at Baxter Street. View looking east.

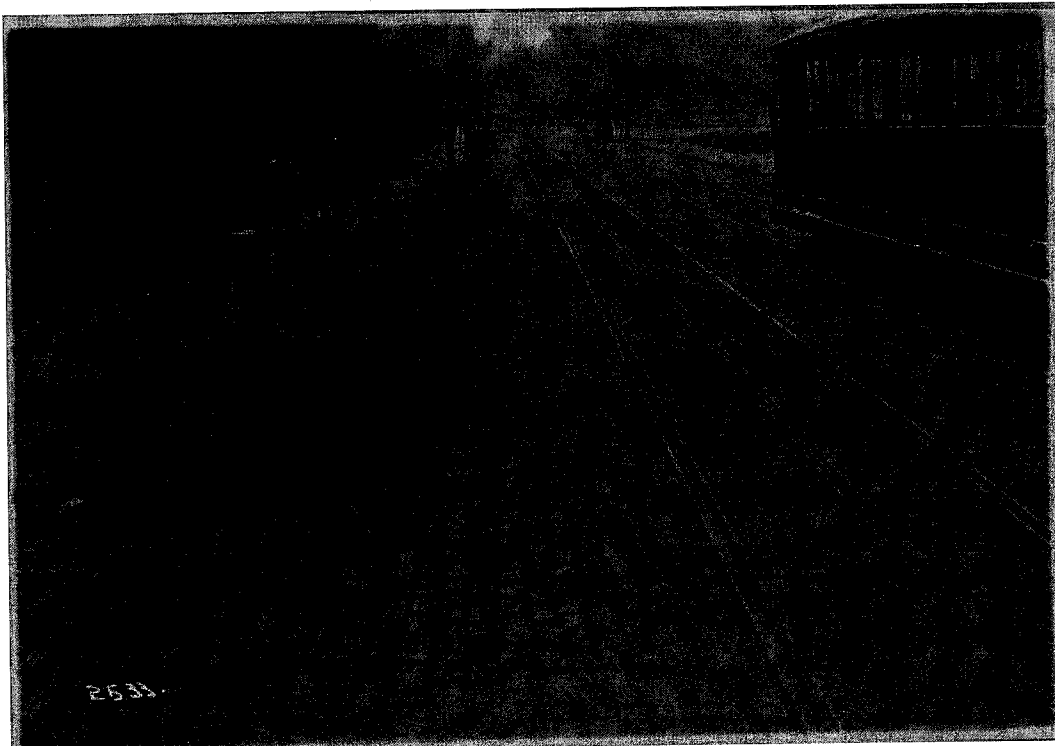




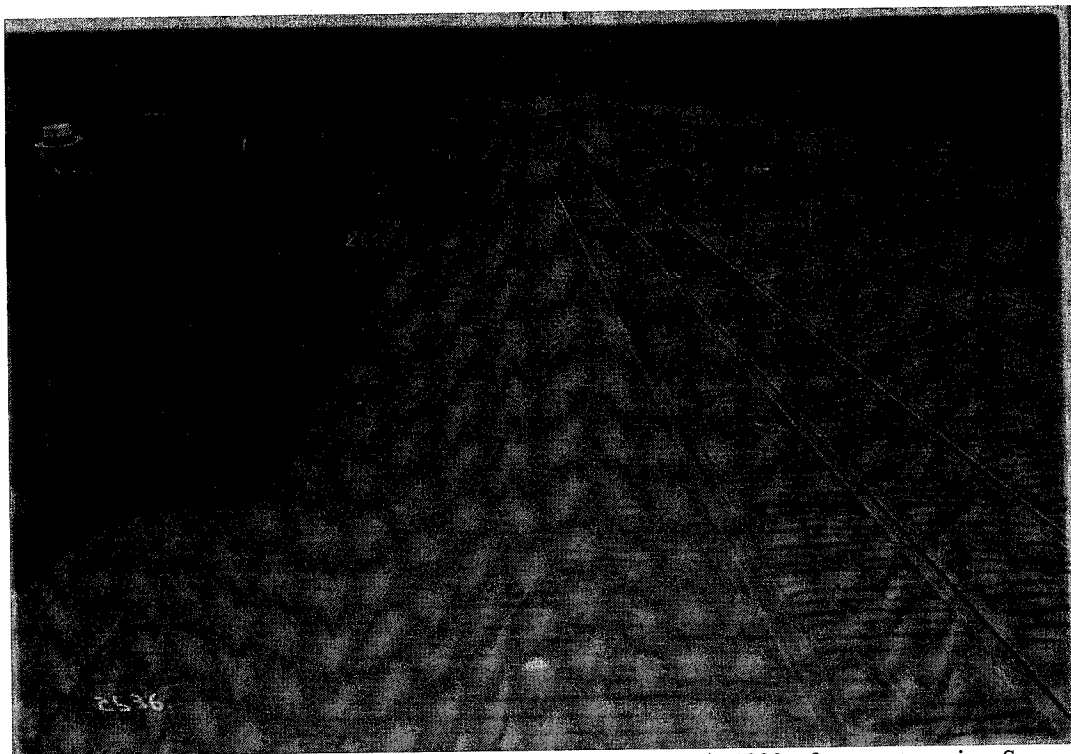
Photograph 11: Worth Street APE from Mulberry to Baxter Streets in 1919, prior to street repairs. Source: NYPL Digital Gallery.



Photograph 12: Worth Street APE from Park Row to Mulberry Street in 1919, prior to street repairs. Source: NYPL Digital Gallery.



2533  
Photograph 13: Worth Street APE from Centre to Mission Streets in 1920, after street repairs. Source: NYPL Digital Gallery.



2536  
Photograph 14: Worth Street APE from Mulberry to Baxter Streets in 1920, after street repairs. Source: NYPL Digital Gallery.

## APPENDIX A: INDIVIDUAL LOT HISTORIES

All household heads in census records are Caucasian unless otherwise noted as (B) black or (M) mulatto

Former Block 160, Lot 7, 72 or 74 Centre Street, Ward 189 (same as below)					
Year	Grantor	Grantee	Directory	Census	Remarks
1791	Mary Barclay executors	Leonard Fisher			
1808					
1810					No addresses or wards, cannot link names
1812					No addresses or wards but appears to be Leonard Fisher, house, Collect corner Anthony
1815			Jane Davison, 17 Collect, Sol Wheeler, 17 Collect		
1820					Leonard Fisher, house, 17 Collect, corner Anthony
1822					Caleb Crane, house, James Dolan tenant
1825			Joseph H. Fisher, 17 Collect c. Anthony		
1829			Elizabeth Williams, grocer, Anthony c. Centre, several other grocers listed at this intersection		Part of Ward 235, 18 Collect corner Anthony; Leonard Fisher, house, Elizabeth Williams, tenant
1830					
1832					Henry Fisher, corner of Centre (136 Anthony)
1835					Estate of Leonard Fisher (138 Anthony, cor Centre)
1837					Estate of Leonard Fisher (138 Anthony, cor Centre)
1838			Elizabeth Marshall, widow of Joseph, 72 Centre		
1840			Elizabeth Marshall, widow of Joseph, 72 Centre		
1844					
1845			Frederick Cook, 74 Centre		Thomas Fisher, Abraham B. Lutgen
1849					Thomas Fisher
1850			Eibe Tietgen, Porter House, 74 Centre 72, Michael Cronin, liquors; Thomas Haley, laborer; Mary Boland, laundress; Melchor Dieckmann, tailor; 74, Frederick Minneker, grocer	At least 1 household: Michael Cronan, Inn Keeper; may be other households but pages ripped	Thomas Fisher
1851			Michael Cronin, Porter House, 72 Centre		
1855					Thomas Fisher

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 160, Lot 7, 72 or 74 Centre Street, Ward 189 (same as below)</b>			
Year	Grantor	Grantee	Remarks
1857		William E. Duing, grocer, 74 Centre	
1859		Grocer, name refused, 74 Centre	
1860			Thomas Fisher
1861			Thomas Fisher
1862			Thomas Fisher crossed out; all off by widening Worth Street

<b>Former Block 160, Lot 7, 136 Anthony Street, Ward 189 (same as above)</b>			
Year	Grantor	Grantee	Remarks
1791	Mary Barclay executors	Leonard Fisher	
1808		Street not laid out yet	
1815			No listing, street not laid out yet
1820			Caleb Crane, house, James Dolan tenant
1824		Robert Foster, 136 Anthony	
1825		Michael M'Gowan, grocer, 136 Anthony; John Conway, laborer, 136 Anthony	
1826			Brothel at 136 Anthony Street (Gilfoyle 1992:App. 1)
1827		James Brennan, smith, 136 Anthony	
1829		No specific address listed	
1830		Daniel Ford, typefounder, 136 Anthony	Henry Fisher, corner of Centre (136)
1832		John Carson, porterhouse, 136 Anthony, cor. Centre	Estate of Leonard Fisher (138 Anthony, cor Centre)
1835			Estate of Leonard Fisher (138 Anthony, cor Centre)
1837		No specific address listed	
1840		John Carson, porterhouse, 136 Anthony, cor. Centre	
1850			unclear
1851		136, unoccupied	
1854		John Beer, scaman, rear 136 Anthony; John Fuller, seaman, rear 136 Anthony	
1860			unclear

<b>Former Block 160, Lot 8, 138 Anthony Street, Ward 1005</b>			
Year	Grantor	Grantee	Remarks
1808		Street not laid out yet	

## APPENDIX A: INDIVIDUAL LOT HISTORIES

<b>Former Block 160, Lot 8, 138 Anthony Street, Ward 1005</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1812	Mayor Alderman and Commonalty of the City of New York	James Ridgeway				Tract Report 880; Lots 4-8, L 152, p. 1
1815						
1818	Jacob and Janet Crane	Caleb Crane			No listing, street not laid out yet	
1820						
1821	Caleb and Elizabeth Crane	John Risley			Corporation, gore	Lots 4-8, L 131, p. 162
1820						Lots 4-8, L 152, p. 4
1825			James Connolly, 138 Anthony, William Wellwood, carpenter, 138 Anthony, Felix O'Neil, 138 Anthony		Corporation, gore 128 Anthony, part of Ward 1246; John Risely, house	
1826						
1827			Margaret Cummings, grocer, 138 Anthony			Brothel at 138 Anthony Street (Gilfoyle 1992:App. 1)
1829			No specific address listed			
1830						
1832					No listing for 138 Estate of Leonard Fisher (138; cor Centre)	
1835					Estate of Leonard Fisher (138; cor Centre)	
1837						
1840			No specific address listed			
1845					John Risley (140, Ward 1005)	
1850					John Risley (140, Ward 1005)	
1851				unclear	John Risley (140, Ward 1005)	
1855			138, unoccupied			
1860				unclear	John Risley (140, Ward 1005)	
1861	John and Sarah Risley	Daniel Creadon				
1862					John Risley (140, Ward 1005) John Risley, reduced assessment due to Worth Street widening	Lot 8 only; L 839, p. 428
<b>Former Block 160, Lot 9, 140 Anthony Street, Ward 1004</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808			Street not laid out yet			
1813	William Beekman executors	Samuel Beekman				Lots 9, 14; L 101, p. 29
1813	Samuel Beekman	William Beekman executors				Lots 9, 14; L 101, p. 40
1815						
1820					No listing, street not laid out yet	
1822	James and Elisa Ann Ridgeway	Elias J. Kent			Corporation, gore	Lot 9 only; L 163, p. 103

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 160, Lot 9, 140 Anthony Street, Ward 1004						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1823	Elias and Hannah Kent	Asahel Gerald, Jr.				Lot 9 only, L 167, p. 216
1825	Mayor Alderman and Commonalty of the City of New York	John M.J. Labatut			No address, part of Ward 1247; J.M. Labuton, lot only	Tract Report 880; Lot 9 only; L 189, p. 461; 35 foot frontage on Anthony
1825	Asahel Gerald, Jr.	John Fegan			Tenant Robert Gordon	Lot 9 only, L 194, p. 387
1826						Brothel at 140 Anthony Street (Gilfoyle 1992:App. 1)
1827						Occupant Robert Gordon, privy nuisance, MCC 16 196
1828			John Davis, Carolina coffeehouse, 140 Anthony			
1829			John Davis, Carolina coffeehouse, 140 Anthony			
1830			Mary Riley, widow of Michael, grocer, 140 Anthony		John Risley; Ridgeway, 2 unfinished houses	
1831	New York Gas Light Co.	Edmund Elmendorf and Charles F. Grim	Thomas Price, tailor, 140 Anthony			Lots 9 and 14; L 280, p. 132
1832					John Risley (140)	Lots 9 and 14; L 328, p. 138
1835	Edmund and Elizabeth Elmendorf and Charles and Mary Ann Grim	John F. J. DeRaimes	William Vanwagenen, porterhouse, 140 Anthony			Lot 9 only, L 329, p. 165
1835	Edmund and Elizabeth Elmendorf and Charles and Mary Ann Grim	James Ridgway				Lots 9 and 14; L 338, p. 231
1835	Edmund and Elizabeth Elmendorf and Charles and Mary Ann Grim	James Ridgway				Lots 9 and 14; L 338, p. 234
1835	Edmund and Elizabeth Elmendorf and Charles and Mary Ann Grim	Eli Sanford				Lots 9, 14, 16; L 338, p. 349
1835	Edmund and Elizabeth Elmendorf and Charles and Mary Ann Grim	James Ridgway				Lots 9 and 14; L 343, p. 17
1835	John and Jean Adelle DeRaimes	Joseph Dupre				Lots 9 and 14; L 343, p. 291
1835	Joseph and Caty Dupre	James Ridgway				Lots 9 and 14; L 358, p. 127
1836	Eli Sanford	James Ridgway				
1837			No specific address listed			
1840			Rebecca Marshall, widow of Henry H., 140 Anthony		James Ridgway (142, Ward 1004)	
1840			John Freeland, grocery, 140 Anthony			
1842						
1845			Joseph Price, broker, h. 140 Anthony		James Ridgway (142, Ward 1004)	
1850				1 household headed by: Joseph Price, Inn Keeper	James Ridgway (142, Ward 1004)	Brothel at 140 Anthony (DA Papers, 26 Oct. 1850; Gilfoyle 2012)

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 160, Lot 9, 140 Anthony Street, Ward 1004</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1851			140, William Laomard, smith; Henry Ripley, mariner; Bernard Bogert, tailor			
1855					Estate James Ridgway (142, Ward 1004)	
1860	George W. Ridgway	Sarah Ann Jarvis		unclear	George W. Ridgway (142, Ward 1004)	Lot 9 only; L 807, p. 224
1862					George Ridgway, reduced assessment due to Worth Street widening	

<b>Former Block 160, Lot 9, 142 Anthony Street, Ward 1003</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808			Street not laid out yet			
1815					No listing, street not laid out yet	
1820					Corporation, gore	
1825	Mayor Alderman and Commonalty of the City of New York	John M.J. Labatut			No address, part of Ward 1247; J.M. Labuton, lot only	Tract Report 880; Lot 9 only; L 189, p. 461; 35 foot frontage on Anthony
1826			Patrick Pidgeon, laborer, 142 Anthony		Tenant Mary Jenkins	Brothel at 142 Anthony Street (Gilfoyle 1992:App. 1)
1829			No specific address listed			
1830					No listing for 142, may be part of 140, above	Brothel at 142 Anthony Street from 1832-1850 (Gilfoyle 1992:App. 1)
1832			John H. Stent, mason, 142 Anthony		James Ridgway (142)	
1834			Hannah Betts, 142 Anthony			
1835					James Ridgway (142)	
1836			Charles Ripley, tavern, 142 Anthony			
1837			No specific address listed			
1840						
1845					James Ridgway (142, Ward 1004); no Ward 1003	
1850			Martin C. Ganley, porter house, 142 Anthony	unclear	James Ridgway (144, Ward 1003)	Brothel at 142 Anthony (DA Papers, 15 April 1850; Gilfoyle 2012)
1851			142, Joseph Castles, carpenter; Stephen Morgan, coachman; Thomas Fisher, printer			

## APPENDIX A: INDIVIDUAL LOT HISTORIES

<b>Former Block 160, Lot 9, 142 Anthony Street, Ward 1003</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1852						Brothel at 142 Anthony (DA Papers, 23 January 1852; Gilfoyle 2012)
1855					Estate James Ridgeway (144, Ward 1003)	
1860				unclear	George Ridgeway (144, Ward 1003)	
1862					George Ridgeway, reduced assessment due to Worth Street widening	

<b>Former Block 160, Lot 9, 144 Anthony Street, Ward 1002</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808			Street not laid out yet			
1815					No listing, street not laid out yet	
1820					Aaron Stockholm, lot only	Tract Report 881, 65 foot frontage on Anthony
1822	Aaron and Phebe Stockholm	James Ridgeway				
1825					No listing	
1829			No specific address listed		No listing for 144, may be part of 140, above	Brothel at 144 Anthony Street from 1832-1850 (Gilfoyle 1992:App. 1)
1830						
1832			William Campbell, printer, 144 Anthony		James Ridgeway (144)	
1834			Henry Jenkins, portehouse, 144 Anthony			
1835			Henry Jenkins, portehouse, 144 Anthony		James Ridgeway (144)	
1837			No specific address listed			
1840			Ann Mason, boardinghouse, 144 Anthony		Widow Brady and Francis McCabe (146, Ward 1002); only McCabe has personal estate tax	
1845			James McQuillin, boarding, 144 Anthony		Widow Brady (146, Ward 1002)	
1847						Brothel at 144 Anthony (NPG, 27 March 1847; Gilfoyle 2012)
1850			Bridget Conlan, portehouse, 144 Anthony	unclear	Widow Brady (146, Ward 1002)	Brothel at 144 Anthony (DA Papers 20 Sept. 1850; Gilfoyle 2012)
1851			144, James Green, liquors; Martin Morse, mason; Theodric Rientz, tailor			
1855					Widow Brady (146, Ward 1002)	
1860				unclear	Mrs. Brady (146, Ward 1002)	



## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 160, Lot 9, 144 Anthony Street, Ward 1002		Former Block 160, Lot 9, 146 Anthony Street, Ward 1001				
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1862					Mrs. Brady, reduced assessment due to Worth Street widening	
1808			Street not laid out yet			
1815					No listing, street not laid out yet	
1820			Miles Riley, grocer, Collect c. Anthony		Aaron Stockholm, lot only	
1822	Aaron and Phebe Stockholm	James Ridgway				
1825						Tract Report 881, 65 foot frontage on Anthony
1828			Mary Riley, widow of Michael, grocer, 146 Anthony		James Ridgway, 136 Anthony, corner Little Water, tenant M. McGowan	
1829			Mary Riley, widow of Michael, grocer, 146 Anthony			
1830						
1832						
1834			Patrick Carr, grocer, 146 Anthony		M. Brady, house Widow Brady (146)	
1835						
1836			Patrick Carr, grocer, 146 Anthony		Widow Brady (146)	
1837			Francis Mahaffy, grocer, 146 Anthony			
1840						
1841			Francis McCabe, tavern, 131 and 146 Anthony		James Ridgway (148, Ward 1001)	
1842			Henry Lowerre, tavern, 146 Anthony; Francis McCabe, grocery, 146 Anthony; Henry Lowery, boarding, 146 Anthony			
1844						
1845			Henry Lowery, boarding, 146 Anthony			Brothel at 146 Anthony (DA Papers 10 Oct. 1844; Gilfoyle 2012)
1849			Patrick Shane, grocery, 146 Anthony		No Ward 1001 listed, James Ridgway listed for Ward 1000	

## APPENDIX A: INDIVIDUAL LOT HISTORIES

<b>Former Block 160, Lot 9, 146 Anthony Street, Ward 1001</b>					
Year	Grantor	Grantee	Directory	Census	Remarks
1850				unclear	Tax Assessment James Ridgway, front and rear (148, Ward 1001)  Brothel at 146 Anthony Street (Gilfoyle 1992:App. 1; DA papers, 20 Sept. 1850; Gilfoyle 2012)
1851			146, Arquist Kass, liquors; S.E. Stultz, tailor		
1855					James Ridgway, front and rear (148, Ward 1001)
1860				unclear	George Ridgway, front and rear (148, Ward 1001)
1862					George Ridgway, reduced assessment due to Worth Street widening

<b>Former Block 160, Lot 9, 150 Anthony Street (7 Little Water Street), Ward 1000</b>					
Year	Grantor	Grantee	Directory	Census	Remarks
1808			Street not laid out yet		
1815					No listing, street not laid out yet
1820					Aaron Stockholm, lot only
1822	Aaron and Phebe Stockholm	James Ridgway			
1825					James Ridgway, 138 Anthony, corner Little Water, tenant Felix O'Neil
1826					
1828					Brothel at 150 Anthony Street (Gilfoyle 1992:App. 1)
1829			Henry Jenkins, 150 Anthony		Brothel at 148 Anthony Street from 1828-1850 (Gilfoyle 1992:App. 1)
1830					Suicide of liquor addicted colored woman (Connecticut Courant August 11, 1829)
1831					James Ridgway, 148 and 150, corner of Little Water
1832					Occupant Felix O'Neil, lot nuisance, MCC 19 651
1835					James Ridgway, 148 and 150, corner of Little Water
1840					James Ridgway (148 and 150 Anthony and 7 Little Water)
1837			No specific address listed		
1845					James Ridgway (150 Anthony and 7 Little Water, part of Ward 1000)

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 160, Lot 9, 150 Anthony Street (7 Little Water Street), Ward 1000				
Year	Grantor	Grantee	Directory	Census
1847				
1850				unclear
1851			150, Anthony Crown,	
1855			grocery	
1860				unclear
1862				

Former Block 160, Part of Lot 26, 152 Anthony Street, Ward unknown				
Year	Grantor	Grantee	Directory	Census
1808				
1815			Street not laid out yet	
1825				
1826			Mary Jenkins, 152 Anthony	
1830				
1831			Robert B. Gordon, grocer, 152 Anthony cor. Little Water	
1832			Robert B. Gordon, grocer, 152 Anthony cor. Little Water	
1833				
1851			Vacant lot	

Former Block 160, Part of Lot 26, 154 Anthony Street, Ward unknown				
Year	Grantor	Grantee	Directory	Census
1808				
1825			Street not laid out yet	

Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1847						Brothel at 150 Anthony (NPG, 22 May 1847; Gilfoyle 2012)
1850					James Ridgway (150 Anthony only, part of Ward 1000)	Brothel at 150 Anthony (DA Papers 20 Sept. 1850; Gilfoyle 2012)
1855					James Ridgway (150 Anthony only, part of Ward 1000)	Brothel at 150 Anthony/Worth St. (PC Papers box 7953, 1 Aug 1855; Gilfoyle 2012)
1860					George Ridgway (150 Worth only, part of Ward 1000)	
1862					George Ridgway, reduced assessment due to Worth Street widening	

Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808						
1815					No listing, street not laid out yet	
1825					Robert Livingston, 140 Anthony, corner of Little Water, tenant Robert Gordon, John Smith	
1826						
1830					Robert Livingston, 152 Anthony, corner of Little Water, tenant Robert Gordon	Brothel at 152 Anthony Street (Gilfoyle 1992:App. 1)
1831						Owner Robert Gordon privy nuisance, MCC 19_539
1832					Robert B. Gordon, 152 Anthony, corner Little Water	
1833					Lot no longer listed	
1851						

Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808						
1825					Robert Livingston, 142 Anthony, corner of Little Water, tenant Mary Jenkins	

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 160, Part of Lot 26, 154 Anthony Street, Ward unknown					
Year	Grantor	Grantee	Directory	Census	Remarks
1828					Brothel at 154 Anthony Street (Gilfoyle 1992:App. 1)
1830					Robert R. Livingston, 2 houses, 154 and 156 Anthony
1832					Robert B. Gordon, 154 Anthony, corner Little Water
1833					Lot no longer listed
1851			No listing in reverse directory		

Former Block 160, Part of Lot 26, 156 Anthony Street, Ward unknown					
Year	Grantor	Grantee	Directory	Census	Remarks
1808			Street not laid out yet		No listing, street not laid out yet
1815					Robert Livingston, 142 Anthony, corner of Little Water, tenant Mary Jenkins
1825					
1829			Sarah Dougherty, widow, grocer, 156 Anthony		
1830					Robert R. Livingston, 2 houses, 154 and 156 Anthony
1832					Robert B. Gordon, 156 Anthony, corner Little Water
1833					Lot no longer listed
1844-1845					Brothel at 156 Anthony (DA Papers 10 Oct. 1844, 4 Sept. 1844, 10 Jan 1845; Gilfoyle 2012)
1851			No listing in reverse directory		

Former Block 160, Part of Lot 26, Little Water Street lots, no addresses					
Year	Grantor	Grantee	Directory	Census	Remarks
1808					No addresses or ward numbers; names cannot be linked
1810					No addresses or ward numbers; names cannot be linked
1815					No addresses or ward numbers; names cannot be linked, but John R. Livingston noted as having 8 houses on Little Water
1820					John R. Livingston, gore corner Anthony, Matthew L. Davis, lot
1833					Lots no longer listed

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 160, Part of Lot 26, 60 Cross Street, Ward unknown						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808					No addresses or ward numbers; names cannot be linked	
1810					No addresses or ward numbers; names cannot be linked, but may be John R. Livingston, tenant Thomas Miller	
1815					John R. Livingston, house, 60 Cross, corner Little Water	
1820					John R. Livingston (60 Cross), tenant John O'Neil	
1825					No listing	
1830					John R. Livingston, 60 Cross, corner of Little Water	
1831						Owner Charles Livingston privy nuisance, MCC.19_539
1832					John R. Livingston, house 60 Cross, corner Little Water	Brothel at 60 Cross (PC Papers box 7444, 9 July 1832; Gilfoyle 2012)
1833					Lot no longer listed	

Former Block 160, Part of Lot 26, 62 Cross Street, Ward unknown						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808					No addresses or ward numbers; names cannot be linked	
1810					No addresses or ward numbers; names cannot be linked, but may be John R. Livingston	
1815					Thomas Miller, house (occupying), 62 Cross	
1820			Owen M'Gowan, 62 Cross; Terrence M'Gowan, 62 Cross		John R. Livingston (62 Cross), tenant John Rooney	
1825					No listing	
1830					John R. Livingston, house 62 Cross	
1831						Owner John R. Livingston privy nuisance, MCC.19_539
1832					John R. Livingston, house 62 Cross	
1833					Lot no longer listed	
1851						Brothel at 62 Cross (DA Papers 21 Feb 1851; Gilfoyle 2012)

Former Block 160, Part of Lot 26, 64 Cross Street, Ward unknown						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808					No addresses or ward numbers; names cannot be linked	

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 160, Part of Lot 26, 64 Cross Street, Ward unknown</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1810					No addresses or ward numbers; names cannot be linked, but may be John R. Livingston, tenants Abraham Thompson, Edward Skinner	
1815					John R. Livingston, house, John Paul, tenant, 64 Cross	
1820					John R. Livingston, 64 Cross	
1825			John M'Gowan, tanner, 64 Cross		John R. Livingston, 64 Cross	
1827						Occupant M. Monagan, privy nuisance, MCC 16 196
1830					John R. Livingston, house 64 Cross	
1832					John R. Livingston, house 64 Cross	
1833					Lot no longer listed	

<b>Former Block 160, Part of Lot 26, 66 Cross Street, Ward unknown</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808					No addresses or ward numbers; names cannot be linked	
1810					No addresses or ward numbers; names cannot be linked, but may be John R. Livingston, tenant Nicholas Furman	
1815					John R. Livingston, house, tenants John Powell, John Cornell, George Dunson (?), Samuel Dunhaven (?), 66 Cross	
1820					John R. Livingston, 66 Cross, tenant Charles Smith	
1825					John R. Livingston, 66 Cross, tenant A. Cunningham	
1827						Occupant F. Cunningham, privy nuisance, MCC 16 196
1830					John R. Livingston, house 66 Cross	
1832					John R. Livingston, house 66 Cross	
1833					Lot no longer listed	
1852						Brothel at 62 Cross (DA Papers 23 Jan 1852; Gilfoyle 2012)

<b>Former Block 160, Part of Lot 26, 68 Cross Street, Ward unknown</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808					No addresses or ward numbers; names cannot be linked	

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 160, Part of Lot 26, 68 Cross Street, Ward unknown</b>			
Year	Grantor	Grantee	Directory
1810			
1815			
1820			
1825			
1827			
1828			
1830			
1832			
1833			

<b>Former Block 160, Part of Lot 26, 70 Cross Street, Ward unknown</b>			
Year	Grantor	Grantee	Directory
1808			
1810			
1815			
1820			
1825			
1830			
1832			
1833			

<b>Former Block 160, Part of Lot 26, 72 Cross Street, Ward unknown</b>			
Year	Grantor	Grantee	Directory
1808			

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 160, Part of Lot 26, 72 Cross Street, Ward unknown</b>			
Year	Grantor	Grantee	Directory
1810			
1815			
1820			
1825			
1830			
1832			
1833			

<b>Former Block 160, Part of Lot 26, 72 Cross Street, Ward unknown</b>			
Year	Grantor	Grantee	Directory
1810			
1815			
1820			
1825			
1830			
1832			
1833			

<b>Former Block 161, Lot unclear, 81 Cross/Park Street, Ward 553</b>			
Year	Grantor	Grantee	Directory
1808			
1810			
1812			No specific address listed
1815			
1820			
1825			
1830			
1835			
1840			
1845			
1850			
1851			81, Wilhelm Harris & Co., grocers; George Menck
1853			Behrend Gurgens, grocer, 81 Cross, h. 81 Cross



## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot unclear, 81 Cross/Park Street, Ward 553			
Year	Grantor	Grantee	Directory
1855			
1860			
1869			
			Census
			Henry O'Keefe
			Henry O'Keefe
			Henry O'Keefe
			Worth Street assessment
Former Block 161, Lot 33, 83 Cross/Park Street, Ward 552			
Year	Grantor	Grantee	Directory
1808			
1810			
1812			
1815			No specific address listed
1820			
1823			John H. Minuse, bookbinder, 83 Cross; Leonard Minuse widow, grocer, 83 Cross
1825			
1826			John H. Minuse, bookbinder, 83 Cross
1829			Matthew Lane, clerk, 83 Cross; John H., Minuse, bookbinder, 83 Cross
1830			
1831			Dorothea Minuse, widow of Leonard, grocer, 83 Cross
1836			Matthew Lane, 83 Cross
1837			Lane, Maria, widow of Matthew, boardinghouse 83 Cross; Sheridan, Patrick, grocer, 83 Cross
1835			
1840			Richard Butler, tavern, 83 Cross
1844			Richard Butler, 83 Cross
1845			
			Census
			No addresses or ward numbers; names cannot be linked
			No addresses or ward numbers; names cannot be linked, but may be David Hutchings, living there
			David Hutchings, tenants Richard Verplanck, Alexander Moore
			Widow Minuse (living there), tenant Matthew Lane
			Widow Minuse (83 Cross), tenants Nathan Lane, John H. Minuse
			Widow Minuse (83 Cross), also living there
			Widow Minuse (83 Cross)
			Widow Minuse (83 Cross, Ward 552), tenant Richard Butler
			Widow Minuse (83 Cross, Ward 552)

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

Former Block 161, Lot 33, 83 Cross/Park Street, Ward 552						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1850				10 households headed by: William Kernan, laborer; Catharine Mahoney, John Bartict, plaster Paris moulder; Michael Germotti, plaster Paris moulder; Timothy Jarvis (M), violinist, John Kernon, laborer; Thomas Hinegan, laborer; John Highlandhill, tailor; William Pyne, hatter; James Ryan, laborer Total: 36 occupants	Widow Minuse (83 Cross, Ward 552)	
1851			83, William McKiernan, liquors; Thomas DuBois (col'd), seaman; J.A. Matz, bookbinder; Rhody Sullivan, tailor; Charles Highfield, tailor; Ann Faulkner, laboress; James Dempsey, laborer; Timothy Jarvis (col'd), musician; Daniel Mithony, laborer			
1853			William Kiernan, liquors, 83 Cross, h. 83 Cross			
1855	John M. Lane	William T. Bucken				L 731, p. 234
1857	William T. and Augusta Bucken	Garrett B. Lane				L 744, p. 446
1860- 1861			McKiernan, William, liquors, 83 Park	6 households headed by: William McKiernan, store keeper; Anne Rooney, house keeper; Margrit Dundero, house keeper; Giobetti Cassassa, musician; Barholeme Spinetti, musician; Patrick McAnulty, porter Total: 33 occupants	John H. Mumase	
1869	Garrett and Maria Lane	John H. Mimese			John H. Mumase, Worth Street assessment	L 1110, p. 341

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 34, 85 Cross/Park Street, Ward 551						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808						
1810					No addresses or ward numbers; names cannot be linked	
1812			No specific address listed		No addresses or ward numbers; names cannot be linked, but may be Hamilton Ward, living there, tenant Peter Ackerman	
1815						
1819			Catherine Sibert, widow, 85 Cross		Hamilton Ward (living there)	
1820						
1825					Elijah Valentine	
1826					Elijah Valentine (85 Cross)	
1829			Mary Ann, Stewart, 85 Cross			Brothel at 85 Cross, 2 <sup>nd</sup> door from Orange (DA papers, 11 Oct. 1826; Gilfoyle 2012)
1830						
1832			Mary Ann, Stewart, 85 Cross		E. Valentine (85 Cross)	
1833						
1834			William Woodbury, porterhouse, 27 1/2 Orange, h. 85 Cross			Brothel at 85 Cross (PC papers, box 7445, 20 July. 1833; Gilfoyle 2012)
1837			Edward Huestis, pilot, 85 Cross			
1835						
1840			Smith Cooper, 85 Cross		E. Valentine (85 Cross)	
1842			Isaac Ktee, porterhouse, 85 Cross		Elijah Valentine (85 Cross, Ward 551)	
1844			George Hanley, butcher, 85 Cross			
1845						
1850			Henry Menke, grocer, 85 Cross, h. 85 Cross; William Harris, grocer, 85 Cross, h. 85 Cross	6 households headed by: Jacob Miller, shoemaker; George Anderson (M), victualler; William Harris, grocer; Peter Mendike (B), seaman; John Cummings, ship rigger; Elizabeth Berr (M) Total: 20 occupants	Elijah Valentine (85 Cross, Ward 551) Elijah Valentine (85 Cross, Ward 551)	Brothel at 85 Cross (DA papers, 26 Oct. 1850; Gilfoyle 2012)

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 34, 85 Cross/Park Street, Ward 551</b>			
Year	Grantor	Grantee	Remarks
1851		Directory 85, Edward Welch, founder	
1854		John Mehl, shoemaker, 85 Cross	
1855			E. Valentine
1856			Brothel at 85 Park (PC papers, box 7954, 25 March 1856; Gilfoyle 2012)
1857	Elijah Valentine heirs	Stephen Thayer, ref.	Lots 34-37, includes release of dower, L 739, p. 573; L 745, p. 52
1857	Stephen Thayer, ref., Catherine Valentine et al., defendants	Henry S. Valentine	L 741, p.268
1860		Bridget Harrington, lodgings 85 Park	E. Valentine
1861		Brody, John, laborer, h. 85 Park	
1867	Henry S. Valentine	Marcus Horbelt	Lot 34; L 1010, p. 130
1869			Worth Street assessment

<b>Former Block 161, Lot 35, 87 Cross/Park Street, Ward 550</b>			
Year	Grantor	Grantee	Remarks
1807	Daniel Dunscomb executors	Samuel F. Randolph and David Hutchings	
1808			No addresses or ward numbers; names cannot be linked
1810			No addresses or ward numbers; names cannot be linked
1812		No specific address listed	
1815			Thomas Miller, tenant James Morgan
1820		Thomas Miller, clerk, 87 Cross	Thomas Miller (living there), tenant Peter Vogelsang
1825			Thomas Miller (87 Cross)
1827		Peter Vogelsang, clerk 87 Cross	

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 35, 87 Cross/Park Street, Ward 550</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1829			Jane Miller, widow of Thomas, 87 Cross; Peter, Vogelsang, clerk, 87 Cross			
1830			Jane Miller, widow of Thomas, 87 Cross		Thomas Miller (87 Cross)	
1834			Jane Miller, widow of Thomas, 87 Cross; Peter Vogelsang, clerk 87 Cross			
1835			Jane Miller, widow of Thomas, 87 Cross		Estate of Thomas Miller (87 Cross)	
1840					Estate Thomas Miller (87 Cross, Ward 550)	
1842			George Henley, butcher, 87 Cross			
1845						
1850				unclear	James Monroe (87 Cross, Ward 550) Elijah Valentine (87 Cross, Ward 550)	Brothel at 87 Cross (DA papers, 26 Oct. 1850; Gilfoyle 2012)
1851			87, Maria Robinson, boarding			
1853			M. Robinson, brandies, 87 Cross			
1855						
1857		Stephen Thayer, ref.			E. Valentine	
1857	Stephen Thayer, ref., Catherine Valentine et al., defendants	William Nealis				Lots 34-37, includes release of dower, L 739, p. 573; L 745, p. 52 L 727, p. 467
1860			Timothy Murphy, laborer, h. 87 Park; Cornelius Mahony, laborer, h. 87 Park	6 households headed by: Cornelius Mahony, laborer; Catharine Teburn (?); Dennis Sullivan, Timothy Murphy, laborer; Antony Seprona, musician; Lungenate Beniter (?), deck hand; Total: 35 occupants	E. Valentine	
1861			O'Brien, Jeremiah, laborer, h. 87 Park; Eardley, Dennis, laborer, h. r. 87 Park			
1869					William Nealis	Worth Street assessment
<b>Former Block 161, Lot 36, 89 Cross/Park Street, Ward 549</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1773	Thomas Pears executors	Daniel Dunscomb				Lots 36, 37, 38; L. 40, p. 87

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 36, 89 Cross/Park Street, Ward 549</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808					No addresses or ward numbers; names cannot be linked	
1810					No addresses or ward numbers; names cannot be linked	
1812			No specific address listed		Unclear, but may be George McKay, lot only	
1815					Elijah Valentine, tenant John Ward	
1820					Elijah Valentine (89 Cross) and back ground, tenant Catherine Wheeler	
1825						
1826						Brothel at 89 Cross (DA papers, 11 Oct. 1826; Gilfoyle 2012)
1829			Widow Esther, Schwartz, 89 Cross			
1830					E. Valentine (89 Cross), tenant Mrs. Swartz.	
1831			Widow Esther Schwartz, 89 Cross			
1832						Brothel at 89 Cross Street, Ann Pullis (Gilfoyle 1992:App. 2)
1835						
1836			Stewart, widow Mary Ann, 89 Cross		E. Valentine (89 Cross)	
1837			Stewart, widow Mary Ann, 89 Cross			
1838			James Whaley, 89 Cross			
1840			James Whaley, 89 Cross		Elijah Valentine (89 Cross, Ward 549)	
1842			Emma Stevenson, widow of James, 89 Cross			
1845					Elijah Valentine (89 Cross, Ward 549)	
1850				Unclear, but may be 6 households headed by: Harman Diker, grocer; Maria Bailey (B); Sarah Kemp (B); Phoebe Francis (B); Carolina Edwards (B); Mary Wilson (B) Total: 12 occupants, most women	Elijah Valentine (89 Cross, Ward 549)	Brothel at 89 Cross (DA papers, 26 Oct. 1850; Gilfoyle 2012)

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 36, 89 Cross/Park Street, Ward 549</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1851			89, John Baxter, oysters; Anna Bernard, laundress; George Persall, seaman; Joseph Casey, tailor, J.W. Ziegler, patternmaker; Jane Van Curen, laundress; Susan Hardy, tailoress; Mary Mcner, tailoress; Marks Ruf, carpenter; Peter Dawson, porterhouse			
1852						Brothel at 89 Cross (DA papers, 23 Jan. 1852; Gilfoyle 2012)
1853			John Ford, liquors, 14 Franklin, h. 89 Cross; Gasper Mesner, pedlar, 89 Cross; Michael Farley, tailor, 89 Cross; Thomas Deery, sailor, 89 Cross			
1854						Brothel at 89 Cross (DA papers, 18 Oct. 1853; Gilfoyle 2012)
1855					E. Valentine	
1857	Elijah Valentine heirs	Stephen Thayer, ref.				Lots 34-37, includes release of dower, L 739, p. 573; L 745, p. 52
1857	Stephen Thayer, ref., Catherine Valentine et al., defendants	Edward Ludlam				L 736, p. 319
1860-1861			Hayes, George, carman, h 89 Park	5 households headed by: Mary Coleman, house keeper; Patrick Fora, laborer; George Hays, carman; Stephen Sanders (b), sweep (+ 5 women); John Depoyster (b), laborer Total: 18 occupants	E. Lucilain (with 91 Park)	
1865			Buckley, John, driver, h. 89 Park (or 39?)			
1869					E. Ludlam	Worth Street assessment
<b>Former Block 161, Lot 36, 91 Cross/Park Street, Ward 549</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808						No addresses or ward numbers; names cannot be linked
1810						No addresses or ward numbers; names cannot be linked

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

Former Block 161, Lot 36, 91 Cross/Park Street, Ward 549						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1812			No specific address listed			
1815					Elijah Valentine (93 Cross), tenants James Thomas, Eliakim Munson, Hart Pichard, Edward Murphy	
1820					Elijah Valentine (93 Cross), tenants John Williams, Elias Cadmus, Pierce	
1825					E. Valentine (91 Cross)	
1830					E. Valentine (91 Cross and back house)	
1835					E. Valentine (91 Cross and rear building)	
1840					Elijah Valentine (91 Cross, Ward 549), and rear buildings	
1845					Elijah Valentine (91 Cross, Ward 549)	
1846			Jane Patterson, col'd, 91 Cross			
1850				unclear	Elijah Valentine (91 Cross, Ward 549)	
1851			No listing		E. Valentine	
1855						
1857	Elijah Valentine heirs	Stephen Thayer, ref.				Lots 34-37, includes release of dower, L 739, p. 573; L 745, p. 52
1857	Stephen Thayer, ref., Catherine Valentine et al., defendants	Edward Ludlam				L 736, p. 319
1860				Unclear, but may be a building housing a number of Italian immigrants, many musicians	E. Lucilain (with 89 Park)	
1865					E. Ludlam	Worth Street assessment

Former Block 161, Lot 25, 19 Orange/Baxter Street, Ward 292						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1763	Jacob and Jane Reed	Obadiah Wells				L 36, p. 454
1763	John and Rachel Kingston	Obadiah Wells				L 36, p. 456
1799	Edmond Livingston, interest of	Charles White				L 56, p. 304
1800	Charles and Jane White	Thomas Miller				L 58, p. 348
1805	African Methodist Episcopal Church of the City of New York in the State of New York called Zion Church	William Beatty				L 71, p. 229



**APPENDIX A: INDIVIDUAL LOT HISTORIES**

Former Block 161, Lot 25, 19 Orange/Baxter Street, Ward 292						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808					No addresses or ward numbers; names cannot be linked	
1810					No addresses or ward numbers; names cannot be linked, but may be Lawrence Braken, living there, tenants John Merry, Barny Murphy, John Thurston	
1812			19, Leonard Minus, Edward Doyle, James Casey, Thomas Gray, Luke Stephen			
1815					Lawrence Braken (19 Orange), tenants James Casay, Israel Knapp, Romeo Brown, Samuel Peterson	L 118, p. 324
1816	Samuel F. Randolf et al. and David and Hama Hutchings	Thomas Mooney				
1818	Edmond and Margaret Livingston	Jacob Ashley	George Forsyth, carpenter, 19 Orange			L 128, p. 180
1818	Jacob Ashley administrator	Patrick Mehen				L 129, p. 20
1818	Henrietta Ashley, widow of Jacob	Patrick Mehan				Release of dower; L 219, p. 14
1820	Thomas and Jane Miller	Francis Jacobs et al.			Patrick Meaghan, tenant Dennis Corman?	L 143, p. 212
1820	David and Mary Lynch and Robert Beatty	Patrick Meehen				L 143, p. 255
1820	William and Hannah Hamilton	Patrick Mehen				L 145, p. 513
1821	Patrick Mehen	Jane Mehen				L 152, p. 51
1823	Jane Mehen	Margaret Mehen	Ann Demore, 19 Orange			Quit claim; L 170, p. 57
1823	Margaret Mehen	Jane Mehen				L 170, p. 59
1825			Bridget Bammigan, grocer, 19 Orange		Widow Meghan (19 Orange)	
1828			James O'Roarke, grocer, 19 Orange; Thomas Mehan, 19 Orange			
1829			James, Dixon, rigger, 19 Orange; John, Scott, grocer, 19 Orange			
1830			John P. Clement, grocer, 19 Orange		Thomas Mahan (19 Orange)	
1835	David Hutchings	George Ives	John Gelston, tailor, 19 1/2 Orange		Estate Patrick Mehan (19 1/2 Orange)	L 327, p. 195
1837			Michael Kerrigan, clothier, 19 1/2 Orange			

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 25, 19 Orange/Baxter Street, Ward 292</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1840			Patrick Daley, grocer, 19 Orange		Estate Patrick Meghan (19 Orange, Ward 29 J), tenant Patrick Daily	
1842	George and Mary Ives	Nicholas Berthoud				L 429, p. 432
1842	Assignee of Nicholas Berthoud	John Roach				L 429, p. 434
1844	John McGlain et al., defendants	Sheldon Burwell	Patrick Daley, grocer, 19 Orange; Michael Cain, laborer, 19 Orange; Patrick Gillan, laborer, 19 Orange; Michael Costello, laborer, 19 Orange			L 441, p. 596
1845	Sheldon and Margaret Burwell	Jane Ann McGloin trustee			John McGloin (19 Orange, Ward 292)	L 454, p. 607
1846	Sheldon and Margaret Burwell and John and Frances McNulty	Jane Ann McGloin				L 476, p. 116
1846	George and Mary Ives	John Roach				L 477, p. 437
1847	John and Jane Ann Gleason	William Nealis				L 489, p. 401
1850			Henry Mehden, grocer, 19 Orange	unclear		
1851			19, Henry Meahden, grocer			
1853	Thomas Mooney executors	Henry O'Keefe				L 645, p. 83
1854			Henry Mehden, grocer, 19 Orange	unclear		
1860					William Nealis	
1861			Holste, Patrick A., liquors, 361 West, grocery, 19 Baxter, h. 678 Greenwich			
1869					William Nealis	Worth Street assessment
1870	John Roach executors	William Nealis				L 1133, p. 403

<b>Former Block 161, Lot 25?, 21 Orange/Baxter Street, Ward 291</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1799	Edmond Livingston, interest of	Charles White				L 56, p. 304
1800	Charles and Jane White	Thomas Miller				L 58, p. 348
1805	African Methodist Episcopal Church of the City of New York in the State of New York called Zion Church	William Beatty				L 71, p. 229
1808					No addresses or ward numbers, names cannot be linked	

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

Former Block 161, Lot 253, 21 Orange/Baxter Street, Ward 291						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1810					No addresses or ward numbers; names cannot be linked, but may be Thomas Miller	
1812			21, Hugh Nesbit, Lewis Reade, Bernard Kennedy, Bern Canada			
1815					Patrick Meeghan (21 Orange), living there, tenant Lewis Link	L 118, p. 324
1816	Samuel F. Randolph et al. and David and Hanna Hutchings	Thomas Mooney				
1818	Edmond and Margaret Livingston	Jacob Ashley	Darby Gillen, 21 Orange			L 128, p. 180
1818	Jacob Ashley administrator	Patrick Mehen				L 129, p. 20
1818	Henrietta Ashley, widow of Jacob	Patrick Mehan				Release of dower, L 219, p. 14
1819			Terrence M'Gowan, 21 Orange			
1820	Thomas and Jane Miller	Francis Jacobs et al.				
1820	David and Mary Lynch and Robert Beatty	Patrick Meehen			Patrick Meeghan	L 143, p. 212 L 143, p. 255
1820	William and Hannah Hamilton	Patrick Mehen				L 145, p. 513
1821			Thomas Hudson, laborer, rear 21 Orange; Charles White, mariner, rear 21 Orange			
1823	Jane Mehen	Margaret Mehen				Quit claim; L 170, p. 57
1823	Margaret Mehen	Jane Mehen				L 170, p. 59
1828			Richard Finning, grocer, 21 Orange		Widow Meeghan (21 Orange)	
1829			Michael, M'Gown, grocer, 21 Orange, 374			
1830						
1832			Thomas W. Hannas, grocer, 21 Orange; Rennsalaer Halsey, mer. tailor, Pearl, h. 21 Orange		Thomas Mahan (21 Orange)	
1834			Patrick Waters, grocer, 21 1/2 Orange			
1835	David Hutchings	George Ives				
1840			Henry O'Neil, grocer, 21 1/2 Orange		Estate of Patrick Mehan (21 Orange)	L 327, p. 195
1842	George and Mary Ives	Nicholas Bertfoud			Estate Patrick Meeghan (21 Orange, Ward 291), tenant Henry O'Neil	L 429, p. 432

## APPENDIX A: INDIVIDUAL LOT HISTORIES

<b>Former Block 161, Lot 25?, 21 Orange/Baxter Street, Ward 291</b>					
Year	Grantor	Grantee	Directory	Census	Remarks
1842	Assignee of Nicholas Berthoud	John Roach			L 429, p. 434
1844	John McGlain et al., defendants	Sheldon Burwell			L 441, p. 596
1845	Sheldon and Margaret Burwell	Jane Ann McGloin trustee			L 454, p. 607
1846	Sheldon and Margaret Burwell and John and Frances McNulty	Jane Ann McGloin			L 476, p. 116
1846	George and Mary Ives	John Roach			L 477, p. 437
1847	John and Jane Ann Gleason	William Nealis			L 489, p. 401
1850				4 households headed by: Peter Gillespie, grocer; Saeten Vinchins (?), laborer; Anthony Bercha, street musician; Michael Warden, laborer; Total: 27 occupants	
1851			21, Peter Gillespie, grocer; Michael Hanley, rags		
1860			O'Shea, Patrick, rags, 21 Baxter	unclear	William Nealis
1861					
1869					Worth Street assessment

<b>Former Block 161, Lot unclear, 23 Orange/Baxter Street, Ward 290</b>					
Year	Grantor	Grantee	Directory	Census	Remarks
1808					No addresses or ward numbers, names cannot be linked
1810					No addresses or ward numbers, names cannot be linked, but may be John Park, tenants Benjamin Covenhoven, Stephen Hall, Jerediah Lippincott
1812			No specific address listed		Samuel Randolph, tenants Hiram Higgins, Strong
1815					
1817			Joseph Ludwick, distiller, 23 Orange		
1821			David Hutchings, tailor, 23 Orange; Michael Connolly, shoemaker, 23 Orange		
1820			Stephen Smith, mariner, 23 Orange		David Hutchings, tenant Abel Smith
1825					David Hutchings (23 Orange), tenant Henry Ireland

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot unclear, 23 Orange/Baxter Street, Ward 290</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1827			David Hutchings, tailor, 23 Orange			
1829			William, Nelson, physician, 23 Orange; Eliza, Prout, victualler, 23 Orange			
1830			David Hutchins, 23 Orange		Doctor Nelson (23 Orange), living there	
1832			David Hutchings, 23 Orange			
1834			Elias R. Hollenbeck, M.D., 23 Orange			
1835					David Hutchins (23 Orange) [Ives]	
1836			John Roach, tavern, 23 Orange			
1837			Roach, John, tavern, 23 Orange			
1840			John Roach, tavern, 23 Orange		Nicholas Berthoud (23 Orange, Ward 290), tenant John Roach	
1845					John Roach (23 Orange, Ward 290)	
1847			John Roach, liquors, 23 Orange, h. 23 Orange; Robert Frazer, boarding, 23 Orange			
1850				May be same listing as 81/85 or 89 Cross		Brothel at 23 Orange (DA papers, 26 Oct. 1850; Gilfoyle 2012)
1851			23, D. Daike, grocer; William Anderson, boarding			
1860			Dennis Shay, 23 Baxter; Jeremiah Doolan, poster, h. 23 Baxter; Henry Hynes, pedlar, h. 23 Baxter	unclear	John Roche	
1861			Hynes, Henry, pedlar, h. 23 Baxter			
1869					John Roache	Worth Street assessment

<b>Former Block 161, Lot unclear, 25 Orange/Baxter Street (Ward 553, same as 81 Cross/Park Street)</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1812			25, Amos Neptune, Samuel James			

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

Former Block 161, Lot unclear, 25 Orange/Baxter Street (Ward 553, same as 81 Cross/Park Street)						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1829			Julia Ann, Cassidy, 25 Orange, John, Duncan, grocer, 25 Orange, 407 Broadway; William, Spencer, mariner, 25 Orange; William, Watson, victualler, 25 Orange			
1830						Brothel at 25 Orange, cellar (DA papers, 16 April 1830; Gilfoyle 2012)
1835			Edward Langan, porterhouse, 25 Orange			
1837			Pascal, Romant, tavern, 25 Orange c. Cross			
1844						Brothel at 25 Orange, SE cor Cross (DA papers, 3 Sept. 1844; Gilfoyle 2012)
1845			Patrick Reynolds, victualing, 25 Orange			
1850				1 household headed by: Olona Green Total: 5 occupants 6 households headed by: Jacob Miller, shoemaker; George Anderson (M), victualler; William Harris, grocer; Peter Mendike (B), seaman; John Cummings, ship rigger; Elizabeth Beir (M) Total: 20 occupants NOTE: same as 85 Cross		Brothel at 25 Orange (DA papers, 20 Sept. 1850; Gilfoyle 2012)
1851			25, Eliza Green, clothier; Jacob Miller, shoemaker; Manke & Harris, grocers; H.D. Manke, William Harris			
1855						Brothel at 25 Orange (DA papers, 9 Feb. 1855; Gilfoyle 2012)
1860			Arthur Braden, exchange, h. 25 Baxter	unclear		
1865			Lane, Thomas, liquors, 25 Baxter, h. 854 W. 16 <sup>th</sup>			
1869					Henry O Keefe	Worth Street assessment

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot unclear, 27 Orange/Baxter Street (Ward 553, same as 81 Cross/Park Street)</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1812			27, Sophia Niblow, James Donalds, Peter Robell			
1828			William Vandyke, grocer, 27 Orange			
1834			William Woodbury, porterhouse, 27 1/2 Orange, h. 85 Cross			
1837			Chambers, Daniel, grocer, 27 Orange			
1842			Frederick Trow, grocer, 27 Orange; William Johnson (col'd), 27 Orange			
1850				unclear		Brothel at 27 Orange (DA papers, 26 Oct. 1850; Gilfoyle 2012)
1851			27, Herman Butoff, grocer, Robert Phelan, exchange			
1861			Schutte, John, grocer, 27 Baxter	John Schutte, store keeper, 6 occupants		
1865			Grote, Caspar, grocer, 27 Baxter			
1869					Henry O'Keefe	Worth Street assessment

<b>Former Block 161, Lot 27 1/2, 13 Mulberry Street, Ward 305</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1793	Obadiah and Abigail Wells	Archibald Gatfield				Lots 27 and 27 1/2, L 49, p. 284
1796	Archibald and Catharine Gatfield	Jared Beach				Lots 27 and 27 1/2, L 51, p. 318
1808			Beach, Jared, carpenter, 13 Mulberry; Beach, Nathaniel, shoemaker, 13 Mulberry, Hitchcock, Widow, seamstress, 13 Mulberry; Pallimer, Benjamin, rear 13 Mulberry		Gerard Beach (13 Mulberry), living there, tenant Erastus Smith, Nathaniel Beach, Samuel Hillweed?, Isatah Smart	
1810					Jared Beach (13 Mulberry), living there, tenants John Brown, Mr. Conn, John Vanhorn	
1812			13, Jared Beach, Martin Lyon, Ch. G. Sommers, James E. Ray, Jacob Winans, Mary M. Burke, Margaret Tier, John Higgs, Hannah Gilmore			

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 27 1/2, 13 Mulberry Street, Ward 305</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1814			Widow Tier, rear 13 Mulberry			
1815					Jared Beach (13 Mulberry), living there, tenants John Brown, Marcelus Prior	
1817	Jared Beach	John H. Harrison				Lots 22 and 27 1/2, L 119, p. 207
1818	Robert and Rebecca Baanon	John Brown				Lot 27 1/2, L 127, p. 208
1820	William and Elizabeth Thompson	Thomas Brown	Thomas Smith, sexton, 13 Mulberry		John H. Harrison (13 Mulberry), living there, tenants Thomas Smith, Richard Wood, Reed	Lot 27 1/2, L 152, p. 48
1825					John H. Harris (13 Mulberry), tenants Thomas Smith, Joseph Pettis	
1828			William Jewell, rigger, 13 Mulberry			
1829			Henry, Christie, 13 Mulberry; Robert, Dean, boot-crimper, 13 Mulberry rear. John H., Harrison, carpet manufacturer, 13 Mulberry; Joseph R., Lee, 13 Mulberry; Eliza, Mason, 13 Mulberry rear, Thomas, Smith, sexton, 13 Mulberry; Rachel, Vermilya, 13 Mulberry rear			
1830	Samuel and Elizabeth Higgins and Martin and Olivia Shaw	John George Gottsberger			Thomas Harrison (13 Mulberry), tenant Thomas Smith	Lot 27 1/2, L 365, p. 353
1835					Widow Harrison (13 Mulberry)	
1836	Samuel and Mary Linderbeck	John George Gottsberger				Lot 27 1/2, 1/5 interest, L 365, p. 350
1836	Eleanor Atkins	John George Gottsberger				Lot 27 1/2, 1/5 interest, L 365, p. 356
1837			Brusle, Peter, painter, rear 13 Mulberry; Price, Hampton B., clerk, 13 Mulberry; Vermilya, Rachel, widow of John, 13 Mulberry			
1838	Thomas and Elizabeth Harrison	John G. Gottsberger				1/5 interest; L 385, p. 639
1838	Mary Jane Jeffrey, heir of John H. Harrison	John G. Gottsberger				1/20 interest; L 391, p. 37



**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 27 1/2, 13 Mulberry Street, Ward 305</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1845					Widow Harrison (13 Mulberry, Ward 305)	
1840			Rachel Vermilya, widow of John, 13 Mulberry			
1841	Jane Harrison, widow of John	John G. Gottsberger				L 414, p. 291
1841	Jane Harrison et al., defendants	John G. Gottsberger				L 417, p. 438
1841	Sarah Frances Jeffrey	John G. Gottsberger				Lots 22, 27 1/2, 1/20 interest; L 420, p. 113
1844	John Brown executors	William Colgate				L 448, p. 158
1844	John Brown heirs	William Colgate				L 448, p. 160
1845					John C. Goetzberger (13 Mulberry, Ward 305)	
1850			Alexander Carvin/Ceraban/Sereben, butcher, 13 Mulberry; Isaac Thompson, second hand furniture dealer, 13 1/2 Mulberry, h. 11 Mulberry;	7 households headed by: Solomon Sturlong, baker; John Riker, clerk; Louis Barr; Samuel Ferris, tailor; Edward Benjamin, tailor; Patrick Donohoo, laborer; Alexander Cerebin, butcher Total: 29 occupants		
1851			13, Alexander Lereben, butcher; Samuel Stodolla, baker; Lonis Bell, tailor; Louis Rosentein, tailor			
1855					J.G. Gotsburger	
1860-1861			Molony, James, laborer, h. r. 13 Mulberry; Shea, Ellen, wid. Michael, h. r. 13 Mulberry	4 households headed by: John Burk, peddler; Ellen Shea, house keeper; Henry Kexton, peddler, John Kilfoy, laborer Total: 14 occupants	J.G. Gotsburger	
1863	George R. Thompson	Samuel Colgate				L 876, p. 640
1868	John George Gottsberger executors	James Cassin				Lots 22, 27 1/2, L 1033, p. 539
1869					Gotsberger	Worth Street assessment
<b>Former Block 161, Lot 27, 15 Mulberry Street, Ward 306</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1763	John and Rachel Kingston and Jacob and Jane Reed	Obadiah Wells				Lot 27 only; L 36, p. 464
1793	Obadiah and Abigail Wells	Archibald Gatfield				Lots 27 and 27 1/2, L 49, p. 284

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 27, 15 Mulberry Street, Ward 306</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1796	Archibald and Catharine Gatfield	Jared Beach				Lots 27 and 27 1/2, L 51, p. 318
1808			John Lippencott, mason, 15 Mulberry		John Lippincott (15 Mulberry), living there, tenants Jeremiah Spuce?, William Earles	
1810					John Lippincott (15 Mulberry), living there, tenant Thomas Ridgeway	
1812			15, John Lippincott			
1815					John Lippincott (15 Mulberry), living there	
1820					John Lippincott (15 Mulberry), living there	
1821	William Bethell executors	Robert Banman	John, Lippencott, mason, 15 Mulberry			L 152, p. 44
1825					John Lippincott (15 Mulberry), living there, tenant Henry Marshall	
1829			John, Lippencott, mason, 15 Mulberry; Hannah, Travis, 15 Mulberry			
1830					Jacob Dixott (15 Mulberry)	
1835					Herman Thorne (15 Mulberry), tenant Thomas Green [removed]	
1837			Graves, Chester, bookkeeper, 15 Mulberry; Melvin, Solomon, commissioner, 18 Wall, h. 15 Mulberry			
1840			Ashbel Chandler, jeweler, 53 Nassau, h. 15 Mulberry; John Scutthorpe, shoemaker, 15 Mulberry		Herman Thorne (15 Mulberry, Ward 306), tenants John Barker, Ashbel Chandler	
1845					Herman Thorne (15 Mulberry, Ward 306)	
1850			Patrick Owens, salesman, 15 Mulberry	7 households headed by: Alexander Achling, shoemaker; Robert Cotrell, last maker; Patrick Owens, clerk; Michael Connerly, tailor; William Miles, pattern maker; David Kearney, policeman; Catharine Dolterly Total: 25 occupants		
1851			15, Patrick Howard, sailor; F.W. Miles			
1855					H. Thorne	

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 27, 15 Mulberry Street, Ward 306</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1860-1861			Twomey, Jeremiah, laborer, h. 15 Mulberry; Cullen, John, porter, h. 15 Mulberry	5 households headed by: John Cullen, porter; Mary Runley, housekeeper; Michael Leary, laborer; John S. Riker, policeman; Elizabeth Wardell, housekeeper Total: 21 occupants	H. Thorne	
1865			Daver, Margaret, fruit, h. 15 Mulberry			
1869	Executors of Herman Thorne	James Cassin			— Thorne, Worth Street assessment	Lots 26 1/2 and 27; L. 1118, p. 200

<b>Former Block 161, Lot 26 1/2, 17 Mulberry Street, Ward 307</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1800	Henry and Martha Wells, Edward and Mary Livingston	Edward Livingston and Thomas Miller				Lots 24, 26, and 26 1/2, L. 58, p. 139
1808			Flanbrow, Widow, 17 Mulberry; Bassford, Thankful, 17 Mulberry, William Risley, shoemaker, 17 Mulberry		Widow Bashford (17 Mulberry), tenant William Risley?	
1810					Widow Bashford (17 Mulberry)	
1812			17, Anthony Wyble, Thomas Bassford, Thankful Bassford, Peter Patterson, John Patterson			
1815					Widow Bashford (17 Mulberry), tenant Thomas Bashford	
1820					Mrs. Bassford (17 Mulberry)	
1825					Widow Bassford (17 Mulberry)	
1829			Thomas, Smith, jeweller, 17 Mulberry			
1830					Jacob Dixon (17 Mulberry)	
1835					Herman Thorne (17 Mulberry), tenants Nathan Platt, Samuel Raynor	
1837			Platt, Nathan C., jeweler, 12 Maiden-L, h. 17 Mulberry; Raynor, Samuel, books, 76 Bowery, h. 17 Mulberry			
1840					Herman Thorne (17 Mulberry, Ward 307), tenant Nathan C. Platt	
1845					Herman Thorne (17 Mulberry, Ward 307)	

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 26 1/2, 17 Mulberry Street, Ward 307</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1850			Adam Hartman & Co., lithographers, 17 Mulberry, h. 17 Mulberry; Lewis Leichlweis, engraver, 17 Mulberry; Lewis Wedel, painter, 17 Mulberry	5 households headed by: Adam Hartman, lithographic prints; Joseph Baumaster, mixer of colors; Louis Weddel, Japanner, John O'Donnell, clerk; Hillen Jegen, tailor Total: 16 occupants		
1851			17, Worsley Hague, barber; G.L. Weber, furrier; Louis Webel, painter; C.C. Huber, painter			
1855			August Neubacher, tailor, h. 17 Mulberry; William H. Hughes, seaman, h. 17 Mulberry	8 households headed by: Philip Dufferback, shoemaker; John McKelvey, shoemaker; August Neubacher, tailor; Bernard Gilhooly, mason; William Hughes, runner; Henry Strombert, machinist; Margaret Kelly, seamstress; Christian Meyer, baker Total: 27 occupants	H. Thorne H. Thorne	
1860-1861						
1861	Executor of John Rutherford who was executor of William Jauncey	Executors of Herman Thorne				Lot 26 1/2, L 841, p. 435, release of mortgage
1865			McKelvey, John, shoemaker, 17 Mulberry			
1869	Executors of Herman Thorne	James Cassin			— Thorne, Worth Street assessment	Lots 26 1/2 and 27; L. 1118, p. 200

<b>Former Block 161, Lot 26, 19 Mulberry Street, Ward 308</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1791			Magnus Garret, carman, 19 Mulberry			
1800	Henry and Martha Wells; Edward and Mary Livingston	Edward Livingston and Thomas Miller				Lots 24, 26, and 26 1/2, L 58, p. 139
1808			Freeland, John, master(?), 19 Mulberry		Robert Wallis (19 Mulberry), tenant John Freeland	
1810					Robert Wallace (19 Mulberry), tenants John Smith, David Loughlin	

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 26, 19 Mulberry Street, Ward 308</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1812			19, John Dickinson, Edward Wooley, States Williams, Abraham Stewart			
1815					Widow Wallace (19 Mulberry), tenant Henry Luydam	
1816	James and Ann Banks, formerly Wallace	Robert Banks				L 115, p. 543
1818			Ebenezer Lothar, tailor, 19 Mulberry; Amable Goguet, milliner, 19 Mulberry			
1820	John Hartenstein	Cornelius Fradenburgh			James Banks (19 Mulberry), tenants Antonia Gazen, Robert Lawrence	Lots 26, 41; L 146, p. 244
1825			John M'Devitt, tailor, 19 Mulberry		Ann Banks (19 Mulberry), tenant John M'Devitt	
1829			Ann, Banks, 19 Mulberry; John, Bradburn, shoemaker, 19 Mulberry; B. Farole, artificial florist, 19 Mulberry			
1830					Ann Banks (19 Mulberry), tenant Bery Farrole	
1833	John and Sarah Heymer	Thomas Wallace				1/5 interest, L 293, p. 426
1834	Samuel Walker et al. (including Thomas Wallace)	Edwin Stebbins				Lots 26, 41; L 314, p. 178
1837			McMahon, Michael, tavern 19 Mulberry			
1835						
1840			Charles O'Neil, grocer, 19 Mulberry		Estate of Mrs. Banks (19 Mulberry) Edwin Stebbins (19 Mulberry, Ward 308)	
1845					Edwin Stebbins (19 Mulberry, Ward 308)	
1846	Edwin Stebbins executors	Owen O'Connor				Lots 26, 41; L 476, p. 1
1850				No names linked, but appears to be one or two large buildings with mostly black or mulatto residents		
1851			19, Luer Norman, grocer			
1855					E. Stephens	

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 26, 19 Mulberry Street, Ward 308</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1860			William H. Smith (col'd), butcher, r. 19 Mulberry; Michael A. Lynch, oysters, 19 Mulberry; William States (col'd), porter, h. r. 19 Mulberry	3 households headed by: Michael Lynch, bartender; Isabella Chase (b), housekeeper; Elizabeth Drummond (b), housekeeper Total: 13 occupants 4 households headed by: William States (b), steward; John Willson(b), steward; Mary Richardson (b), housekeeper; John Richardson (b), longshoreman Total: 14 occupants	Owen O'Connor	
1861			Jasper, Anna (col'd), wid. John, boardinghouse, r. 19 Mulberry			
1862	Abraham B. Hiltman	Harriet A. Stewart				
1864	Gerardus Hitman, interest of	Harriet A. Stewart				Lots 26, 41; L 869, p. 142 Lots 26, 41; L 224, p. 62
1869	William H. Johnson and Owen O'Connor	James Cassin			Owen O'Connor, Worth Street assessment	Lots 26, 41; L 1091, p. 288

<b>Former Block 161, Lot 41, 21 Mulberry Street, Ward 309</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1784	Michael Hortestien	John Garrett, trustee for Michael John Hortestien				L 41, p. 143
1801	Cornelius and Mercy Fradenburgh	John Hiltman				L 61, p. 143
1801	Michael Hartonstein et al.	Cornelius Fradenburgh				L 61, p. 187
1805			Lawrence Weaver, baker, 21 Mulberry			
1808			Green, Lawrence, tailor, 21 Mulberry		John Hiltman (21 Mulberry), tenants Lawrence Beaver, Lawrence Green, Mr. Teale?	
1810					John Hiltman (21 Mulberry), tenants Ernis Hass, John Noble, George Taylor?, James Thraitle?	
1812			21, Fred Staphii, Mary Marshall, Wm Meberg			
1815					John Hiltman (21 Mulberry), tenant Williamson	
1820	John Hartenstein	Cornelius Fradenburgh	John Thompson, rigger, 21 Mulberry		John Hiltman (21 Mulberry), tenants John Evans, John Thompson, John Chance	Lots 26, 41; L 146, p. 244

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

Former Block 161, Lot 41, 21 Mulberry Street, Ward 309						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1821						Brothel at 21 Mulberry (PC papers, box 7437, 5 Dec. 1821; Gilfoyle 2012)
1822						Brothel at 21 Mulberry (DA papers, 10 Jan. 1822; Gilfoyle 2012)
1825					John Hittman (21 Mulberry)	
1829			Amos, Jones, 21 Mulberry; Widow Mary, Perine, 21 Mulberry; William, Skinner, baker, 35 Canal, 21 Mulberry			
1830					Maurice Selah (21 Mulberry), tenant Sampson Moore	
1834	Samuel Walker et al. (including Thomas Wallace)	Edwin Stebbins				Lots 26, 41; L 314, p. 178
1835					Mrs. Nelson (21 Mulberry) [John Hiltman]	
1836						Brothel at 21 Mulberry, upper part (PC papers, box 7448, 11 Feb. 1836; Gilfoyle 2012)
1837			McCaffrey, Jeremiah, tavern, 21 Mulberry			
1840					John Hiltman (21 Mulberry, Ward 309)	
1845					John Hiltman (21 Mulberry, Ward 309)	
1846	Edwin Stebbins executors	Owen O'Connor				Lots 26, 41; L 476, p. 1
1850			James Dunford, oyster house, 21 Mulberry, John Stein, 21 Mulberry			
1851			No listing			
1855					John Hiltman	
1859	John Thomas Hiltman	Harriet A. Stewart	John Keogh, liquors, h. 21 Mulberry			Lot 41, 1/5 interest; L 796, p. 421
1860				John Keogh, store keeper Total: 6 occupants Possibly a second building with 6 households (12 occupants) of free blacks but cannot link names	John Hiltman	
1862	Abraham B. Hiltman	Harriet A. Stewart				Lots 26, 41; L 869, p. 142
1864	Gerardus Hiltman, interest of	Harriet A. Stewart				Lots 26, 41; L 224, p. 62

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 41, 21 Mulberry Street, Ward 309</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1869	William H. Johnson and Owen O'Connor	James Cassin			John Hillman, Worth Street assessment	Lots 26, 41, L. 1091, p. 288
1876	Harriette A. Stewart	Gerardus Hiltman				Lot 26; L. 1379, p. 116
<b>Former Block 161, Lot 40, 23 Mulberry Street, Ward 310</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1793			Jarvis Currey, carman, 23 Mulberry			
1808					Unclear	L. 84, p. 437
1809	Daniel Dunscomb executors	Henry Sickles				L. 84, p. 457
1809	Henry and Sarah Sickles	George Lorillard				
1810					Peter and George Lorillard (23 Mulberry), tenants Francis Boyce, James McConnell, John Chilty?, Oliver Strong	
1812			23, Elizabeth Leach, John McConnell, Samuel Ogden, William Flemming			
1813	Christian Nestell	George Lorillard				Lots 37, 38, 40, L. 103, p. 420
1813	Christian Nestell	George Lorillard				Lot 40 only, L. 103, p. 417
1815					G. Lorillard (23 Mulberry), tenants Hamilton Bigham, G.E. Everett, John McConnell, Hugh Marin	
1820					George Lorillard (23 Mulberry), tenants James Milligan, William Dobbs	
1825					John H. Harris (23 Mulberry), tenants Dorth? Graham, Morris July in b. house, H. Cook in b. house	
1829			Catharine, Cornelius, 23 Mulberry; Maurice, Selah, carpenter, 23 Mulberry, 24 Mulberry			
1830			Maurice Sebah, carpenter, 23 Mulberry, h. 51 Division; Thomas J. Harris, hatter, 120 Chatham, h. 23 Mulberry			John Harris (23 Mulberry), tenants Thomas Harris, Lemuel Harris
1835						John Harris (23 Mulberry), also living there
1837			Smith, Thomas, sexton, 23 Mulberry			



**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 40, 23 Mulberry Street, Ward 310</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1840			Albert Coles, silversmith, 6 L Green, h. 23 Mulberry; Walter L. Childs, upholsterer, 449 Pearl, h. 23 Mulberry; Charles J. Wallace, tailor, 23 Mulberry; George Smith, porter, 23 Mulberry		John W. Harris (23 Mulberry, Ward 310), tenants Albert Coles, Water Childs	
1845					John W. Harris (23 Mulberry, Ward 310)	
1850				4 households headed by: Thomas Hoy, laborer; John Smith, clerk; Herman Levi, tailor; Edward Owens, laborer Total: 34 occupants		
1851			23. Harman Levi, tailor; John Smith, clerk; Thomas Hoy, grocer			
1853	William Messer	Michael Goodwin				Assignment of Lease; L 600, p. 376
1853	Michael Goodwin	Thomas Hoy				Assignment of Lease; L 600, p. 376
1855						
1860			John Callaghan, grocer, 23 Mulberry	7 households headed by: John Callaghan, laborer, Thomas Hoy, laborer, Dennis Murphy, laborer, James Bartlett, seaman, John Donovan, laborer, John O'Connor, stage driver; John Davis, tailor Total: 27 occupants Possibly one other building on lot with 4 households but can't link names	Thomas Hoy Thomas Hogg	
1861			Bartlett, James D., seaman, h. 23 Mulberry			
1869					Thomas Hogg	Worth Street assessment
<b>Former Block 161, Lot 39, 25 Mulberry Street, Ward 311</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808					Unclear	
1810					John O'Neale (25 Mulberry), tenants Abraham Salter, Elijah Hitchcock	
1812			25. Joseph Drinker, William Baker			

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 39, 25 Mulberry Street, Ward 311</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1815					John O'Neale (25 Mulberry), tenants John Briton, Peter Nodine	
1820					Elijah Valentine (25 Mulberry), tenant Ebenezer McLean	
1825					Elijah Valentine (25 Mulberry), tenant John H. Rlick?	
1829			William, Briskcoe, silver- plater, 25 Mulberry; William, Florence, mariner, 25 Mulberry; Andrew, Lewis, mariner, 25 Mulberry			
1830					Elijah Valentine (25 Mulberry)	
1835					Elijah Valentine (25 Mulberry)	
1840					Peter Lorrillard (25 Mulberry, Ward 311)	
1841	George Lorrillard	John H. Harris				Lease, L 420, p. 58
1841	John H. Harris	James T. Collyer				Asst. of lease, L 60, p. 39
1842			Alois Schluser, shoemaker, 25 Mulberry			
1843	James T. Collyer	Richard Austin				L 434, p. 37
1843	Heirs of Peter Lorrillard et al.	Commissioners in Partition				L 442, p. 1
1843	Commissioners in Partition	Dorothea A.L. Wolfe (heir of Peter Lorrillard)				L 442, p. 3
1844	Daniel Dunscomb executors	Peter Lorrillard				L 442, p. 153
1845	Daniel Holzman heirs	William W. Messer			Catharine Lorrillard (25 Mulberry, Ward 311)	Lease, L 458, p. 358
1850				3 households headed by: Martin Herbert, shoemaker; John Smith, machinist; Joseph Wilson, laborer Total: 15 occupants		
1851			25, Martin Horbelt, shoes			
1855				3 households headed by: Philip Murphy, store keeper; Mary Horbelt, house keeper; John Heagan, mason; Total: 13 occupants May be other households in another building but can't link names	E.L. Spencer E.L. Spencer	
1860			Catharine Horbelt, widow Martin, shoes, h. 25 Mulberry			

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 39, 25 Mulberry Street, Ward 311</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1865			Gallagher, Eliza, wid. John, milk, 25 Mulberry			
1869					Spencer	No assessment for Worth Street
<b>Former Block 161, Lot 6, 6 Mulberry Street, Ward 389</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1765	John and Rachel Kingston	Ameranshe Somerindyck				Lots 5, 6, L 37, p. 372
1769	Isaac and Jemima Schutze	David Henry Mellow				Lots 2 and 6; L 38, p. 305
1790			Valentine Shimell, tea waterman, 6 Mulberry			
1799			Martin Englehart, baker, Mulberry			
1804			William Englehart, baker, 6 Mulberry, widow of Martin Englehart, baker, 6 Mulberry			
1808			George Graham, baker, 6 Mulberry		William Englehart, tenants George Graham, Bishop, John Smith	
1809	John and Mary Peterson	William and Jacob Peterson				Lots 3, 4, 6, 2/21 interest, L 83, p. 240
1810	Isaac and Catherine Williams	Anthony Rabel			Unclear	L 108, p. 400
1812			6, George Graham, James Graham, George Fash			
1815	Anthony and Maria Rabel	Isaac Williams			William Englehart (6 Mulberry), tenants James Darsie, John Henryon	L 108, p. 403
1820					George Englehart (6 Mulberry), tenants Uzal Ward, John Barbarie	
1825	Samuel Maghee executor	John Marschalck				Lots 5, 6, 7, examine 4; L 190, p. 78
1825	John and Sarah Somerindyck	Samuel Maghee				Lots 5, 6, 7, examine 4; L 190, p. 80
1825	John Marschalck executors	Samuel Norsworthy			Estate of G. Inglehart (6 Mulberry), tenant Jacob F. Kutzel	Lots 5, 6, 7, examine 4; L 190, p. 83
1829			John, Field, mariner, 6 Mulberry; Christian, Schonher, cabinetmaker, 6 Mulberry			
1830					Jacob Lorrillard (6 Mulberry)	
1835					Jacob Lorrillard (6 Mulberry), tenant James Gillen	
1840					Estate of Jacob Lorrillard (6 Mulberry, Ward 389)	

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 6, 6 Mulberry Street, Ward 389</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1845					Estate of Jacob Lorrillard (6 Mulberry, Ward 389)	
1851			6, J.H. Sanders, grocer			
1855					Estate of T. J. Inglehart	
1860	Lansing Merchant et al.	Maria and Elisha Dorr			Estate of T. J. Inglehart	Lot 6, L. 803, p. 408; release of judgment
1860	Edmund Dorr	Elisha Dorr				Lot 6, L. 803, p. 409; in trust for creditors
1860	George Englehart and Edmund Dorr assignees	Abner Mellin				Lot 6, L. 803, p. 413
1860	John J. Herrick	Maria and Elisha Dorr; assignees of George Englehart				Lot 6, L. 803, p. 416; release of judgment
1860	Thomas B. Vanbockirek	Maria and Elisha Dorr; assignees of George Englehart		unclear		Lot 6, L. 803, p. 417; release of judgment
1869					Estate of J. Inglehart	Worth Street assessment

<b>Former Block 161, Lot 7, 8 Mulberry Street, Ward 388</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1774	John and Elizabeth Fay	Margaret Beck				Lots 7 and 58, L. 40, p. 245
1774	John and Margaret Beck	Thomas Smith				Lots 7 and 58, L. 40, p. 248
1774	Thomas Smith	Margaret Beck				Lots 7 and 58, L. 40, p. 251
1789			Lawrence Low, constable, 8 Mulberry, Miss Johnson, seamstress, 8 Mulberry Fay, Jacob, shoemaker, 8 Mulberry			
1808					Unclear	
1810					Unclear	
1812			8, John Stewart, Job Tunae			
1813	Jacob Fay	William Smith				Lots 7 and 58, L. 101, p. 361
1813	Job Tunis	Mary and Jacob Morison et al.				Lots 7 and 58, L. 101, p. 463
1813	Catharine Gable	Jacob Morrisson				Lot 7 only, L. 103, p. 247
1813	Leonard and Fayette Allen	Jacob Morrisson				Lots 7 and 58, L. 103, p. 250
1813	Frederick Rigger et al.	Jacob Morrisson				Lots 7 and 58, L. 103, p. 397
1815	Jacob and Mary Morrisson	Elizabeth Dickey			Jacob Morrisson (8 Mulberry), tenant Menander Porter	Lots 7 and 58, L. 108, p. 628
1817	Jacob Morrisson et al., defendants	David Randell				Lots 7 and 58, L. 119, p. 217
1817	David Henry Mellows et al.	Martin Englehart				Lot 7 only; L. 119, p. 166
1818			David Roach, 8 Mulberry			

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 7, 8 Mulberry Street, Ward 388						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1820					David Randall (8 Mulberry), tenant Edward Nolan	
1821			Widow Ireland, 8 Mulberry; John Harkins, dyer, 8 Mulberry			
1825	Samuel Maghee executor	John Marschalck			David Randel (8 Mulberry), tenant Thomas Kelly (crossed out)	Lots 5, 6, 7, examine 4; L 190, p. 78
1825	John and Sarah Somerindyck	Samuel Maghee				Lots 5, 6, 7, examine 4; L 190, p. 80
1825	John Marschalck executors	Samuel Notsworthy				Lots 5, 6, 7, examine 4; L 190, p. 83
1829			William, Black, 8 Mulberry rear; Frederick M., Graham, physician, 8 Mulberry; Jonathan, Solomon, carpenter, 8 Mulberry, 300 Front; Hiram, Wisner, grocer, 8 Mulberry h. 62 Mott			
1830					David Randel (8 Mulberry), tenant Hiram Wisner	
1835					David Randall (8 Mulberry)	
1837			Cadwell, William S., shoemaker, 8 Mulberry, h. 10 Lispenard			
1840					David Randall (8 Mulberry, Ward 388)	
1845					David Randall (8 Mulberry, Ward 388)	
1846	David and Lydia Randell	James Barker and Samuel Towle				L 473, p. 494
1850				14 households headed by: David Curtin, grocer; Frederick Spencer, glass cutter; Matthew Spittle, blacksmith; Martin Doran, laborer; Leonard Kelly, book binder; James Brogan, tailor; Isaac Mendick, tailor; Peter Fitzpatrick, book binder; Bridget Danlin; James Cuddy, laborer; Jane Fardley; Esther Harding; Margaret Shield; Bernard Valladay, laborer Total: 61 occupants		

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 7, 8 Mulberry Street, Ward 388</b>						
<b>Year</b>	<b>Grantor</b>	<b>Grantee</b>	<b>Directory</b>	<b>Census</b>	<b>Tax Assessment</b>	<b>Remarks</b>
1851	James and Abigail Barker	Henry Scudder and William Curtis	8, David Curtis, liquors, Charles Harra, baker, 8 Mulberry; Henry Coyle, waiter, r. 8 Mulberry; Martin Doran, wool, r. 8 Mulberry; Simon M'Kenna, mason, r. 8 Mulberry			Lots 7, 58, L. 570, p. 382
1851	Enoch Dean	James Barker	John H. Ryan, porterhouse, 8 Mulberry; John Wells, laborer, h. 8 Mulberry; Patrick McDonald, laborer, h. 8 Mulberry		Scudder & Curtis	Lots 7, 58, L. 570, p. 401
1855						
1860				12 households headed by: John Madden, laborer; Lawrence Ryan, steam boat hand; Michael Burke, tailor; John Doyle, laborer; Catharine Hart, washer woman; James Cox, porter; Patrick Walsh, laborer; Michael Hannigan, junk dealer; Patrick McDonnell, laborer; Catharine Ryan, house keeper; Patrick Hoy, laborer; Augustus Lunstead, cigar maker; Total: 52 occupants 9 households headed by: Morris Powers, laborer; Daniel Collins, laborer; James Constantine, laborer; Ann Cady, washer woman; Margaret Breshnahan, Catharine Mays, house cleaner; Jane Smith, washer woman; Michael Hart, carman; Ellen Deavy, house cleaner Total: 33 occupants	Scudder & Curtis	

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 7, 8 Mulberry Street, Ward 388					
Year	Grantor	Grantee	Directory	Census	Remarks
1861			Connerly, Timothy T., grocer, 8 Mulberry; McMahon, Matthew, clerk, h. 8 Mulberry; McMahon, Michael, laborer, h. r. 8 Mulberry; Byrne, John, laborer, h. 8 Mulberry; Hart, Margaret, wid. James, h. 8 Mulberry; Coleman, Mary, wid. Thomas, h. r. 8 Mulberry; McDonald, Patrick, laborer, h. 8 Mulberry		
1869				Scudder & Curtis	Worth Street assessment
Former Block 161, Lot 57/58, 10 Mulberry Street, Ward 387					
Year	Grantor	Grantee	Directory	Census	Remarks
1774	John and Elizabeth Fay	Margaret Beck			
1774	John and Margaret Beck	Thomas Smith			Lots 7 and 58, L 40, p. 245 Lots 7 and 58, L 40, p. 248
1774	Thomas Smith	Margaret Beck			
1808					
1810					
1811	Job Tunis (interest of)	David Lyons			
1811	David and Matilda Lyons	George Brunn			L 95, p. 268 L 95, p. 270
1811	George Brunn	Hannah Tunis			
1812			10, Peter Williams, Fortain Dennis		L 95, p. 316
1813	Leonard and Fayette Allen	Jacob Morrisson			
1813	Frederick Rigger et al.	Jacob Morrisson			Lots 7 and 58, L 103, p. 250
1815	Jacob and Mary Morrisson	Elizabeth Dickey			
1817	Jacob Morrisson et al., defendants	David Randell			George Beck (10 Mulberry) Lots 7 and 58, L 108, p. 628
1820					Lots 7 and 58, L 119, p. 217
1825			John Campbell, cabinetmaker, 10 Mulberry, h. 40 Orchard		
1830					
1835			Samuel Weyer, painter, 10 Mulberry		
1837	George R. Beck	Rosannah Beck			Widow Beck, shop (10 Mulberry) Widow Parker, shop (10 Mulberry) [Beck] Lots 58, 59; L 379, p. 417

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 57?/58, 10 Mulberry Street, Ward 387						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1840			John Campbell, cabinetmaker, 10 Mulberry, h. 274 Grand		Widow Beck (10 Mulberry, Ward 387)	
1845					Widow Beck (10 Mulberry, Ward 387)	Lots 58, 59; L. 469, p. 568
1846	Rosanna Beck	James W. Barker and Samuel Towle				Lot 58 only, L. 483, p. 565
1847	Samuel Towle	James W. Barker				
1850				12 households headed by: William O'Reilly, bookseller; Bernard Harrimill, carpenter; Thomas Donahoo, frame maker; Mary Cunningham; James Brennon, porter; Dennis Murphy, mason; Margaret M'Mahon; Patrick Milan, laborer; Mark Kelly, carpenter; Jeremiah Wheelan, laborer; William Oakes, liquor dealer; Henry Rislau, inn keeper. Total: 53 occupants May also be two other buildings with 9 households each (44 occupants in each building) but cannot link any names; mostly Irish immigrants		
1851	James and Abigail Barker	Henry Scudder and William Curtis	10, William Oakes, liquors; Dennis Horan, laborer, r. 10 Mulberry; Daniel Reardon, laborer, r. 10 Mulberry; Patrick Cohen, porter, 10 Mulberry; Dennis Lanagan, tailor, r. 10 Mulberry; Margaret Fitz, widow, washer, r. 10 Mulberry; Dennis Lyons, laborer, r. 10 Mulberry; Dennis Holbert, laborer, r. 10 Mulberry; Catharine Head, boots, r. 10 Mulberry			Lots 7, 58; L. 570, p. 382
1851	Enoch Dean	James Barker				
1855					Scudder & Curtis	Lots 7, 58; L. 570, p. 401



## APPENDIX A: INDIVIDUAL LOT HISTORIES

Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1860-1861			<p>O'Connell, Patrick, laborer, h. r. 10 Mulberry; Murphy, Timothy, laborer, h. r. 10 Mulberry; Murphy, Catharine, wid. John, h. r. 10 Mulberry; Gleason, Ann, wid. Thomas, h. r. 10 Mulberry; McAndrew, Patrick, laborer, h. r. 10 Mulberry; Brower, Maria, wid. George, h. r. 10 Mulberry; O'Brien, Margaret, wid. Marks, h. 10 Mulberry; Keegan, Owen, tailor, h. 10 Mulberry; Hillen, John, laborer, h. r. 10 Mulberry; Garvin, John, laborer, h. r. 10 Mulberry; Maloney, Ann, wid. Allen, h. r. 10 Mulberry</p>	<p>8 households headed by: Timothy Murphy, laborer; Bettisia McCarrick Winaford Dannell, washerwoman; Ellen Fitzgerald; John Garvin, laborer; John Coterin, clerk; Patrick McMahon, laborer; Louisa Bussiner, house cleaner Total: 41 occupants 6 households headed by: Ann Collins, seamstress; William O. Murphy, liquor dealer; Edward Lovin, porter; Dominick Hart, laborer; Patrick Bowers, foreman in hotel; Margaret O'Brien, housekeeper; Ellen Holland; Timothy Conerary, grocer; John Langen, tailor Total: 54 occupants 10 households headed by: Andrew Currin, watchman; Andrew Fogarty, laborer; Hannah Hallin, house cleaner; Thomas Burns, cap maker; Patrick Connell, laborer; Patrick Delaney, laborer; Lawrence Proute, tailor; Johanna McCurdy; Patrick McAndrew, laborer; Dennis Colbert, laborer Total: 36 occupants 8 households headed by: John Bossenger; Mary Joyce; John Cummings, rigger; William Leathy, laborer; John Doyle, laborer; Otto Lawrence; Patrick Meane, tailor; Catharine Brown, seamstress; Total: 26 occupants</p>	No listing	

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 57?/58, 10 Mulberry Street, Ward 387</b>			
Year	Grantor	Grantee	Remarks
1865		Directory Cain, James, laborer, h. 10 Mulberry; Fitzgerald, John, laborer, h. 10 Mulberry; Hines, Martin, laborer, h. 10 Mulberry	
1869			Scudder & Curtis Worth Street assessment
<b>Former Block 161, Lot 59, 12 Mulberry Street, Ward 386</b>			
Year	Grantor	Grantee	Remarks
1805		Directory Margaret Lafian, 12 Mulberry	
1808			George Beck, tenants Francis McCullum, David Fortime?, David Kennon, Julian Scott, Nace Short
1810			Unclear
1812		12, B.S. Orsbom, Mary Travis, Richard Bostwick, Nace Shurter, Maria Willson	
1815			George Beck (12 Mulberry), tenants John Wessen?, John Scott, William Warner, Jacob Hutson
1816	John Strang	James Donaldson	L 112, p. 484
1820			Widow Beck (12 Mulberry)
1825			Widow Beck (12 Mulberry)
1829		Widow Rachel, Goodwin, 12 Mulberry; Sarah, Richards, victualler, 12 Mulberry; Samuel, White, silversmith, 127 Mulberry	
1830			Widow Beck (12 Mulberry)
1835			Widow Parker (12 Mulberry) [Beck] L 368, p. 143
1836	William H. Strang et al., defendants	James J.M. Valentine	
1837	George R. Beck	Rosannah Beck	Lots 58, 59; L 379, p. 417
1840			Widow Beck (12 Mulberry, Ward 387)
1841		Conrad Wurmnest, tailor, 12 Mulberry	
1845			Widow Beck (12 Mulberry, Ward 387)
1847	Samuel Towle	James Barker	Lot 59 only, L 483, p. 564

### APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 59, 12 Mulberry Street, Ward 386						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1850				9 households headed by: John O'Neil, grocer; James Byron, crockery dealer; George Cook, shoemaker; Julius Dumpey, tailor; Samuel Stone, tailor; Louis Caspar, tailor; Patrick Twigg, tailor; Patrick Cohen, porter; Michael Mooney, laborer Total: 39 occupants		
1851			12, John O'Neill, grocer			
1855					Scudder & Curtis (part)	
1857	William M. Valentine interest	Israel D. Walter				L 729, p. 256
1857	Israel and Henrietta Walter	Lawrence Myers and Philip Pike				L 727, p. 498
1860	Philip and Hannah Pike	Lawrence Myers		Unclear	Scudder & Curtiss	Lot 59; L 799, p. 606, 1/2 interest
1865			Cauley, Patrick, laborer, h. 12 Mulberry; O'Byrne, Marg't, wid. Patrick, dealer, 12 Mulberry			
1869					Lawrence Myers	Worth Street assessment

Former Block 161, Lot 60?/61, 14 Mulberry Street, Ward 385						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1763	John and Rachel Kingston	Obadiah Wells				Lots 61, 62, 63; L 36, p. 467
1789			William Hawx, 14 Mulberry			
1793			Jacob Cypher, laborer, 14 Mulberry; John Sherwood, house-carpenter, 14 Mulberry			
1803	James and Rachel Dunlap	John Strang				
1808			Bannan, Robert, grocer, 14 Mulberry		Unclear	Lot 61, 1/2 interest, L 65, p. 218
1809	Theophilis and Catherine Marselis	Charles Mahoney				
1809	Charles and Margaret Mahoney	Walter Fleming				Lot 61, L 84, p. 86
1809	Walter and Biddy Fleming	Christopher Dinninger				Lot 61, L 84, p. 89
1810						
1812			14, John Strang		Unclear	Lot 61, L 84, p. 92

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 60?/61, 14 Mulberry Street, Ward 385						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1813	Christopher and Mary Dinninger	Charles Gilmore				Lot 61, L 104, p. 146
1815					John Strang (14 Mulberry), tenants John Wenman?, George Jarvis, Joseph Patterson	
1816	John and Sarah Strang	Henry Strang	Widow of John Strang, grocer, 14 Mulberry			Lot 61, L 114, p. 7
1817	John Strang, interest of	Thomas Ash				Lot 61, L 124, p. 13
1817	Henry and Ann Eliza Strang	Eldad and Irad Holmes				Lot 61, L 123, p. 575
1818	Martha Johnston	Richard and Julia Johnston trustee				1/3 interest; L 132, p. 47
1820					Sarah Strang (14 Mulberry), living there	
1825					Sarah Strang (14 Mulberry)	
1829			William, Strang, grocer, 14 Mulberry			
1830	Henry Waring	George W. Platt	John Basley, ropemaker, 14 Mulberry		Mr. Strang (14 Mulberry)	Lot 61; L 266, p. 258
1830	Heirs of Richard Johnston and John Southall	George W. Platt				Lot 61; L 266, p. 260
1835					Estate of Widow Strang (14 Mulberry)	
1840					Woodhull & Valentine (14 Mulberry, Ward 386)	
1845					J.M. Valentine (14 Mulberry, Ward 386)	
1846	Irad and Sarah Hawley	Francis C. Guinaud				Lot 61; L 474, p. 130
1850				4 households headed by: Conrad Wournnest, tailor; Abraham Mendelson, tailor; Maurice Jacobs, tailor; Louis Cutloff, cap maker Total: 17 occupants		
1851			14, Conrad Wurnnest, tailor; William Schoppe, tailor; Godfrey Mithely, waiter			
1855					I. W. Valentine	

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 60?/61, 14 Mulberry Street, Ward 385						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1860				9 households headed by: John Griffin, grocer, Mary Mitchal, washer woman; Daniel Dismene, laborer; John Russell, laborer; Michael Taylor, tailor; Henry Almon, tailor; Michael Donohue, tailor; Catharine Burrett, washer woman; John McGinnis, carpenter Total: 34 occupants	Lawrence Myers	
1861			Donohue, Michael, tailor, h. 14 Mulberry			
1863	Frederick and Ellen Evers	Henry Bischoff				
1865			Griffin, John, grocer, 14 Mulberry			Lot 61, L 872, p. 276
1869						
1871	William and Mary Phelps	James Cassin			Frederick Evers	Worth Street assessment Lot 61; L 1155, p. 565

Former Block 161, Lot 61, 16 Mulberry Street, Ward 384						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1803	James and Rachel Dunlap	John Strang				Lot 61, 1/2 interest, L 65, p. 218
1805						
1808			Francis Dupont, cabinetmaker, 16 Mulberry Strang, John, carpenter, 16 Mulberry; Markly, Conrad, tobacconist, 16 Mulberry		Unclear	
1809	Theophilis and Catherine Marselis	Charles Mahoney				Lot 61, L 84, p. 86
1809	Charles and Margaret Mahoney	Walter Fleming				Lot 61, L 84, p. 89
1809	Walter and Biddy Fleming	Christopher Dinninger				L 84, p. 92
1810						
1812			16, Richard Stanton, Alexander Burns, John Disbrough, Abby Waters, Mary Wittson		Unclear	
1815	Charles and Elizabeth Gilmore	Richard Johnston				L 111, p. 321
1816	John and Sarah Strang	Henry Strang			John Strang (16 Mulberry), living there	Lot 61, L 114, p. 7
1817	John Strang, interest of	Thomas Ash				Lot 61, L 124, p. 13

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 61, 16 Mulberry Street, Ward 384						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1817	Henry and Ann Eliza Strang	Eldad and Irad Holmes				Lot 61, L 123, p. 575
1818	Martha Johnston	Richard and Julia Johnston trustee				1/3 interest; L 132, p. 47
1820			John Turnier, 16 Mulberry, M.C. Turnier, teacher, 16 Mulberry		Edward Holmes, tenant John Teller?	
1825					Holmes & Hawley (16 Mulberry)	
1829			Samuel, Marvin, inspector of customs, 16 Mulberry, David, Platt, thimble maker, 16 Mulberry			
1830	Henry Waring	George W. Platt			Holmes & Hawley (16 Mulberry), tenant Samuel Marvin	Lot 61; L 266, p. 258
1830	Heirs of Richard Johnston and John Southall	George W. Platt				Lot 61; L 266, p. 260
1835						
1837			Platt, David, jeweler, 12 Maiden-lane, h. 16 Mulberry; Wickham Jr., Daniel H., silversmith 106 Reade, h. 16 Mulberry		Holmes & Hawley (16 Mulberry)	
1840						
1845					Holmes & Hawley (16 Mulberry, Ward 385)	
1846	Irad and Sarah Hawley	Francis C. Guinaud			Irad Hawley (16 Mulberry, Ward 385)	Lot 61; L 474, p. 130
1850				5 households headed by: John Crieghtbill, tailor; John Stozzer, tailor; Solomon Solomon, pedlar; Carl Conrad, blacksmith; Jacob Bellen, shoemaker Total: 15 occupants		
1851			16, J.P. Krehbiel, tailor; Solomon Solomon, pedlar; John Stroeszzer, tailor; Jacob Benner, shoes; Charles Conrad, smith			
1853	Francis and Matilda Guinaud	George and Martin Munch				L 640, p. 11
1853	George and Eliza Platt	William Phelps				L 654, p. 303
1855					G. & M. Munch (Halley crossed out)	
1857	George Munch et al.	Frederick Evers				L 726, p. 97

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

Former Block 161, Lot 61, 16 Mulberry Street, Ward 384						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1860-1861			Friedmann, Solomon, pedlar, h. r. 16 Mulberry; Monahan, Bridget, wid. John, bdgh., 16 Mulberry; Dempsey, John, mason, h. 16 Mulberry; Ruppert, John F., shoes, h. r. 16 Mulberry; Halpin, Jane, wid. Thomas, h. r. 16 Mulberry	5 households headed by: James Ryan, liquor dealer; Timothy Ryan, painter; Rachel Livy, tailress; Lewis Brumm, porter; John Ruppert, shoe maker Total: 13 occupants		
1863	Frederick and Ellen Evers	Henry Bischoff				Lot 61; L. 872, p. 276
1865			Shand, George, liquors, 16 Mulberry			
1869					G. W. Platt	Worth Street assessment
1871	William and Mary Phelps	James Cassin				Lot 61; L. 1155, p. 565

Former Block 161, Lot 54, 1 Mott Street, Ward 662 (same as 174 Chatham)						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1812			i. E. Halsted, jr., Smith Ovvutt?			
1820	Jacob and Margaret Webbers	David Devoore				Lots 54, 55, 56; L. 146, p. 434
1820	Abraham and Ann Brevoort	James Myers				Lots 54, 55, 56; L. 146, p. 437
1822	James J. Myers estate	Daniel McLaren, Jr.				Lots 51-56; L. 158, p. 354
1822	Robert C. Cornell and Foster Nostrand	Daniel McLaren, Jr.				Lots 50-56; L. 158, p. 358
1822	James J. Myers estate	Obadiah Peck				Lots 51-56; L. 160, p. 58
1822	James J. Myers estate	John Drake				Lots 51-56; L. 160, p. 63
1822	Robert C. Cornell and Foster Nostrand	John Drake				Lots 51-56; L. 160, p. 67
1822	Robert C. Cornell and Foster Nostrand	John Drake				Lots 51-56; L. 160, p. 71
1822	Robert C. Cornell and Foster Nostrand	John Drake				Lots 51-56; L. 160, p. 72
1822	Foster Nostrand	Benjamin Driggs				Lots 51-56; L. 160, p. 73
1822	Foster Nostrand	Benjamin Driggs				Lots 51-56; L. 162, p. 82; quit claim
1829	James J. Myers estate	Benjamin Driggs				Lots 51-56; L. 162, p. 85
1850			Isaac P., Chapin, feather-store, 1 Mott; James, Warrell, portrait painter, 1 Mott	unclear		

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 54, 1 Mott Street, Ward 662 (same as 174 Chatham)						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1851			I. A. Mellin & Co, feathers, William Banks, W. Pomroy, Thomas Warren, physician			
Former Block 161, Lot 54, 3 Mott Street, Ward 391						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808			Bell, Thomas, grocer, 3 Mott		James Meyer (3 Mott), tenants Thomas Bell, Mr. Douglas James Myers (3 Mott), living there, tenants Joseph Butler, Francis Peers	
1810						
1812			3, John Brown, A. Kerstinecker, Mr. Shannenbun, Henry Fisk			
1815					James Myers (3 Mott), tenants Richard Cornell, Jacob Hoffman, Tubb?	
1820	Jacob and Margaret Webbers	David Devoore				Lots 54, 55, 56; L 146, p. 434
1820	Abraham and Ann Brevoort	James Myers	Andrew Hart, laborer, 3 Mott		Estate James Myers (3 Mott), tenant Joseph Hoyt, Andrew Hart	Lots 54, 55, 56; L 146, p. 437
1822	James J. Myers estate	Daniel McLaren, Jr.	Pye & Whaley, locksmiths, 3 Mott			Lots 51-56; L 158, p. 354
1822	Robert C. Cornell and Foster Nostrand	Daniel McLaren, Jr.				Lots 50-56; L 158, p. 358
1822	James J. Myers estate	Obadiah Peck				Lots 51-56; L 160, p. 58
1822	James J. Myers estate	John Drake				Lots 51-56; L 160, p. 63
1822	James J. Myers estate	John Drake				Lots 51-56; L 160, p. 67
1822	Robert C. Cornell and Foster Nostrand	Obadiah Peck				Lots 51-56; L 160, p. 71
1822	Robert C. Cornell and Foster Nostrand	John Drake				Lots 51-56; L 160, p. 72
1822	Robert C. Cornell and Foster Nostrand	John Drake				Lots 51-56; L 160, p. 73
1822	Robert C. Cornell and Foster Nostrand	John Drake				Lot 54 only; L 160, p. 174
1822	Robert C. Cornell and Foster Nostrand	Benjamin Driggs				Lots 51-56; L 162, p. 82; quit claim
1822	James J. Myers estate	Benjamin Driggs				Lots 51-56; L 162, p. 85
1823	James Weeks et al.	Obadiah Peck				Lot 54 only, release of mortgage; L 166, p. 188
1823	Elizabeth, Lizetta and Obadiah Peck	Thomas Whaley				Lot 54 only; L 166, p. 190
1825			Jane Baker, widow of Leonard, 3 Mott		Thomas Whaley (3 Mott)	
1830					Pye & Whaley (3 Mott)	



## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 54, 3 Mott Street, Ward 391						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1835					Mrs. Whaley (3 Mott), tenant Allan Kingsland	
1837			Latour, Rebecca, widow of John, 3 Mott			
1840						
1845						
1850			Klimker & Co. grocers, 3 Mott	6 households headed by: Augustus Lazenar, clerk; Richard Smith, boot maker; John Burns, caulker; Joseph Molan, boot maker; Jacob Collisti, cap maker; Arthur Harrison, inn keeper; Total: 39 occupants	Widow Whaley (3 Mott, Ward 391) Widow Whaley (3 Mott, Ward 391)	
1851			3, Richard Smith, shoemaker; John Burns, boarding; Joseph Knowlan, shoemaker; Mattheus Hohn, grocer			
1855						
1860				unclear	Mrs. Whaley Mrs. Wiley	
1861						
1865			Sullivan, James, liquors, 168 Chatham, h. 3 Mott Conway, Martin, cooper, h. 3 Mott			
1869					Illegible	No Worth Street assessment yet
Former Block 161, Lot 53, 5 Mott Street, Ward 392						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808			James Myers, merchant, 7 Mott		James Myers, back (7 Mott), living there	
1810						
1812					James Myers, back (7 Mott), tenants Benjamin Ashley, Frederick Bascadore	
1815			No specific address listed			
1820	William Brawnjohn executors	James Myers			Samuel Myers, back (no number), tenants Isaac Myers, William Ashford	
1822	James J. Myers estate	Daniel McLaren, Jr.			Estate James Myers (5 Mott), tenant John Flower	Lots 51, 52, 53, L 146, p. 440
1822	Robert C. Cornell and Foster Nostrand	Daniel McLaren, Jr.				Lots 51-56; L 158, p. 354
1822	James J. Myers estate	Obadiah Peck				Lots 50-56; L 158, p. 358
						Lots 51-56; L 160, p. 58

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 53, 5 Mott Street, Ward 392						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1822	James J. Myers estate	John Drake				Lots 51-56; L 160, p. 63
1822	James J. Myers estate	John Drake				Lots 51-56; L 160, p. 67
1822	Robert C. Cornell and Foster Nostrand	Obadiah Peck				Lots 51-56; L 160, p. 71
1822	Robert C. Cornell and Foster Nostrand	John Drake				Lots 51-56; L 160, p. 72
1822	Robert C. Cornell and Foster Nostrand	John Drake				Lots 51-56; L 160, p. 73
1822	Robert C. Cornell and Foster Nostrand	Benjamin Driggs				Lots 51-56; L 162, p. 82; quit claim
1822	James J. Myers estate	Benjamin Driggs			John Deake (5 Mott), tenant William Couch	Lots 51-56; L 162, p. 85
1825						
1826			Stebbins and Couch, 5 Mott; William Couch, 5 Mott			
1829			Thomas, Dewitt, rev. D. D., 5 Mott			
1830					John Drake (5 Mott), tenant Thomas Dewitt	
1835					John Drake (5 Mott), tenant S.T. Skidmore (artiliariast in military)	
1837			Skidmore, Samuel T., merchant, 131 Pearl, h. 5 Mott			
1840					John Drake (5 Mott, Ward 392), tenant S.T. Skidmore	
1845				May be same occupants as 3 Mott	John Drake (5 Mott, Ward 392)	
1850						
1851			5, Arthur Harrison; Isaac Hall, printer			L 636, p. 13
1853	Archibald Hilton, Referee	George Law, John Drake et al., Caroline Townsend, Samuel Skidmore et al.				
1855				unclear	John Drake	
1860					George Law	
1861			Harrison, Edward, liquors, 179 Chatham & New Bowers n. Oliver, h. 5 Mott			
1865			Hall, Isaac P., printer, h. 5 Mott			
1869					Saw	No Worth Street assessment yet

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot unclear, 160 Chatham Street, Ward unknown (address only, part of adjacent lots)</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808						
1810			No listings		Unclear	
1812					Unclear due to different numbering, but may be William Englehart, 128 Chatham, tenant William Pike, Isaac Oakley	
1815			J&C T Ward (128 Chatham)			
1820					Unclear due to different numbering, but may be William Englehart, 128 Chatham, tenant Pratt & Mount	
1825					John Pell, 158 and 160 Chatham, tenants John Richardson, John Richardson Jr.	
1829			F. Peters, dry goods, 160 Chatham		Estate John Pell, house, 160 Chatham, tenant Leonard Peters	
1830			Samuel Price, shoe store, 160 Chatham; James Taylor, shoemaker, 160 Chatham			
1835			James D. Miller, dry goods, 160 Chatham, h. 18 Eldridge		Widow Pell, house, 160 Chatham	
1840					Widow Pell, 2 stores, 158 and 160 Chatham	
1845					No listing	
1851					No listing	
1860			No listing		No listing	
				unclear		

<b>Former Block 161, Lot 1, 162 Chatham Street, Ward 659</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808						
1810			No listings		Unclear	
1812					Unclear	
1815			Henry Eagle (130 Chatham)			
1820					Unclear due to different numbering, but may be Daniel Hall, 130 Chatham, tenant Henry Eagle	
1822					Hopkins & Smith, 162 and 164 Chatham	
1825			John T. Hopkins, 162 Chatham			
1829			James W., Pinekney, drygoods, 162 Chatham		Hopkins, 162 and 164 Chatham, tenant Alfred Hopkins	

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 1, 162 Chatham Street, Ward 659						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1830			Isaac M. Pinckney, dry goods, 162 Chatham		J.W. Pinckney & Co., 162 and 164 Chatham, resident J.W. Pinckney	Lots 1, 3; L 309, p. 134
1834	Commissioners	John Pell			J.W. Pinckney, 2 stores, 162 and 164 Chatham, tenant John Heath	
1835					Estate Hopper (162 Chatham, Ward 659), tenant John Heath	
1840			John Heath, dry goods, 162 Chatham		Estate Hopper (162 Chatham, Ward 659)	L 455, p. 613
1845	Interest of Garrett H. Striker	Seabury Brewster				
1850				John Reese, merchant Total: 5 occupants		
1851			162, Roberts & Rees, drygoods; L.T. Roberts, John Rees			
1853	John Drake et al.	Francis T. Luqueer			Mrs. Hopper	
1860-1861			Davies, John L., drygoods, 162 Chatham, h. 205 Division; Jones, Eleazer, agent, 23 B-way, h. 162 Chatham; Roberts, Joshua, drygds, 162 Chatham	6 households headed by: Joshua Roberts, drygoods; Ralph Lord, photographer; James Imore, coffee saloon (+ 7 men); Jacob Walfisitan (?), tailor; James Johnson, liquor dealer; Elizabeth Smith, saloon keeper Total: 30 occupants		Lots 1, 55, 56; L 624, p. 651
1865			Drummond, William L., photographer, 162 Chatham			
1869	Jacob Mott, bankrupt	James M. Smith			Mott & Stryker, Worth Street assessment	Lot 1; L 1090, p. 121
1869	Jordon Mott, bankrupt	James M. Smith				Lot 1; L 1090, p. 124
Former Block 161, Lot unclear, 164 Chatham Street, Ward unknown (address only, part of adjacent lots)						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808			No listings		Unclear	
1810					Unclear	
1812			Henry Eagle (130 Chatham)			
1815					Unclear due to different numbering, but may be Daniel Hall, 130 Chatham, tenant Henry Eagle Hopkins & Smith, 162 and 164 Chatham	
1820					Hopkins, 162 and 164 Chatham, tenant Alfred Hopkins	
1825						
1829			William, Brown, hatter, 164 Chatham			

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot unclear, 164 Chatham Street, Ward unknown (address only, part of adjacent lots)</b>			
Year	Grantor	Grantee	Directory
1830			
1835			Charles W. May, merchant, 164 Chatham; David Morrison, merchant, 164 Chatham, h. 43 Grand
1840			David Morrison, thread and needle store, 164 Chatham
1845			
1850			
1851			164, David Morrison, thread & nee
1860			Robert Irwin, 164 Chatham

<b>Former Block 161, Lot 56, 166 Chatham Street, Ward 660</b>			
Year	Grantor	Grantee	Directory
1808			Stephen Ludlum, drygood store, 132 Chatham
1810			
1812			James H. Guion & Co., Gamble & Pratt (132 Chatham)
1815			
1820	Jacob and Margaret Webbers	David Devoore	
1820	Abraham and Ann Brevoort	James Myers	
1822	James J. Myers estate	Daniel McLaren, Jr.	
1822	Robert C. Cornell and Foster Nostrand	Daniel McLaren, Jr.	
1822	James J. Myers estate	Obadiah Peck	
1822	James J. Myers estate	John Drake	
1822	James J. Myers estate	John Drake	
1822	Robert C. Cornell and Foster Nostrand	Obadiah Peck	
1822	Robert C. Cornell and Foster Nostrand	John Drake	
1822	Robert C. Cornell and Foster Nostrand	John Drake	
1822	Robert C. Cornell and Foster Nostrand	Benjamin Driggs	
1822	James J. Myers estate	Benjamin Driggs	

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot 56, 166 Chatham Street, Ward 660						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1825			Elbridge, Malby, merchant, h. 10 Mott, 166 Chatham		John Drake, 166 Chatham	
1829						
1830					John Drake, 4 tenements, 166, 168, 170, 172 Chatham	
1835					John Drake, 4 stores, 166, 168, 170, 172 Chatham, tenant Nathaniel Wood	
1840					No listing	
1845			Stephen O. Jennings, carpets, 166 Chatham, h. 187 E. Broadway		John Drake (166 Chatham, Ward 660)	
1850			No listing	unclear		
1851						
1853	John Drake et al.	Francis T. Luqueer				Lots 1, 55, 56, L 624, p. 651
1860			Theodore Kaliske, clothier, 166 Chatham; Solomon Cohen, caps, 166 Chatham; Joseph Levy, clothier, 166 Chatham, h. 25 City Hall Pl.	5 households headed by: Solomon Cohen, cap maker; Jacob Bernus; George Habermil, artificial flowers; Frederick Reamer, varnisher; Margaret Greene, washer woman Total: 18 occupants	F.T. Legeurre? Leguire?	
1861			Cohen, Solomon, caps, 166 Chatham; Cohen, S. & Co., caps, 166 Chatham; Cohn & Bernas, hatters, 166 Chatham			
1865			Davies, John L., drygds, 166 Chatham			
1869					F.T. Luqueer	Worth St. assessment
Former Block 161, Lot unclear, 168 Chatham Street, Ward unknown (address only, part of adjacent lots)						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808			Stephen Ludlam, drygood store, 132 Chatham		Unclear	
1810						
1812			James H. Guion & Co., Gamble & Pratt (132 Chatham)		Unclear	
1815						Unclear due to different numbering, but may be Widow Table, 132 Chatham, tenant James Guion, Matthais Williams
1820						John Drake, 168 Chatham

### APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot unclear, 168 Chatham Street, Ward unknown (address only, part of adjacent lots)						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1825						
1829			Isaac, Freeman, victualler, 168 Chatham; Hall & Mellen, feather store, 168 1/2 Chatham; Hezekiah, Kelley, 134 Madison, 168 1/2 Chatham; Kelley & Robinson, drygoods, 168 1/2 Chatham upstairs; Stephen, Lyon, tailor, h. 74 Hester, 168 1/2 Chatham; Oliver, Mathews, drygoods, h. 31 Harman, 168 Chatham; James, Robinson, 130 Madison, 168 1/2 Chatham; Frederick, Weed, 168 1/2 Chatham		Oliver Mathews, 168 Chatham, lives there	
1830						
1835					John Drake, 4 tenements, 166, 168, 170, 172 Chatham	
1837			Hall & Mellen, featherstore, 168 1/2 Chatham & 1 Mott; Phillips, Alfred, drygoods, 168 Chatham		John Drake, 4 stores, 166, 168, 170, 172 Chatham, tenant Nathaniel Wood	
1840						
1845					No listing	
1850					No listing	
1851			168, Lyon & Cohen (ref.), watches; 168 1/2, A. Mellen & Co., feather store, mattress warehouse, and curled hair manufactory; William Banks, Wright Pemroy	Abraham Lyons, jeweler Total: 2 occupants		
1860						
1861			Sullivan, James, liquors, 168 Chatham, h. 3 Mott	unclear	No listing	

## APPENDIX A: INDIVIDUAL LOT HISTORIES

Former Block 161, Lot unclear, 168 Chatham Street, Ward unknown (address only, part of adjacent lots)		Tax Assessment		Remarks	
Year	Grantor	Grantee	Directory	Census	Tax Assessment
1865			Russell, Thomas, liquors, B'way c. W. 46 <sup>th</sup> , 168 Chatham, 209 Fulton, 65 Eighth av., 484 & 1390 Third av., 651 Seventh av., 41 & 612 Sixth av., h. 76 W. 36 <sup>th</sup>		

Former Block 161, Lot unclear, 170 Chatham Street, Ward unknown (address only, part of adjacent lots)						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808			No listings		Unclear	
1810					Unclear	
1812			Joseph H. Horton (134 Chatham)			
1815						Unclear due to different numbering, but may be James Myers, 134 Chatham, tenants Joseph Horton, Daniel Thomas
1820						John Drake, store, 170 Chatham
1825						Jacob Drake, 170 Chatham, tenant Swenby Wilson
1829			Jacob W. & W., Field, drygoods, 170 Chatham			
1830						John Drake, 4 tenements, 166, 168, 170, 172 Chatham
1835						John Drake, 4 stores, 166, 168, 170, 172 Chatham, tenant Nathaniel Wood
1840						John Drake (170 Chatham, Ward 660)
1845				unclear		No listing
1850						
1851			170, J.S. Hughes, boots & shoes			
1860				unclear		No listing
1861			Gartner, Adolph, math. insts., 170 Chatham, h. N.J.; Everdell, Charles, engraver, 170 Chatham; Ludemann, Chas., dep. stff., 170 Chatham, h. 55 Ridge			
1865			Bricke, Edw'd, glasses, 170 Chatham, h. 125 Norfolk			



**APPENDIX A: INDIVIDUAL LOT HISTORIES**

Former Block 161, Lot 55, 172 Chatham Street, Ward 661						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808			No listings		Unclear	
1810					Unclear	
1812			E. Halsted & Co. (136 Chatham)			
1815						
1820	Jacob and Margaret Webbers	David Devoore			Unclear due to different numbering, but may be James Myers, 136 Chatham, tenant Thomas Baitey	
1820	Abraham and Ann Brevoort	James Myers			Estate James Myers, 172 Chatham, tenant John Flotard	Lots 54, 55, 56; L 146, p. 434
1822	James J. Myers estate	Daniel McLaren, Jr.				Lots 54, 55, 56; L 146, p. 437
1822	Robert C. Cornell and Foster Nostrand	Daniel McLaren, Jr.				Lots 51-56; L 158, p. 354
1822	James J. Myers estate	Obadiah Peck				Lots 50-56; L 158, p. 358
1822	James J. Myers estate	John Drake				Lots 51-56; L 160, p. 58
1822	James J. Myers estate	John Drake				Lots 51-56; L 160, p. 63
1822	Robert C. Cornell and Foster Nostrand	Obadiah Peck				Lots 51-56; L 160, p. 67
1822	Robert C. Cornell and Foster Nostrand	John Drake				Lots 51-56; L 160, p. 71
1822	Robert C. Cornell and Foster Nostrand	John Drake				Lots 51-56; L 160, p. 72
1822	Robert C. Cornell and Foster Nostrand	John Drake				Lots 51-56; L 160, p. 73
1822	Robert C. Cornell and Foster Nostrand	Benjamin Driggs				Lots 51-56; L 162, p. 82; quit claim
1822	James J. Myers estate	Benjamin Driggs				Lots 51-56; L 162, p. 85
1825						
1829			Hayey, Hart, drygoods, 172 Chatham		Jacob Drake, 172 Chatham, tenant Samuel Park?	
1830						
1835					John Drake, 4 tenements, 166, 168, 170, 172 Chatham	
1837					John Drake, 4 stores, 166, 168, 170, 172 Chatham, tenant Nathaniel Wood	
1840			Wood, Nathaniel, E., shoes, 172 Chatham, h. 244 Bowery			
1845					John Drake (172 Chatham, Ward 661)	
1850					John Drake (172 Chatham, Ward 661)	
1851				unclear		
1853	John Drake et al.	Francis T. Luqueer	Robert Foulds, thread & need			
						Lots 1, 55, 56; L 624, p. 651



**APPENDIX A: INDIVIDUAL LOT HISTORIES**

<b>Former Block 161, Lot 54, 174 Chatham Street, Ward 662</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1835					Obadiah Peck, house, 174 and 176 Chatham, corner Mott	
1837			Canfield, David W., drygoods, 174 Chatham			
1840					No listing	
1845					No listing	
1850				unclear		
1851			174 & 176, J.H. Beers, clothing			
1860				unclear		
1865			Briecke, Edward, drawing insts., 174 Chatham, Habermehl, George, peeps, 174 Chatham		Rutgers Insurance Company	
1869					Rutgers Insurance Company	Worth Street assessment

<b>Former Block 161, Lot unclear, 176 Chatham Street, Ward unknown (address only, part of adjacent lots)</b>						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1808			Claude Redon, confectioner, 140 Chatham; Wm. H. Pyke, 140 h. 156 Chatham; William Johnson, milliner, 140 Chatham		Unclear	
1810					Unclear	
1812			M.M. Durell, Devoe & Tompkins, John Stokes (140 Chatham)			
1820					Estate James Myers, 176 Chatham, tenants Isaac Devoe, Randolph Mount, Ely	
1825					Obadiah Peck, 176 Chatham, tenant Samuel Raynord	
1829			Beers & Peck, tailors, 176 Chatham; Samuel, Peck, tailor, 18 Allen, 176 Chatham			
1830						
1835					O. Peck, 174 and 176 Chatham	
1837			Wilson, John, saddler, 341 Pearl and 176 Chatham		Obadiah Peck, house, 174 and 176 Chatham, corner Mott	
1840						
1845					Obadiah Peck (176 Chatham, Ward 662)	
					Obadiah Peck (176 Chatham, Ward 662)	

**APPENDIX A: INDIVIDUAL LOT HISTORIES**

Former Block 161, Lot unclear, 176 Chatham Street, Ward unknown (address only, part of adjacent lots)						
Year	Grantor	Grantee	Directory	Census	Tax Assessment	Remarks
1850			176 Chatham, Crouch and Fitzgerald, trunk makers	unclear		
1851			174 & 176, J.H. Beers, clothing			
1860-1861			Magary, William W., clothing. 176 Chatham, h. 156 Madison; Barker, Isaac O., pres. 176 Chatham & 9 Mers. Ex., h. 288 Fourth; Ketcham, John W. v. pres. 176 Chatham & supt. Randall's Island; Dugliss, Joseph W., clerk, 176 Chatham, h. E. 82d n. Second av.; Courter, William A., tailor, 176 Chatham	unclear		

ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 2

DATED: May 2, 2014

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Any substantial modification of the Contract shall be subject to approval by the State Commissioner of Transportation and the Federal Highway Administration, in addition to the City agencies involved.
2. The Contractor shall be responsible for compliance with all the provisions of the following Schedules of Federal and State requirements which are hereby made a part of the original contract documents and are annexed hereto:

- Attachment "A" - Required Contract Provisions for Federal-Aid Construction Contracts - FHWA 1273
- Attachment "B" - New York State Contract Requirements - including Worker's Compensation and Liability Insurance, Appendix A - Standard Clauses for New York State Contracts, Labor and Employment, Non-Assignment of Agreement, Non-Collusive Bidding Certifications, Debarment History Certification, Appendix C (Disclosure of Lobbying Activities)
- Attachment "C" - Assurance of Non-Discrimination, Subcontracts, Appendix A-1 Supplemental Title VI Provisions (Civil Rights Act)
- Attachment "D" - Provisions Relating to the NYS Labor Law, Prevailing Wages, and the Use of Convict Labor and Materials on Federal & State Contracts
- Attachment "E" - "Buy America" Requirements & Waivers
- Attachment "F" - Equal Employment Opportunity Requirements
- Attachment "G" - NO TEXT
- Attachment "H" - Disadvantaged Business Enterprises Requirements for Federal Aid Contracts
- Attachment "I" - Requirements Regarding Training in Federal Aid Contracts - Training Special Provision
- Attachment "J" - NO TEXT
- Attachment "K" - Changed Conditions and Disputed Work Provisions, Extra Force Account Work, Dispute Compensation and Record Keeping, Differing Site Conditions, Suspensions of Work, Significant Changes in the Character of the Work Provisions
- Attachment "L" - Contractor Initiated Value Engineering Change Proposals (CIVEC)
- Attachment "M" - NO TEXT
- Attachment "N" - Itemized Proposal
- Attachment "O" - US DOT Hotline / NYS Inspector General Hotline
- Attachment "P" - Prompt Payments by the Contractor / Civil Rights Monitoring and Reporting
- Attachment "Q" - Appendix 2 - Iran Divestment Act

In addition to compliance with the above Federal and State requirements, the Contractor shall also be required to comply with all City requirements as depicted in the Information for Bidders and Standard Construction Contract herein. Wherever a conflict may exist, the Federal Regulations shall take precedence.

3. The Contractor shall not pay less than the highest minimum hourly rates as set forth by Federal, State or City laws.
4. The Contractor shall maintain his records in conformity with the current NYSDOT "Manual for Uniform Record Keeping", referred to as MURK, copies of which are available on line at the NYSDOT website [www.dot.ny.gov/publications](http://www.dot.ny.gov/publications).
5. In accordance with 23 US C315 and Order 1321.1C, FHWA Directives Management, issued January 6, 2010, the construction work performed under this Contract shall be available to be subject to inspection at all times by the New York State Department of Transportation and the Federal Highway Administration.
6. Amendments to Information for Bidders:

- a) Refer to Page 6, SECTION 20. Low Tie Bids;  
Delete Article 20 in its entirety and substitute the words  
"20. (NO TEXT)."
- b) Refer to Pages 6 and 7, Subsection 21.(C), Rejection of All  
Bids and Negotiation With All Responsible Bidders;  
Delete Sub-Article 21.(C) in its entirety and substitute the  
words "(C) (NO TEXT)."
- c) Refer to Pages 8 and 9, SECTION 26. Bid, Performance and  
Payment Security;  
Add the following:

"(F) Bidders are hereby advised that the apparent low Bidder, as determined at the bid opening or subsequently notified that its firm is the low Bidder, will be required to submit within seven (7) days a complete DBE Pre-Award Utilization Package in compliance with SECTION 102-12H of the NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS using their approved civil rights reporting software called EBO. For EBO software see Attachment 'P', CIVIL RIGHTS MONITORING AND REPORTING. Failure to submit the above documents within the specified seven (7) days after the date of the bids may be cause for a determination of non-responsiveness."

- d) Refer to Page 9, SECTION 27. Failure to Execute Contract, 6th,  
7th and 8th lines;  
Delete the sentence beginning with the words: "No plea of mistake in  
such..." in its entirety.

- e) Refer to Page 10, SECTION 30. Labor Law Requirements, Sub-Article (A) General:  
Add the following at the end of the Sub-Article (A): "This provision shall apply to subcontractors also."
  
- f) Refer to Page 11, Subsection 33.(B), Variations from Engineer's Estimate;  
Delete Subsection 33.(B) in its entirety. See Attachment "K", Page A2-K2 and A2-K3, Significant Changes in the Character of Work, Sub-Article 3.(iv)(B).
  
- g) Refer to Pages 12 and 13, SECTION 37. Locally Based Enterprise Requirements (LBE);  
Delete the SECTION, in its entirety. See Attachment "H" Disadvantaged Business Enterprise Utilization Requirements.

7. Amendments to Standard Construction Contract:

- a) Refer to Page 5, Sub-Article 5.2, "Procurement Policy Board Rules";  
Delete the second sentence starting with the words: "In the event of..." and ending with the words "...shall take precedence."
  
- b) Refer to Pages 11 and 12, ARTICLE 7. PROTECTION OF WORK AND OF PERSONS AND PROPERTY; NOTICES AND INDEMNIFICATION;  
Add the following:

"7.6 In addition to the requirements stipulated herein, all work performed under this Contract shall comply with the safety and health standards of the Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor."

- c) Refer to Page 13, Sub-Article 9.3;  
Delete the first sentence starting with the words: "If the Contractor..." and ending with the words "...progress schedule."
  
- d) Refer to Pages 22 and 23, ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION;  
Delete Sub-Article 16.1.4, in its entirety.
  
- e) Refer to Pages 23 and 24, ARTICLE 17. SUBCONTRACTS;  
Delete Sub-Article 17.11.1, in its entirety;  
Substitute the following revised Article 17.11.1:

"17.11.1 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, as are contained in this **Contract**."



- f) Refer to Page 26, ARTICLE 19. SECURITY DEPOSIT;  
Delete Sub-Article 19.2, in its entirety;  
Substitute the following Sub-Article 19.2:

"19.2 If performance and payment bonds are not required, the bid security shall be retained by the **City** as security for the **Contractor's** faithful performance of the Contract. If partial payments are provided, the bid security will be returned to the **Contractor** subject to the other provisions of this **Contract**. If partial payments are not provided, the bid security will be released when final payment is certified by the **City** for payment."

- g) Refer to Page 29, ARTICLE 21. RETAINED PERCENTAGE;  
Delete Article 21, in its entirety;  
Substitute the following:

**"ARTICLE 21. (NO TEXT)"**

- h) Refer to Page 36, ARTICLE 24. MAINTENANCE AND GUARANTY;  
Add the following to Sub-Article 24.9:

"On any contract, which requires the furnishing and/or installing of electrical or mechanical equipment, the **Contractor** shall provide the following:

- (1) Manufacturer's warranties or guarantees on all electrical and mechanical equipment, consistent with those provided as customary trade practice.
- (2) Contractor's warranties or guarantees providing for satisfactory in-service operation of the mechanical and electrical equipment and related components for a period not less than one (1) year following project acceptance."

- i) Refer to Page 37, ARTICLE 25. CHANGES;  
Add the following paragraph:

"25.5 Extra Work: It is anticipated that the preliminary engineering and the preparation of plans, specifications and contract documents have been performed with sufficient thoroughness, accuracy and care, and that changes and extra work during the construction can be held to a minimum and limited almost exclusively to revisions and additions necessitated by conditions that could not reasonably be anticipated before the project was advertised for bids or force account operations commenced."

- j) Refer to Pages 50, 51 and 52, ARTICLE 36. NO DISCRIMINATION;  
Change in Paragraph 36.1.1, 4th line, "citizen of the State of New York"  
to "person";  
Delete Paragraphs 36.1.3, 36.1.4, 36.2.2 and 36.2.4 in their  
entireties;  
Add "or sex or age" to the expression "race, creed, color or national  
origin", and "or sex or age" to the expression "race, color or  
creed", wherever these expressions appear in Article 36.

- k) Refer to Page 59, ARTICLE 43. PROMPT PAYMENT;  
Add the following sentence to the end of Sub-Article 43.5:

"The Contractor shall not hold any retainage, but may deduct an amount necessary to satisfy any claims, liens or judgements against a Subcontractor or materialman which have not been fully discharged."

- l) Refer to Pages 59 and 60, ARTICLE 44. SUBSTANTIAL COMPLETION  
PAYMENT;  
Delete Sub-Articles 44.2 and 44.3, in their entirety;  
Substitute the following:

"44.2 The **Commissioner** shall issue a voucher calling for payment of any part or all of the balance due for **Work** performed under the **Contract**, less any and all deductions authorized to be made by the **Commissioner**, under this **Contract** or by **Law**, and less twice the amount the **Commissioner** considers necessary to ensure the completion of the balance of the **Work** by the **Contractor**. Such a payment shall be considered a Partial and not a Final Payment. No **Substantial Completion** payment shall be made under this Article 44 where the **Contractor** 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.

44.3 No further partial payments shall be made to the **Contractor** after **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**. Such waiver shall be in writing."

- m) Refer to Pages 60 and 61, ARTICLE 45. FINAL PAYMENT;  
Delete Sub-Article 45.1, in its entirety;  
Substitute the following:

"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**. Such submission shall be within 90 days of the date of the **Commissioner's** written determination of **Final Acceptance**, or within such additional time as may be granted by the **Commissioner** in writing. If the **Contractor** fails to submit all required certificates and documents within the time allowed, no payment of the balance claimed shall be made to the **Contractor** and the **Contractor** shall be deemed to have forfeited its right to payment of any balance claimed. A verified statement similar to that required in connection with applications for partial payments shall also be submitted to the **Commissioner**."

- n) Refer to Page 67, ARTICLE 59. SERVICE OF NOTICES;  
Delete the words "deposited in a post office box regularly  
maintained by the United States Postal Service in a  
properly addressed, postage prepaid envelope".

- o) Refer to Pages 71, 72 and 73, ARTICLE 64. TERMINATION BY THE CITY;  
Delete the text of the 1st paragraph;  
Substitute the following:

"64.1 In addition to termination pursuant to any other article of this Contract, the Commissioner may, by written notice, terminate the Contract or any portion thereof after determining that for reasons beyond either Department or Contractor control it is not feasible to proceed with or complete the work as originally contracted for, and that termination would therefore be in the public interest. Such reasons for termination may include, but need not be necessarily limited to, executive orders of the President relating to prosecution of war or national defense, national emergency which creates a serious shortage of materials, orders from duly constituted authorities relating to energy conservation, and restraining orders or injunctions obtained by third-party citizen action resulting from national or local laws or regulations, or where the issuance of such order or injunction is primarily caused by acts or omissions of persons or agencies other than the Contractor, or where the orderly progression of a project is interfered with or delayed by acts or omissions of persons or agencies other than the Contractor. The Contractor specifically understands that the issuance of such notice by the Commissioner shall be conclusive as to its necessity. In such event the Contractor shall upon receipt of such notice:"

- p) Refer to Pages 74 and 75, ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM;  
Delete Article 67, in its entirety. See Attachment "H"  
Disadvantaged Business Enterprise Utilization  
Requirements.
- q) Refer to Pages 75, 76 and 77, ARTICLE 69. MacBRIDE PRINCIPLES PROVISIONS;  
Delete Article 69, in its entirety, and Substitute the following "ARTICLE 69. (NO TEXT)"
- r) Refer to Page 78, ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR;  
Delete Article 75, in its entirety and Substitute the following "ARTICLE 75. (NO TEXT)".

- s) Add the following to Pages 92, 93, 94, 95, 96, 97, 98, and 99,  
PERFORMANCE BOND:

"Prior to or at the time of execution of the contract, successful bidder must deliver to the City of New York an executed bond equal to one hundred percent (100%) of the contract price, to secure the faithful performance of the contract, and an executed bond in an amount equal to one hundred percent (100%) of the contract price, as security for the payment of all persons performing labor or furnishing materials in connection with this contract, prepared on the forms of bonds authorized by The City of New York, and made a part of the contract documents, copies of which are annexed hereto, and having as surety thereunder such surety company or companies as are approved by The City of New York and are authorized to do business in the State of New York. Premium of such bonds shall be included in the base bid.

In lieu of a performance and completion bond and labor and material bond, a contractor may deposit with the Comptroller, money or obligations of The City of New York which the Comptroller shall approve as of equal value with the amount of the performance and completion bond required.

Whenever a contractor deposits obligations of The City of New York, in lieu of a performance and completion bond and a labor and material bond, it shall be with the understanding that the Comptroller of the City of New York, or his successors, 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 money is deposited with the Comptroller, the Contractor shall not be entitled to receive interest on such money from The City of New York.

If the bidder to whom the contract is awarded refuses to execute it, or fails to furnish the required security and insurance within ten (10) days after receipt of notice to him of the award, the amount of his deposit, or as much thereof as may be applicable to the amount of the award made to him, shall be forfeited and shall be retained by the City as liquidated damages."

8. Amendments to General Conditions of the Standard Highway Specifications:

- a) Refer to Page 14 of the Standard Highway Specifications,  
Article 1.06.23. Rules, Laws, and Requirements;  
Add the following:

"Certain items of work are to be performed in accordance with the general specifications of the following departments of the City of New York:

Bureau of Traffic Operations  
Police Department  
Fire Department  
Department of Environmental Protection  
Bureau of Water Supply and Sewer Operations  
Street Lighting

Copies of these specifications may be examined at their offices."

- b) Refer to Pages 16 and 17 of the Standard Highway Specifications, Article 1.06.23.(G) Rules Governing Navigation, last paragraph;  
Delete the word "asbestos" wherever it occurs.
  
  - c) Refer to Pages 36, 37 and 38, of the Standard Highway Specifications, Article 1.06.46. Project Sign;  
Delete the Article 1.06.46, in its entirety;  
Substitute the following:  
  
"1.06.46. Project Sign. No project signs will be required on this project."
  
  - d) Refer to Page 40 of the Standard Highway Specifications, Sub-Article 1.06.48.(C) Access Ramps, 2nd paragraph, 1st line;  
Change the maximum grade from "one (1) vertical on three (3) horizontal" to "one (1) vertical on six (6) horizontal".
9. Amendments to the Standard Highway Specifications:
- a) Refer to Page 83, Subsection 2.18.3(A), 4th paragraph;  
Change "." to "," after "... and Appeals";  
Add the following words: "and the health standards of OSHA of the U.S. Department of Labor."
  
  - b) Refer to Page 187, Subsection 4.06.12;  
Delete the Subsection 4.06.12, in its entirety and substitute the words "**4.06.12. (NO TEXT).**" The use of rubble aggregate will not be permitted.
10. The Contractor is hereby notified that this is a City contract funded through apportionment available under Title 23, U.S. Code, as amended, and that the contract will be awarded by the City of New York, subject to the approval of the Commissioner of the New York State Department of Transportation and the Federal Highway Administration. Furthermore, no extensions in time for completion or other changes affecting the contract work can be granted by the City of New York without concurrence of the State of New York and approval of the Federal Highway Administration.

11. All reference to the delivery of salvageable materials to a designated City-owned yard do not apply to this Contract. All salvageable materials designated by the Engineer shall be stored on site for pick-up by City forces.
  
12. Wherever references are made within these specifications to "race, creed, color, national origin or sex," they shall be construed to include "sexual orientation and marital status".

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

### ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

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3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

## II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:



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a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of

potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency

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may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

**10. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

**III. NONSEGREGATED FACILITIES**

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The

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contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

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b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## 3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee ( e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses

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and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of



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Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

### b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program

## ATTACHMENT "A"

shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

## ATTACHMENT "A"

- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

## ATTACHMENT "A"

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

**VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

**VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

**This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.**

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

## **ATTACHMENT "A"**

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

### **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

### **X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

#### **1. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

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c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this

transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

**2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR



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Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

### **Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-- Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

**WORKER'S COMPENSATION AND LIABILITY INSURANCE**

The CONTRACTOR agrees to procure and maintain, until final acceptance by the City of the work covered by this Agreement, insurance of the kinds and in amounts hereinafter provided in insurance companies authorized to do business in the State of New York, covering all operations under this Agreement whether performed by him or subcontractors. Before commencing the work, the CONTRACTOR shall furnish to the COMMISSIONER and to the City of New York a certificate or certificates, in form satisfactory to the COMMISSIONER and to the CITY, showing that he has complied with this requirement, which certificate or certificates, shall provide that the policies shall not be changed or cancelled until thirty (30) days written notice has been given to the COMMISSIONER and to the City of New York. The kinds and amounts of insurance required are as specified in Schedule A shown on Pages SA-1 to SA-11, in Volume 3 of 3.

This Agreement shall be void and of no force and effect unless the Contractor shall provide coverage for the benefit of, and keep covered during the life of this agreement, such employees as are required to be covered by the provisions of the Worker's Compensation Law. (State Finance Law Section 142)

**NO FURTHER TEXT ON THIS PAGE**

**APPENDIX A**

**STANDARD CLAUSES FOR NEW YORK STATE CONTRACTS**

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**STANDARD CLAUSES FOR NYS CONTRACTS**

The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinafter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party

**2. NON-ASSIGNMENT CLAUSE.** In accordance with Section 138 of the State Finance Law, this contract may not be assigned by the Contractor or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the State's previous written consent, and attempts to do so are null and void. Notwithstanding the foregoing, such prior written consent of an assignment of a contract let pursuant to Article XI of the State Finance Law may be waived at the discretion of the contracting agency and with the concurrence of the State Comptroller where the original contract was subject to the State Comptroller's approval, where the assignment is due to a reorganization, merger or consolidation of the Contractor's business entity or enterprise. The State retains its right to approve an assignment and to require that any Contractor demonstrate its responsibility to do business with the State. The Contractor may, however, assign its right to receive payments without the State's prior written consent unless this contract concerns Certificates of Participation pursuant to Article 5-A of the State Finance Law.

**3. COMPTROLLER'S APPROVAL.** In accordance with Section 112 of the State Finance Law (or, if this contract is with the State University or City University of New York, Section 355 or Section 6218 of the Education Law), if this contract exceeds \$50,000 (or the minimum thresholds agreed to by the Office of the State Comptroller for certain S.U.N.Y. and C.U.N.Y. contracts), or if this is an amendment for any amount to a contract which, as so amended, exceeds said statutory amount, or if, by this contract, the State agrees to give something other than money when the value or reasonably estimated value of such consideration exceeds \$10,000, it shall not be valid, effective or binding upon the State until it has been approved by the State Comptroller and filed in his office. Comptroller's approval of contracts let by the Office of General Services is required when such contracts exceed \$85,000 (State Finance Law Section 163.6-a). However, such pre-approval shall not be required for any contract established as a centralized contract through the Office of General Services or for a purchase order or other transaction issued under such centralized contract.

**4. WORKERS' COMPENSATION BENEFITS.** In accordance with Section 142 of the State Finance Law, this contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the Workers' Compensation Law.

other than the State, whether a contractor, licenser, licensee, lessor, lessee or any other party):

**1. EXECUTORY CLAUSE.** In accordance with Section 41 of the State Finance Law, the State shall have no liability under this contract to the Contractor or to anyone else beyond funds appropriated and available for this contract.

**5. NON-DISCRIMINATION REQUIREMENTS.** To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex (including gender identity or expression), national origin, sexual orientation, military status, age, disability, predisposing genetic characteristics, marital status or domestic violence victim status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is a contract for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex, or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of \$50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this contract and forfeiture of all moneys due hereunder for a second or subsequent violation.

**6. WAGE AND HOURS PROVISIONS.** If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law. Additionally, effective April 28, 2008, if this is a public work contract covered by Article 8 of the Labor Law, the Contractor understands and agrees that the filing of payrolls in a manner

**STANDARD CLAUSES FOR NYS CONTRACTS****APPENDIX A**

consistent with Subdivision 3-a of Section 220 of the Labor Law shall be a condition precedent to payment by the State of any State approved sums due and owing for work done upon the project.

**7. NON-COLLUSIVE BIDDING CERTIFICATION.** In accordance with Section 139-d of the State Finance Law, if this contract was awarded based upon the submission of bids, Contractor affirms, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further affirms that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the State a non-collusive bidding certification on Contractor's behalf.

**8. INTERNATIONAL BOYCOTT PROHIBITION.** In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds \$5,000, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (2NYCRR 105.4).

**9. SET-OFF RIGHTS.** The State shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the State's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing to the State with regard to this contract, any other contract with any State department or agency, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the State for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The State shall exercise its set-off rights in accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Comptroller.

**10. RECORDS.** The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter, collectively, "the Records"). The Records must be kept for the balance of the calendar year in

which they were made and for six (6) additional years thereafter. The State Comptroller, the Attorney General and any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this contract, shall have access to the Records during normal business hours at an office of the Contractor within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. The State shall take reasonable steps to protect from public disclosure any of the Records which are exempt from disclosure under Section 87 of the Public Officers Law (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the State's right to discovery in any pending or future litigation.

**11. IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION.** (a) Identification Number(s). Every invoice or New York State Claim for Payment submitted to a New York State agency by a payee, for payment for the sale of goods or services or for transactions (e.g., leases, easements, licenses, etc.) related to real or personal property must include the payee's identification number. The number is any or all of the following: (i) the payee's Federal employer identification number, (ii) the payee's Federal social security number, and/or (iii) the payee's Vendor Identification Number assigned by the Statewide Financial System. Failure to include such number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on its invoice or Claim for Payment, must give the reason or reasons why the payee does not have such number or numbers.

(b) Privacy Notification. (1) The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by the seller or lessor to the State is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law. (2) The personal information is requested by the purchasing unit of the agency contracting to purchase the goods or services or lease the real or personal property covered by this contract or lease. The information is maintained in the Statewide Financial System by the Vendor Management Unit within the Bureau of State Expenditures, Office of the State Comptroller, 110 State Street, Albany, New York 12236.



**12. EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITIES AND WOMEN.**

In accordance with Section 312 of the Executive Law and 5 NYCRR 143, if this contract is: (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000.00, whereby a contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; or (ii) a written agreement in excess of \$100,000.00 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; or (iii) a written agreement in excess of \$100,000.00 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project, then the following shall apply and by signing this agreement the Contractor certifies and affirms that it is Contractor's equal employment opportunity policy that:

(a) The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, shall make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on State contracts and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination. Affirmative action shall mean recruitment, employment, job assignment, promotion, upgradings, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation;

(b) at the request of the contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the Contractor's obligations herein; and

(c) the Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

Contractor will include the provisions of "a", "b", and "c" above, in every subcontract over \$25,000.00 for the

construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State. The State shall consider compliance by a contractor or subcontractor with the requirements of any federal law concerning equal employment opportunity which effectuates the purpose of this section. The contracting agency shall determine whether the imposition of the requirements of the provisions hereof duplicate or conflict with any such federal law and if such duplication or conflict exists, the contracting agency shall waive the applicability of Section 312 to the extent of such duplication or conflict. Contractor will comply with all duly promulgated and lawful rules and regulations of the Department of Economic Development's Division of Minority and Women's Business Development pertaining hereto.

**13. CONFLICTING TERMS.** In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this Appendix A, the terms of this Appendix A shall control.

**14. GOVERNING LAW.** This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

**15. LATE PAYMENT.** Timeliness of payment and any interest to be paid to Contractor for late payment shall be governed by Article 11-A of the State Finance Law to the extent required by law.

**16. NO ARBITRATION.** Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of New York.

**17. SERVICE OF PROCESS.** In addition to the methods of service allowed by the State Civil Practice Law & Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon the State's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of process can be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

**18. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS.** The Contractor certifies and warrants that all wood products to be used under this contract award will be

**STANDARD CLAUSES FOR NYS CONTRACTS****APPENDIX A**

in accordance with, but not limited to, the specifications and provisions of Section 165 of the State Finance Law, (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State or any governmental agency or political subdivision or public benefit corporation. Qualification for an exemption under this law will be the responsibility of the contractor to establish to meet with the approval of the State.

In addition, when any portion of this contract involving the use of woods, whether supply or installation, is to be performed by any subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in §165 State Finance Law. Any such use must meet with the approval of the State; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for exemption will be the responsibility of the Contractor to meet with the approval of the State.

**19. MACBRIDE FAIR EMPLOYMENT PRINCIPLES (APPLICABLE ONLY IN NON-FEDERAL AID NEW YORK STATE CONTRACTS).** In accordance with the MacBride Fair Employment Principles (Chapter 807 of the Laws of 1992), the Contractor hereby stipulates that the Contractor either (a) has no business operations in Northern Ireland, or (b) shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles (as described in Section 165 of the New York State Finance Law), and shall permit independent monitoring of compliance with such principles.

**20. OMNIBUS PROCUREMENT ACT OF 1992 (APPLICABLE ONLY IN NON-FEDERAL AID NEW YORK STATE CONTRACTS).** It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York State subcontractors and suppliers is available from:

NYS Department of Economic Development  
Division for Small Business  
Albany, New York 12245  
Telephone: 518-292-5100  
Fax: 518-292-5884  
email: [opa@esd.ny.gov](mailto:opa@esd.ny.gov)

A directory of certified minority and women-owned business enterprises is available from:

NYS Department of Economic Development  
Division of Minority and Women's Business Development  
633 Third Avenue  
New York, NY 10017  
212-803-2414  
email: [mwbecertification@esd.ny.gov](mailto:mwbecertification@esd.ny.gov)  
<https://ny.newnycontracts.com/FrontEnd/VendorSearchPublic.asp>

The Omnibus Procurement Act of 1992 requires that by signing this bid proposal or contract, as applicable, Contractors certify that whenever the total bid amount is greater than \$1 million:

(a) The Contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the State;

(b) The Contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

(c) The Contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The Contractor agrees to document these efforts and to provide said documentation to the State upon request; and

(d) The Contractor acknowledges notice that the State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

**21. RECIPROCITY AND SANCTIONS PROVISIONS.** Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapter 684 and Chapter 383, respectively) require that they be denied contracts which they would otherwise obtain. NOTE: As of May 15, 2002, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii. Contact NYS Department of Economic Development for a current list of jurisdictions subject to this provision.

**22. COMPLIANCE WITH NEW YORK STATE INFORMATION SECURITY BREACH AND**

**NOTIFICATION ACT.** Contractor shall comply with the provisions of the New York State Information Security Breach and Notification Act (General Business Law Section 899-aa; State Technology Law Section 208).

**23. COMPLIANCE WITH CONSULTANT DISCLOSURE LAW.** If this is a contract for consulting services, defined for purposes of this requirement to include analysis, evaluation, research, training, data processing, computer programming, engineering, environmental, health, and mental health services, accounting, auditing, paralegal, legal or similar services, then, in accordance with Section 163 (4-g) of the State Finance Law (as amended by Chapter 10 of the Laws of 2006), the Contractor shall timely, accurately and properly comply with the requirement to submit an annual employment report for the contract to the agency that awarded the contract, the Department of Civil Service and the State Comptroller.

**24. PROCUREMENT LOBBYING.** To the extent this agreement is a "procurement contract" as defined by State Finance Law Sections 139-j and 139-k, by signing this agreement the contractor certifies and affirms that all disclosures made in accordance with State Finance Law Sections 139-j and 139-k are complete, true and accurate. In the event such certification is found to be intentionally false or intentionally incomplete, the State may terminate the agreement by providing written notification to the Contractor in accordance with the terms of the agreement.

**25. CERTIFICATION OF REGISTRATION TO COLLECT SALES AND COMPENSATING USE TAX BY CERTAIN STATE CONTRACTORS, AFFILIATES AND SUBCONTRACTORS.**

To the extent this agreement is a contract as defined by Tax Law Section 5-a, if the contractor fails to make the certification required by Tax Law Section 5-a or if during the term of the contract, the Department of Taxation and Finance or the covered agency, as defined by Tax Law 5-a, discovers that the certification, made under penalty of perjury, is false, then such failure to file or false certification shall be a material breach of this contract and this contract may be terminated, by providing written notification to the Contractor in accordance with the terms of the agreement, if the covered agency determines that such action is in the best interest of the State.

**26. IRAN DIVESTMENT ACT.** By entering into this Agreement, Contractor certifies in accordance with State Finance Law §165-a that it is not on the "Entities Determined to be Non-Responsive Bidders/Offerers pursuant to the New York State Iran Divestment Act of 2012" ("Prohibited Entities List") posted at:  
<http://www.ogs.ny.gov/about/reggs/docs/ListofEntities.pdf>

Contractor further certifies that it will not utilize on this Contract any subcontractor that is identified on the Prohibited

Entities List. Contractor agrees that should it seek to renew or extend this Contract, it must provide the same certification at the time the Contract is renewed or extended. Contractor also agrees that any proposed Assignee of this Contract will be required to certify that it is not on the Prohibited Entities List before the contract assignment will be approved by the State.

During the term of the Contract, should the state agency receive information that a person (as defined in State Finance Law §165-a) is in violation of the above-referenced certifications, the state agency will review such information and offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment activity which is in violation of the Act within 90 days after the determination of such violation, then the state agency shall take such action as may be appropriate and provided for by law, rule, or contract, including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring the Contractor in default.

The state agency reserves the right to reject any bid, request for assignment, renewal or extension for an entity that appears on the Prohibited Entities List prior to the award, assignment, renewal or extension of a contract, and to pursue a responsibility review with respect to any entity that is awarded a contract and appears on the Prohibited Entities list after contract award.

## LABOR AND EMPLOYMENT

The provisions of NYS Labor Law, as amended, and referred to in §102-08, *Standard Clauses for All New York State Contracts*, shall be applicable. On contracts financed with Federal-Aid, any provisions of NYS Labor Law that are in conflict with mandatory Federal-Aid construction contract compliance requirements, as contained in 23 CFR 635.117 are superseded. Any provisions of NYS Labor Law that are not in conflict with mandatory Federal-Aid construction contract compliance requirements or the Davis-Bacon Act, but are more restrictive, shall apply.

The Contractor shall directly employ those members of its own organization. Employee leasing and other similar arrangements under which workers are employed by another organization will only be considered under a subcontract approved in accordance with §108-05, *Subletting or Assigning the Contract*.

**A. Wages.** The Department will provide the Contractor with prevailing wage rate schedules. When both State and Federal wage rate schedules are provided, the Contractor shall pay the higher of the two wages and supplemental (fringe) benefits. If prevailing wage rate schedules are attached, all onsite work shall be paid prevailing wages. The Contractor shall ensure that workers are paid the appropriate wages and supplemental (fringe) benefits. The Contractor shall obtain periodic wage rate schedule updates from the NYS Department of Labor (NYSDOL). Wage rate amendments and supplements are available on the NYSDOL web site at [www.labor.state.ny.us](http://www.labor.state.ny.us). All changes or clarification of labor classification(s) and applicability of prevailing wage rates shall be obtained in writing from the Office of the Director, NYSDOL Bureau of Public Work. The Contractor shall include the cost of changes in wage rate schedules and supplements (fringes) over the contract duration in the contract bid prices.

On-site Contractor or Subcontractor employees shall be paid prevailing wages required under the Davis-Bacon Act. In accordance with 29 CFR 5.2(l), "site of the work" is defined as the physical place or places where the construction called for in the contract will remain when work on it has been completed. Facilities such as fabrication plants, mobile factories, batch plants, borrow pits, etc. are part of the site of the work provided that they are dedicated exclusively to the performance of the contract. Not included in the site of the work are facilities whose continuance in operation are determined wholly without regard to a particular contract. Such permanent, previously established facilities are not a part of the "site of the work," even where the operations for a period of time may be dedicated exclusively to the performance of a contract.

In accordance with NYS Labor Law, Sections 220 and 220-d:

1. No laborer, worker, or mechanic, in the employ of the Contractor, Subcontractor or other person doing or contracting to do the whole or any part of the work contemplated by the contract shall be permitted or required to work more than eight (8) hours in any one calendar day or more than five days in any one week, except in the emergencies set forth in the Labor Law.
2. The wages paid for a legal day's work shall be not less than the prevailing rate of wages as defined by law.
3. The minimum hourly rate of wages to be paid shall not be less than that stated in the contract documents, and any redetermination of the prevailing rate of wages after the contract is approved shall be deemed to be incorporated herein by reference as of the effective date of redetermination and shall form a part of these contract documents.
4. The contract may be forfeited and no sum paid for any work done thereunder on a second conviction for willfully paying less than:
  - a. the stipulated wage scale as provided in Labor Law, §220 (3), as amended, or;
  - b. the stipulated minimum hourly wage scale as provided in Labor Law, §220-d, as amended.

**B. Overtime Dispensation.** All bidders, in submitting their bids, should base their bids and work progression on the assumption that Overtime Dispensation pursuant to Article 8 of the New York State Labor Law, for any workers, laborers, and mechanics to work more than 8 hours in any one calendar day or more than 5 days in any one week will not be granted for any operation for the contract duration. Regardless of approval or disapproval of overtime by the NYSDOL, no adjustment will be made in any bid prices.

## ATTACHMENT "B"

Subsequent to award, where the contract proposal has imposed specific scheduling and/or phasing requirements or where it is determined by the Department to be in the best interest of the public, the Department may process, for approval by the NYSDOL, requests for overtime dispensation on certain specific operations

The Contractor shall submit requests for overtime dispensation to the Department on Form PW- 30, Application for Dispensation for Hours, which will be provided by the Engineer upon request. The Department will review applications for overtime dispensation submitted by the Contractor associated with contracts subject to (A+B) Bidding, Incentive/Disincentive (I/D) or Lane Rental work favorably, but the application should not request more than 60 hours per week. The 60 hours per week may be either 6 - 10 hour days or 5 - 12 hour days. Overtime dispensations will be supported by the Department to advance Department goals and priorities, subject to specific circumstances and conditions associated with each contract.

The Department cannot guarantee that the NYSDOL will grant dispensation from restrictions pursuant to the provisions of Article 8 of the State Labor Law, however with the Department's certification, it is anticipated that they will act favorably, provided that the Contractor is in compliance with Labor Law requirements at the time of application.

**C. Payrolls.** The Contractor shall furnish the Engineer, each week, a certified payroll and statement of compliance with respect to the wages paid each of its employees, (including apprentices, trainees, watch persons and guards) and a certified payroll from each Subcontractor engaged on work during the preceding weekly payroll period.

Certified payrolls shall contain work class, hours worked, wage rate, payroll taxes and withholdings. Certified payrolls shall be annotated by race and gender, and shall be submitted on Form WH-347 or Form HC-231-1 for Federal-Aid contracts, and on HC-231-1 for non Federal-Aid contracts. At the Contractor's option, computer printed payroll records, which supply the required data and certifications may be used.

**D. Training.** An apprentice is defined as an individual who is enrolled in an apprenticeship training program that is registered with the NYS Department of Labor. A trainee is defined as an individual who is enrolled in an On-the-Job Training (OJT) program that is approved by the Federal Highway Administration (FHWA).

A number of sources to obtain training for apprentices/trainees are available. These include:

- A NYSDOL-approved apprenticeship program sponsored by a union or a temporary project level agreement with a union which has a NYSDOL approved apprenticeship program.
- A NYSDOL-approved apprenticeship program sponsored by a contractor.
- A NYSDOL-approved apprenticeship program sponsored by a contractor signatory with an apprenticeship sponsor consortium for certain services.
- An FHWA-approved OJT program (where applicable).

Approved OJT Programs are currently limited to apprenticeable occupations as determined by NYSDOL or USDOL. A list of approved OJT programs can be found in the On-the-Job Training and Apprenticeship Program Construction Catalogue which is available through the Department's Office of Equal Opportunity Development and Compliance.

Training under Training Special Provisions, if required, will be shown in the contract documents. In order to fulfill training requirements required under Training Special Provisions and/or §102-11 *Equal Employment Opportunity Requirements*, training should begin as early as possible during a construction contract. The Department recommends that all bidders have an approved apprenticeship or OJT program prior to bidding.

The Contractor shall furnish the apprentice/trainee a copy of the program to be followed in providing the training. The Contractor shall provide each apprentice/trainee with a certification showing the type and length of training satisfactorily completed.

## ATTACHMENT "B"

When training is required under Training Special Provisions and/or §102-11 *Equal Employment Opportunity Requirements*, the Contractor shall designate to the Engineer, at the preconstruction meeting, a person (or persons) from its existing workforce as the Trainer and Training Coordinator for any apprentice(s)/ trainee(s).

The Trainer shall:

1. Be located on the contract site generally on a daily basis; and
2. Be responsible for the day-to-day supervision and training of persons on the contract; and
3. Be responsible for the preparation and submission of a monthly training progress report, after consultation with designated apprentices/trainees.

The Training Coordinator shall:

1. Be knowledgeable about the contract and the Apprenticeship/OJT programs to be used; and
2. Be responsible for ensuring on-the-job orientation of apprentice/trainees; and
3. Be responsible for ensuring meaningful and effective training for the duration of training.

**E. Public Notices.** Before commencing any work on the site, the Contractor shall provide a satisfactory weather resistant surface, and post, in a location accessible to all workers, a copy of the NYSDOL schedules of prevailing wages and supplements for this contract, a copy of all redeterminations of such schedules for the contract, the Workers' Compensation Law notice, required safety notices, and all other notices required by law to be posted at the site. The Contractor shall maintain such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. The Notices shall be maintained until all work on the site is complete.

**F. Federal-Aid Requirements.** No procedures or requirement shall be imposed by any state which will operate to discriminate against the employment of labor from any other state, possession or territory of the United States, in the construction of a Federal-Aid project. The selection of labor to be employed by the Contractor on any Federal-Aid project shall be of its choosing.

The Contractor shall not use convict labor unless performed by convicts who are on parole, supervised release, or probation for construction, maintenance or any other purpose at the site or within the contract limits of any Federal-Aid highway construction project from the time of contract award or the start of work on force account until final acceptance of the work by the Department.

**NON-ASSIGNMENT OF AGREEMENT**

In accordance with Section 138 of the State Finance Law, the Contractor agrees not to assign, transfer, convey, sublet or otherwise dispose of this agreement or any part thereof, or of its right, title or interest therein or its power to execute such agreement to any person, company or corporation without the previous consent in writing of the City and of the Commissioner of the Department of Design and Construction and any attempts to assign the agreement without the City's written consent are null and void.

**No further Text on This Page**

**BID DEPOSIT**

Accompanying this proposal is a bid bond, certified check or bank cashier's check for the specified amount of deposit required. In the event this proposal is accepted by the Department of Transportation and the undersigned shall fail to execute the contract and in all respects comply with the provisions of Section 38 of the Highway Law, as amended, or where applicable, Section 30 of the Canal Law, as amended, the moneys represented by such bid bond, certified check or Bank cashier's check shall be regarded as liquidated damages and shall be forfeited and become the property of the State of New York; otherwise to be returned to the depositor in accordance with the provisions of said Section 38 of the Highway Law, as amended, or where applicable with Section 30 of the Canal Law, as amended.

On acceptance of this proposal for said work the undersigned does or do hereby bind herself/himself or itself/themselves to enter into written contract, within ten days of date of notice of award, with the said Department of Transportation, and comply in all respects with § 38(6) of the Highway Law, as amended, or where applicable with §30 (7) of the Canal Law, as amended, in relation to security for the faithful performance of the terms of said contract.



**NON-COLLUSIVE BIDDING CERTIFICATIONS**

**REQUIRED BY SECTION 139-D, STATE FINANCE LAW and  
SECTION 103-D OF GENERAL MUNICIPAL LAW**

"Section 139-d, SFL and Section 103-d, GML, 'Statement of non-collusion in bids to the state.'

1. Every bid hereafter made to the state or any public department agency or official thereof, where competitive bidding is required by statute, rule or regulation, for work or services performed or to be performed or goods sold or to be sold, shall contain the following statement subscribed by the bidder and affirmed by such bidder as true under the penalties of perjury:

Non-collusive bidding certification.

(a) By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his knowledge and belief:

(1) The prices of this bid have been arrived at independently, without collusion, consultation, communication, or agreement, for the purposes 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 which have been 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.

(b) A bid shall not be considered for award nor shall any award be made where (a)(1)(2)(3) above have not been complied with; provided however, that if in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefore. Where (a)(1)(2) and (3) above have not been complied with, the bid shall not be considered for award nor shall any award be made unless the head of the purchasing unit of the state, public department or agency to which the bid is made, or his designee, determines that such disclosure was not for the purpose of restricting competition.

The fact that a bidder (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customers of proposed or pending publication of new or revised price lists for such items or (c) has sold the same items to other customers at the same prices being bid, does not constitute, without more, a disclosure within the meaning of subparagraph 1(a).

2. Any bid hereafter made to the state or any public department, agency or official thereof by a corporate bidder for work or services performed or to be performed or goods sold or to be sold, where competitive bidding is required by statute, rule or regulation, and where such bid contains the certification referred to in subdivision one of this section, shall be deemed to have been authorized by the board of directors of the bidder and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of the certificates as to non collusion as the act and deed of the corporation."

(A)2

"By submission of this bid, the bidder does hereby tender to the Owner this sworn statement pursuant to Section 1128 of Title 23, U. S. Code-Highways and does hereby certify, in conformance with said Section 112 of Title 23, U. S. Code-Highways that the said Contractor has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the above contract."

**NON COLLUSIVE BIDDING CERTIFICATION (49 CFR, 29)**

The Contractor to whom the above identified contract is to be awarded does hereby tender to the New York State Department of Transportation this sworn statement pursuant to Section 112(c) of Title 23 U.S. Code *Highway* and does hereby certify, in conformance with said 23 USC 112(c) that the said Contractor has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the above identified contract.

The signatory to this proposal, being duly sworn, certifies that, **EXCEPT AS NOTED BELOW**, its company and any person associated therewith in then capacity of owner, Partner, director, officer, or major stockholder (five percent or more ownership):

- 1) is not currently suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
- 2) has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within that past three years;
- 3) does not have a proposed debarment pending; and
- 4) has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent Jurisdiction in any matter involving fraud or official misconduct within the past three years.

**EXCEPTIONS** – List any relevant information, attaching additional sheets if necessary. (Exceptions will not necessarily result in disapproval, but will be considered in determining responsibility. For any exception noted, indicate below to whom it applies, the initiating agency, and dates of actions. Providing false information may result in criminal prosecution or administrative sanctions.)

**Lobbying Activity Certification [For Federal-Aid Contracts Only]**

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions. (See Exhibit 1 annexed hereto)

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

**CONTRACTOR MUST COMPLETE THE FORM BELOW**

**OFFERER DISCLOSURE OF PRIOR NON-RESPONSIBILITY DETERMINATIONS**

1. Has any Governmental Entity made a finding of non-responsibility regarding the individual or entity seeking to enter into the Procurement Contract in the previous four years? (Please circle):

No                      Yes

If yes, please answer questions 2-4. If no, skip to question 5.

2. Was the basis for the finding of non-responsibility due to a violation of State Finance Law §139-j (Please circle):

No                      Yes

3. Was the basis for the finding of non-responsibility due to the intentional provision of false or incomplete information to a Governmental Entity? (Please circle):

No                      Yes

4. If you answered yes to any of the above questions, please provide details regarding the finding of non-responsibility below.

Governmental Entity:

Date of Finding of Non-responsibility: \_\_\_\_\_

Basis of Finding of Non-Responsibility: \_\_\_\_\_

\_\_\_\_\_

(Add additional pages as necessary)

5. Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the individual or entity seeking to enter into the Procurement Contract due to the intentional provision of false or incomplete information? (Please circle):

No                      Yes

6. If yes, please provide details below.

Governmental Entity: \_\_\_\_\_

Date of Termination or Withholding of Contract: \_\_\_\_\_

Basis of Termination or Withholding: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(Add additional pages as necessary)

**ATTACHMENT "B"**

**NON COLLUSIVE BIDDING**

**BY SIGNING ONE OF THESE CERTIFICATIONS, THE CONTRACTOR CERTIFIES THAT HE UNDERSTANDS AND AGREES TO BE BOUND BY THE PROVISIONS OF THE FOLLOWING LAWS:**

1. NEW YORK STATE FINANCE LAW, ARTICLE 9, SECTION 139-d
2. TITLE 49, CFR, PART 29
3. TITLE 23, U.S. CONE-HIGHWAYS, SECTION 112

THE CONTRACTOR SHOULD CHOOSE THE APPROPRIATE NOTARIZATION WHICH CORRESPONDS TO THE TYPE OF COMPANY (SOLE PROPRIETORSHIP, PARTNERSHIP, OR CORPORATION) THAT HE/SHE REPRESENTS OR IS AFFILIATED WITH. ALL BIDDERS SHOULD FILL OUT THE APPROPRIATE SECTION OF THE BIDDER INFORMATION SHEET.

**BY EXECUTING THIS PROPOSAL, THE CONTRACTOR AGREES TO:**

1. Perform all work listed in accordance with the Contract Documents at the unit prices bid; subject to the Changed conditions provisions if applicable;
2. All the terms and conditions of the non-collusive bidding certifications required by §139-d of the State Finance Law, and Section 112, Title 23, U.S. Code;
3. Certification of Specialty Items category selected, if contained in this proposal;
4. Certification of any other clauses required by this proposal and contained herein;
5. Certification, under penalty of perjury, as to the current history regarding suspensions, debarments, voluntary exclusions, determinations of ineligibility, indictments, convictions, or civil judgments required by 49 CFR, Part 29.
6. Contractor affirms that all information provided to the Department with respect to the requirements contained in State Finance Law §139j and §139k is complete, true and accurate.

Dated: \_\_\_\_\_, 20\_\_\_\_\_

\_\_\_\_\_  
(Legal Name of Person, Corporation, or Firm  
Which is Submitting Bid or Proposal)

BY: \_\_\_\_\_  
(Signature of Person Representing Above)

AS: \_\_\_\_\_  
(Official Title of Signator in Above Firm)

**ATTACHMENT "B"**

**(Acknowledgment by Individual Contractor, if a Corporation)**

STATE OF NEW YORK )  
 ) SS:  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_, before me personally came \_\_\_\_\_, to me known and known to me to be the person who executed the above instrument, who being duly sworn by me, did depose and say that he/she resides at \_\_\_\_\_, and that he/she is the \_\_\_\_\_ of the corporation described in and which executed the above instrument, and that he/she signed his/her name thereto on behave of said Corporation by order of the Board of Directors of said Corporation.

\_\_\_\_\_  
Notary Public

**(Acknowledgment by Co-Partnership Contractor)**

STATE OF NEW YORK )  
 ) SS:  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_, before me personally came \_\_\_\_\_, to me known and known to me to be the person described in and who executed the above instrument, who, being duly sworn by me, did for himself/herself depose and say that he/she is a member of the firm of \_\_\_\_\_, consisting of himself/herself and \_\_\_\_\_, and that he/she executed the foregoing instrument in the firm name of \_\_\_\_\_ and that he/she had authority to sign same, and did duly acknowledge to me that he/she executed same as the act and deed of said firm of \_\_\_\_\_ for the uses and purposes mentioned therein.

\_\_\_\_\_  
Notary Public

**(Acknowledgment by Individual Contractor)**

STATE OF NEW YORK )  
 ) SS:  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_, before me personally came \_\_\_\_\_, to me known and known to me to be described in and who executed the foregoing instrument, and that he/she acknowledged that he/she executed the same.

\_\_\_\_\_  
Notary Public



MA 2A (03-09-33)  
NYCDOT

**NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DEBARMENT HISTORY CERTIFICATION  
CONTRACT NO. \_\_\_\_\_**

I, \_\_\_\_\_, being duly sworn, certifies that,  
**(PRESIDENT OF AUTHORIZED OFFICIAL)**  
except as noted herein, \_\_\_\_\_ or any person  
**(THE COMPANY)**

associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of Federally Aided Projects:

is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any governmental entity;

has not been suspended, debarred, voluntarily excluded or determined ineligible by any governmental entity within the past three (3) years;

does not have a proposed debarment pending; and

has not been indicted, convicted, or had a civil judgement rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years.

**(INSERT EXCEPTIONS HERE. ATTACH SUPPLEMENTAL SHEETS AS NECESSARY)**

Exceptions will not necessarily result in denial of approval, but will be considered in determining responsibility. For any exception noted herein, indicate to whom it applies, initiating governmental entity and dates of action. A material false statement willfully or fraudulently made in connection with this certification may result in rendering the company not responsible for the project and any future projects, and in addition may subject the person making the false statement to criminal charges.

\_\_\_\_\_  
(PRINT NAME)

\_\_\_\_\_  
(SIGNATURE)

\_\_\_\_\_  
(TITLE)

\_\_\_\_\_  
(DATE)

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

MA 2A (03-09-33)  
NYCDOT

**NEW YORK CITY DEPARTMENT OF DESIGN AND CONSTRUCTION  
DEBARMENT HISTORY CERTIFICATION  
CONTRACT NO. \_\_\_\_\_**

**GOVERNMENTAL ENTITY:**

Governmental Entities shall include any/all city, state and federal public agencies, quasi-public agencies, authorities and corporations, public development corporations, and local development corporations.

**COMPANY:**

Companies shall include the persons or affiliates for which a suspension or debarment decision has been rendered, and shall include all subsidiaries, divisions and other organizational elements thereof unless said decision is limited by its terms to one or more specifically identified individuals or organizational elements or to specific types of transactions.

**PERSON:**

Persons shall include any individual, corporation, partnership, association or legal entity however organized, including any subsidiary of the foregoing.

**SUBSIDIARY:**

Subsidiaries shall include any corporation, partnership, association or legal entity however organized, which is owned or controlled by another person.

**AFFILIATE:**

Persons are affiliates of one another if, directly or indirectly, one owns, controls, or has the power to control the other, or a third person owns, controls, or has the power to control both.

**CONTROL:**

Control shall be taken to mean the power to exercise, either directly or indirectly, a controlling influence over management, policies or activities of a person, whether through ownership of voting securities, through one or more intermediary persons, or otherwise. Indications of control shall include, but not be limited to: a person who owns or has the power to vote more than 25 percent of the voting securities of another person, or 25 percent of the total equity if the other person has no voting securities; interlocking management or ownership; identity of interests among family members; shared facilities and equipment; common use of employees; and establishment, following debarment, suspension or other exclusion decision, of any organization or entity which is to operate in the same business or activity and is to have substantially the same management, ownership or principal employees as the debarred, suspended or excluded person.



**APPENDIX C**

**LOBBYING ACTIVITY CERTIFICATION**  
**[FOR FEDERAL-AID CONTRACTS ONLY]**

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions. (See Exhibit 1 annexed hereto)

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

## APPENDIX C

## INSTRUCTIONS FOR COMPLETION OF SF-LLL DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants, and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee", then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001".
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, state and zip code for the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the Federal covered action.  
 (b) Enter the full names of the individual(s) performing services, and include full address if different from 10(a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form; print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB Control Number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington D.C. 20503.

APPENDIX C

**DISCLOSURE OF LOBBYING ACTIVITIES**

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352  
(See reverse for public burden disclosure.)

Approved by OMB  
0348-0046

<b>1. Type of Federal Action:</b> <input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	<b>2. Status of Federal Action:</b> <input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	<b>3. Report Type:</b> <input type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change <b>For Material Change Only:</b> year _____ quarter _____ date of last report _____
<b>4. Name and Address of Reporting Entity:</b> <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____ if known:  Congressional District, if known: 4c	<b>5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:</b>  Congressional District, if known:	
<b>6. Federal Department/Agency:</b>	<b>7. Federal Program Name/Description:</b>  CFDA Number, if applicable: _____	
<b>8. Federal Action Number, if known:</b>	<b>9. Award Amount, if known:</b> \$	
<b>10. a. Name and Address of Lobbying Registrant</b> (if individual, last name, first name, MI):	<b>b. Individuals Performing Services</b> (including address if different from No. 10a) (last name, first name, MI):	
<b>11.</b> Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____	
<b>Federal Use Only:</b>		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

**DISCLOSURE OF LOBBYING ACTIVITIES**  
**CONTINUATION SHEET**

**ATTACHMENT "B"**

APPROVED BY OMB  
0346-0046

REPORTING ENTITY: \_\_\_\_\_ PAGE \_\_\_\_\_ OF \_\_\_\_\_

Authorized for Local Reproduction - Standard form LLL

**NOTICE TO ALL PROSPECTIVE BIDDERS  
FEDERAL-AID CONTRACTS**

**ASSURANCE OF NON-DISCRIMINATION**

The New York State Department of Transportation, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation and Title 23 Code of Federal Regulations, Part 200, Title VI Program and Related Statutes, as amended, issued pursuant to such Acts, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, sex, age, disability/handicap and income status in consideration for an award.

1/17/79  
5/1/79  
6/3/81  
5/9/85

L8/3/2010

**SUBCONTRACTS**

The attention of the Contractor is directed to the requirement that the standard contract clauses, as set forth in the Proposal and in the Labor Compliance Manual (Federal-aid Construction, Appendix D-2, 3) must be physically incorporated in all subcontracts.

Copies of the Labor Compliance Manual referred to above may be examined in the office of the Regional Director.

Rev. 2/27/70  
4/20/72  
8/30/73  
12/7/76

## ATTACHMENT "C"

### APPENDIX A-1 SUPPLEMENTAL TITLE VI PROVISIONS (CIVIL RIGHTS ACT)

(To be included in all contracts)

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- (1) Compliance with Regulations: The contractor shall comply with the Regulation relative to nondiscrimination in Federally assisted programs of the Department of Transportation of the United States, Title 49, Code of Federal Regulations, Part 21, and the Federal Highway Administration (hereinafter "FHWA") Title 23, Code of Federal Regulations, Part 200 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- (2) Nondiscrimination: The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, religion, age, color, sex or national origin, sex, age, and disability/handicap in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR, section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
- (3) Solicitations for Subcontractors, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin, sex, age, and disability/handicap.
- (4) Information and Reports: The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by NYSDOT or the FHWA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to NYSDOT's Office of Civil Rights or FHWA, as appropriate, and shall set forth what efforts it has made to obtain the information.
- (5) Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, NYSDOT shall impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
  - a) Withholding of payments to the contractor under the contract until the contractor complies; and/or
  - b) Cancellation, termination or suspension of the contract, in whole or in part.
- (6) Incorporation of Provisions: The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

## **ATTACHMENT "C"**

The contractor shall take such action with respect to any subcontractor procurement as NYSDOT or the FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request NYSDOT to enter into such litigation to protect the interests of NYSDOT, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

**PROVISIONS RELATING TO THE NEW YORK STATE LABOR LAW,  
PREVAILING WAGES, AND THE USE OF CONVICT LABOR AND  
MATERIALS ON FEDERAL & STATE CONTRACTS**

**GENERAL PROVISIONS.** All projects funded with Federal aid and let to contract in New York State shall conform to the provisions of the New York State Labor Law, except that in accordance with the authorization in Article 4, Section 85 of the New York State Highway Law, any provisions of the above referenced Labor Law which are in conflict with the following enumerated mandatory Federal Aid highway construction compliance requirements, as contained in Section 635 of the Code of Federal Regulations, Title 23-Highways, and other Federal legislation, rules, and regulations, as referenced below, are superseded:

**CONVICT LABOR.** No convict labor, unless performed by convicts who are on parole, supervised release, or probation, shall be employed in construction or used for maintenance or any other purposes at the site or within the limits of any Federal Aid highway construction project from the time of award of the contract or the start of work on force account until final acceptance of the work by the Owner.

**SELECTION OF LABOR.** No procedures or requirements shall be imposed by any state or municipal subdivision thereof which will operate to discriminate against the employment of labor from any other state, possession, or territory of the United States, in the construction of a Federal Aid project. The selection of labor to be employed by the Contractor on any Federal Aid project shall be of his/her own choosing.

**WAGE RATES ON FEDERAL AID PROJECTS.** Attention is directed to the statutory provisions governing the prevailing rates of wages for workmen, mechanics, and laborers who are employed on this project. Section 220 of the New York State Labor Law, as amended, requires that the wages paid for a legal day's work shall be not less than the rate of wages plus the supplements prevailing at the time the work is performed, the current schedules of which shall be included in the contract documents. Such schedules may be amended or supplemented from time to time, and such amendments or supplements shall be forwarded to the Contractor.

The Federal Aid Highway Act of 1968 provides for the payment of wages at rates not less than those determined in accordance with the Davis-Bacon Act (40 USC, Section 276-a), the schedule of which shall also be included in the contract documents.

On-site materials suppliers, in addition to all subcontractors, are subject to the provisions of the Davis-Bacon Act. This will not necessarily be construed as causing the on-site material suppliers to be classified as subcontractors as part of the 50% limitation on the subcontracting of this project.

In case of a variance between (1) the schedules of prevailing rates of wages and supplements as determined under Section 220 of the New York State Labor Law, and (2) the schedule of rates of wages as determined pursuant to the Davis-Bacon Act, the Contractor shall accept and use the schedule or schedules that establish the higher rate of wages as the minimum for the workmen who are employed on the project.



**CONSTRUCTION BY FEDERAL AGENCIES.** When construction on Federal Aid highways is being performed by any Federal agency under its procedures and by Federal contract, the labor standards relating to direct federal contracts shall be applicable.

**NON-DISCRIMINATION.** Employment shall be provided without regard to race, color, religion, sex, or national origin.

**CONVICT-PRODUCED MATERIALS.** The use of convict-produced materials on any Federal or Federally-assisted contract must comply with the following requirements:

- a. Materials produced by convict labor may only be incorporated in a Federal Aid highway construction project if such materials have been:
  1. Produced by convicts who are on parole, supervised release, or probation from a prison; or
  2. Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal Aid highway construction does not exceed the amount of such materials produced in such facility for use in Federal Aid highway construction during the 12-month period ending July 1, 1987.
- b. "Qualified prison facility" means any prison facility in which convicts, during the 12-month period ending July 1, 1997, produced materials for use in Federal Aid highway construction projects.
- c. Standard State and Federal Aid contract procedures may be used to assure compliance with the requirements of this paragraph.

**FEDERAL WAGE RATES**

>

General Decision Number: NY140003 11/14/2014 NY3

Superseded General Decision Number: NY20130003

State: New York

Construction Types: Building, Heavy, Highway and Residential

Counties: Bronx, Kings, New York, Queens and Richmond  
Counties in New York.

BUILDING & RESIDENTIAL CONSTRUCTION PROJECTS (includes single family homes and apartments up to and including 4 stories),  
HEAVY AND HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	01/03/2014
1	01/17/2014
2	01/24/2014
3	03/07/2014
4	04/04/2014
5	06/06/2014
6	06/20/2014
7	06/27/2014
8	07/04/2014
9	07/11/2014
10	07/18/2014
11	07/25/2014
12	08/15/2014
13	08/22/2014
14	08/29/2014
15	09/19/2014
16	10/10/2014
17	10/17/2014
18	11/14/2014

ASBE0012-001 12/30/2013

	Rates	Fringes
Asbestos Workers/Insulator Includes application of all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems.....	\$ 64.73	30.44
HAZARDOUS MATERIAL HANDLER.....	\$ 40.00	10.75

BOIL0005-001 01/01/2013

	Rates	Fringes
BOILERMAKER.....	\$ 49.47	33%+22.87+a

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Thanksgiving Day, Memorial Day, Independence Day, Labor Day and Good Friday, Friday after Thanksgiving, Christmas Eve Day and New Year's Eve

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 BRNY0001-001 07/01/2013

	Rates	Fringes
BRICKLAYER.....	\$ 49.09	22.93
MASON - STONE.....	\$ 55.56	26.75

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 BRNY0001-002 07/01/2014

	Rates	Fringes
Pointer, cleaner and caulker.....	\$ 40.78	27.57

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 BRNY0004-001 07/01/2014

	Rates	Fringes
MARBLE MASON.....	\$ 55.85	29.73

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 BRNY0007-001 07/01/2014

	Rates	Fringes
TERRAZZO FINISHER.....	\$ 47.28	32.16
TERRAZZO WORKER/SETTER.....	\$ 48.88	32.18

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 BRNY0020-001 07/01/2014

	Rates	Fringes
MARBLE FINISHER.....	\$ 44.54	29.31

-----  
 BRNY0024-001 07/01/2014

	Rates	Fringes
BRICKLAYER		
MARBLE POLISHERS.....	\$ 38.96	23.00

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 BRNY0052-001 06/01/2014

	Rates	Fringes
Tile Layer.....	\$ 52.58	30.63

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 BRNY0088-001 06/01/2014

	Rates	Fringes
TILE FINISHER.....	\$ 40.78	27.86

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 CARP0001-009 07/01/2014

	Rates	Fringes
CARPENTER		
Carpenters & Soft floor layers.....	\$ 49.88	42.97

-----  
 CARP0740-001 07/01/2014

	Rates	Fringes
MILLWRIGHT.....	\$ 48.44	49.83

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 CARP1456-004 07/01/2014

	Rates	Fringes
Dock Builder & Piledrivermen DOCKBUILDERS.....	\$ 48.35	45.07

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 CARP1456-005 07/01/2014

	Rates	Fringes
Diver Tender.....	\$ 43.45	45.07
Diver.....	\$ 61.30	45.07

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 CARP1536-001 07/01/2014

	Rates	Fringes
Carpenters: TIMBERMEN.....	\$ 44.33	44.34

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 ELEC0003-001 05/14/2014

	Rates	Fringes
ELECTRICIAN		
Electricians.....	\$ 53.00	27.06
Jobbing, and maintenance and repair work.....	\$ 25.30	15.13+a

PAID HOLIDAYS:

- a. New Years Day, Martin Luther King, Jr.'s Birthday,  
 Washington's Birthday, Memorial Day, Independence Day,  
 Labor Day, Columbus Day, Election Day, Thanksgiving Day,  
 the day after Thanksgiving Day, and Christmas Day

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 ELEC1049-001 03/30/2014

QUEENS COUNTY

	Rates	Fringes
Line Construction (Substation and Switching structures pipe type cable installation and		

maintenance jobs or projects;  
 Railroad electrical  
 distribution/transmission  
 systems maintenance (when  
 work is not performed by  
 railroad employees) Overhead  
 and Underground  
 transmission/distribution  
 line work. Fiber optic,  
 telephone cable and equipment)

Groundman.....	\$ 29.71	18.9
Heavy Equipment Operator....	\$ 39.62	21.55
Lineman and Cable Splicer...	\$ 49.52	24.28
Tree Trimmer.....	\$ 23.06	28.5%+9.75

ELEV0001-002 03/17/2013

	Rates	Fringes
ELEVATOR MECHANIC		
Elevator Constructor.....	\$ 57.01	27.605+a+b
Modernization and Repair....	\$ 45.14	27.455+a+b

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Good Friday, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

b. PAID VACATION: An employee who has worked less than 5 years shall receive vacation pay credit on the basis of 4% of his hourly rate for all hours worked; an employee who has worked 5 to 15 years shall receive vacation pay credit on the basis of 6% of his hourly rate for all hours worked; an employee who has worked 15 or more years shall receive vacation pay credit on the basis of 8% of his hourly rate for all hours worked.

ENGI0014-001 07/01/2013

	Rates	Fringes
Pavement equipment operator		
Asphalt Plants.....	\$ 54.17	28.65+a
Asphalt roller.....	\$ 64.04	28.65+a
Asphalt spreader.....	\$ 65.76	28.65+a
Power Equipment Operator (HEAVY & HIGHWAY)		
GROUP 1.....	\$ 85.00	28.65
GROUP 10.....	\$ 61.53	28.65
GROUP 11.....	\$ 57.46	28.65
GROUP 12.....	\$ 58.74	28.65
GROUP 13.....	\$ 59.21	28.65
GROUP 14.....	\$ 44.63	28.65
GROUP 15.....	\$ 41.44	28.65
GROUP 2.....	\$ 70.10	28.65
GROUP 3.....	\$ 72.34	28.65
GROUP 4.....	\$ 70.63	28.65

GROUP 5.....	\$ 69.23	28.65
GROUP 6.....	\$ 66.45	28.65
GROUP 7.....	\$ 67.70	28.65
GROUP 8.....	\$ 65.76	28.65
GROUP 9.....	\$ 64.34	28.65
Steel erector		
Compressors, Welding Machines.....	\$ 41.84	28.65
Cranes, Hydraulic Cranes, 2 drum derricks, Forklifts, Boom Trucks.....	\$ 70.50	28.65
Three drum derricks.....	\$ 73.37	28.65
Utility Laborer		
Horizontal Boring Rig.....	\$ 62.53	28.65
Off shift compressors.....	\$ 51.93	28.65
Utility Compressors.....	\$ 41.18	28.65

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Tower crane

GROUP 2: Backhoes, power shovel, Hydraulic clam shells, moles and machines of a similar type

GROUP 3: Mine hoists and crane, etc. used as mine hoists

GROUP 4: Gradalls, keystones, cranes (with digging buckets), bridge cranes, trenching machines, vermeer cutter and machines of a similar nature

GROUP 5: Piledrivers, derrick boats, tunnel shovels

GROUP 6: All drills, and machines of a similar nature

GROUP 7: Back filling machines, cranes, mucking machines, dual drum pavers

GROUP 8: Mixers (concrete w/loading attachments), concrete pavers, cableways, land derricks, power house (low pressure units), concrete pumps

GROUP 9: Concrete plants, well drilling machines, stone crushers double drum hoist, power house (other than above)

GROUP 10: Concrete mixers

GROUP 11: Elevators

GROUP 12: Concrete breaking machine, Hoists (single drum), load masters, locomotive and dinkies over 10 tons

GROUP 13: Vibratory console

GROUP 14: Compressors (portable 3 or more in battery), tugger machine (caissons), well point pumps, chum drill

GROUP 15: Boilers, (high pressure, compressors (portable, single, or 2 in battery, not over 100' apart), pumps (river cofferdam and welding machines (except where arc is operated by members of local 15) push button machines, all

engines irrespective of power (power pac) used to drive auxilliary equipment, air, hydraulic etc.

PREMIUMS ON CRANES (Crawler or Truck):

100' to 149' boom - add .50  
 150' to 249' boom - add .75  
 250' to 349' boom - add 1.00  
 350' to 450' boom - add 1.50

Premiums for Cranes on Steel Erection:

100' to 149' boom - add 1.75  
 150' to 249' boom - add 2.00  
 250' to 349' boom - add 2.25  
 350' to 450' boom - add 2.75  
 Tower crane - add 2.00

FOOTNOTE:

a. Paid Holidays: New Year's Day; Lincoln's Birthday; Washington's Birthday; Memorial Day; Independence Day; Labor Day; Veterans Day; Columbus Day; Election Day; Thanksgiving Day; and Christmas Day; provided the employee works one day the payroll week in which the holiday occurs.

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 ENGI0014-002 07/01/2013

	Rates	Fringes
Power Equipment Operator		
BUILDING & RESIDENTIAL		
GROUP 1.....	\$ 65.83	28.65+a
GROUP 2.....	\$ 69.74	28.65+a
GROUP 3.....	\$ 63.58	28.65+a
GROUP 4.....	\$ 57.82	28.65+a
GROUP 5.....	\$ 43.28	28.65+a

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Double drum

GROUP 2: Stone derrick, cranes, hydraulic cranes, boom trucks

GROUP 3: 4 pole Hoist, Single Drum Hoists

GROUP 4: Fork lift, house cars, plaster (platform machine), plaster bucket, concrete pump and all other equipment used for hoisting material

GROUP 5: Compressors, welding machines (cutting concrete work), paint spraying, sand blasting, 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., boilers

Premiums for Cranes:

100'-149' boom - add 1.75  
 150'-249' boom - add 2.00  
 250'-349' boom - add 2.25



350'-450' boom - add 2.75  
 Tower cranes add 2.00

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Lincoln's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Columbus Day, Election Day, Thanksgiving Day, and Christmas Day, provided the employee works one day in the payroll week in which the holiday occurs

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 IRON0040-002 07/01/2014

BRONX, NEW YORK, RICHMOND

	Rates	Fringes
IRONWORKER, STRUCTURAL.....	\$ 47.75	47.77

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 IRON0046-003 07/01/2014

	Rates	Fringes
IRONWORKER METALLIC LATHERS AND REINFORCING IRONWORKERS.....	\$ 40.60	30.56

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 IRON0197-001 06/01/2013

	Rates	Fringes
IRONWORKER STONE DERRICKMAN.....	\$ 41.00	36.57

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 IRON0361-002 07/01/2014

KINGS, QUEENS

	Rates	Fringes
Ironworkers: (STRUCTURAL).....	\$ 47.75	47.77

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 IRON0580-001 07/01/2014

	Rates	Fringes
IRONWORKER, ORNAMENTAL.....	\$ 42.70	44.35

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 LABO0006-001 07/01/2013

	Rates	Fringes
LABORER (Cement and Concrete Workers).....	\$ 42.38	20.52

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 LABO0029-001 07/01/2013

	Rates	Fringes
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Laborers:

Heavy

Blasters (hydraulic trac drill).....\$ 41.30	29.10
Blasters.....\$ 40.55	29.10
Hydraulic Trac Drill.....\$ 29.92	29.10
Jackhammers, Chippers, Spaders, Concrete Breakers, All Other Pneumatic Tools, Walk Behind Self-Propelled Hydraulic Asphalt and Concrete Breaker.....\$ 34.64	29.10
Powder Carriers.....\$ 31.08	29.10
Wagon; Airtrac; Quarry Bar Drill Runners.....\$ 35.07	28.00

LABO0078-001 02/01/2013

Rates Fringes

LABORERS

BUILDING CONSTRUCTION ASBESTOS (Removal, Abatement, Encapsulation or Decontamination of asbestos); LEAD; & HAZARDOUS WASTE LABORERS (Hazardous Waste, Hazardous Materials, Biochemical and Mold Remediation, HVAC, Duct Cleaning, Re-spray Fireproofing, etc).....\$ 35.90	14.75
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LABO0079-001 07/01/2014

Rates Fringes

Laborers Building Construction

Demolition Laborers	
Tier A.....\$ 37.02	23.53
Tier B.....\$ 25.92	17.56
Mason Tenders.....\$ 38.05	24.35

CLASSIFICATIONS

TIER A: Responsible for the removal of all interior petitions and structural petitions that can consist of sheet rock, block or masonry. Also, all structural slab openings for ducts, mechanical, shafts, elevators, slab openings and exterior walls where the building is not being completely demolished.

TIER B: Responsible for shoveling of debris into containers, pushing containers from the inside to the outside of the building.

LABO0147-001 07/01/2013

	Rates	Fringes
LABORERS (FREE AIR & TUNNEL).....	\$ 52.23	37.23

Maintenance Men, Inside Muck Lock Tenders, Pump Men, Electricians, Cement Finishers, Caulkers, Hydraulic Men, Shield Men, Monorail Operators, Motor Men, Conveyor Men, Powder Carriers, Pan Men, Riggers, Chuck Tenders, Track Men Painters, Nippers, Brakemen, Cable Men, Hose Men, Grout Men, Gravel Men, Form Workers, Concrete Workers, Tunnel Laborers, Mole Nipper (one (1) Mole Sipper per Working Shaft per Shift for up to and including Two (2) Moles

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LABO0731-001 07/01/2014

	Rates	Fringes
LABORER		
Building, Heavy and Residential Construction		
LABORER: (Asbestos, Lead, Hazardous Waste Removal (including soil)/CEMENT/CONCRETE.....)	\$ 39.85	34.78
UTILITY LABORER.....	\$ 39.70	34.78

Paid Holidays: Labor Day and Thanksgiving Day

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LABO1010-001 07/01/2011

	Rates	Fringes
Laborers:		
HIGHWAY CONSTRUCTION		
Fence Installer & Repairer..	\$ 38.34	30.25
FORMSETTERS.....	\$ 42.21	30.25
LABORERS.....	\$ 38.34	30.25
Landscape Planting & Maintenance.....	\$ 38.34	30.25
Maintenance Safety Surface..	\$ 38.34	30.25
Slurry/Sealcoater/Play		
Equipment Installer.....	\$ 38.34	30.25
Small Equipment Operator		
(Not Operating Engineer)...	\$ 38.34	30.25
Small Power Tools Operator..	\$ 38.34	30.25

FOOTNOTES:

a. PAID HOLIDAYS: Memorial Day, Fourth of July, Labor Day, Columbus Day, Election Day and Thanksgiving Day, provided the employee has worked one (1) day in the calendar week in which the said holiday occurs.

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LABO1010-002 07/01/2011

	Rates	Fringes
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Laborers-Asphalt Construction:

Micro Paver.....	\$ 44.86	30.25
Raker.....	\$ 44.37	30.25
Screedperson.....	\$ 44.86	30.25
Shoveler (Production Paving Only).....	\$ 41.08	30.25
Small Equipment Operator (Asphalt).....	\$ 41.08	30.25

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\* PAIN0009-001 11/01/2014

	Rates	Fringes
GLAZIER.....	\$ 42.85	27.09
PAINTER		
Painters, Drywall Finishers, Lead Abatement Worker.....	\$ 41.75	20.87
Spray, Scaffold and Sandblasting.....	\$ 46.75	21.87

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PAIN0806-001 10/01/2014

	Rates	Fringes
Painters: Structural Steel and Bridge.	\$ 48.75	35.63

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PAIN1974-001 12/26/2012

	Rates	Fringes
Painters: Drywall Tapers/Pointers.....	\$ 43.82	22.01

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PLAS0262-001 02/01/2012

	Rates	Fringes
PLASTERER.....	\$ 40.78	26.80

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PLAS0262-002 02/01/2012

KINGS AND QUEENS COUNTIES

	Rates	Fringes
PLASTERER.....	\$ 40.78	26.80

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PLAS0780-001 07/01/2014

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 45.88	39.70

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PLUM0001-001 10/01/2014

	Rates	Fringes
PLUMBER		

MECHANICAL EQUIPMENT AND SERVICE

Any repair and/or replacement of the present plumbing system that does not change the existing roughing.....\$ 38.77 13.34  
 PLUMBERS:.....\$ 65.27 25.50

PLUM0638-001 06/27/2012

	Rates	Fringes
PLUMBER		
SERVICE FITTERS.....	\$ 26.30	2.55
SPRINKLER FITTERS, STEAMFITTEES.....	\$ 51.25	49.54

Service Fitter work shall consist of all repair, service and maintenance work on domestic, commercial and industrial refrigeration, air conditioning and air cooling, stoker and oil burner apparatus and heating apparatus etc., including but not exclusively the charging, evacuation, leak testing and assembling for all machines for domestic, commercial and industrial refrigeration, air conditioning and heating apparatus. Also, work shall include adjusting, including capacity adjustments, checking and repairing or replacement of all controls and start up of all machines and repairing all defects that may develop on any system for domestic, commercial and industrial refrigeration and all air conditioning, air cooling, stoker and oil burner apparatus and heating apparatus regardless of size or type.

ROOF0008-003 07/01/2014

	Rates	Fringes
ROOFER.....	\$ 40.70	25.14

SHEE0028-002 07/31/2014

	Rates	Fringes
SHEET METAL WORKER		
BUILDING CONSTRUCTION.....	\$ 50.91	36.70
RESIDENTIAL CONSTRUCTION....	\$ 27.22	16.48

TEAM0282-001 07/01/2014

	Rates	Fringes
TRUCK DRIVER		
Asphalt.....	\$ 39.34	41.6025+a
Euclids & Turnapulls.....	\$ 38.875	41.6025+a
High Rise.....	\$ 47.01	41.6025+a

FOOTNOTES:

PAID HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day,

Independence Day, Labor Day, Columbus Day, Election Day, Veterans' Day (Armistice Day), Thanksgiving Day, Day after Thanksgiving and Christmas Day. Employees working two (2) days in the calendar week in which a holiday falls are to be paid for such holiday, provided that they share each remaining workday during such calendar week.

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.  
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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived

from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION



**"BUY AMERICA" REQUIREMENTS & WAIVERS**

**GENERAL BUY AMERICA BID REQUIREMENTS AND DEFINITION.** In accordance with New York State Department of Transportation Official Order No. 1511 establishing consistency for application of Section 146 of the State Finance Law, and Section 165 of the U. S. Surface Transportation Act of 1982, as amended, the Bidder must submit a bid based on permanently incorporating only domestic steel and/or iron in the construction of this contract.

The Bidder may also submit a bid based upon being allowed to permanently incorporate foreign steel and/or iron into the work of the contract. If the Bidder chooses to submit such a bid, the Bidder should purchase an additional proposal for this contract and legibly print the following in ink on the proposal cover and at the bottom of the proposal sheet which contains the phrase "Total gross sum written in words": TOTAL BID BASED UPON USING FOREIGN STEEL AND/OR IRON.

When bids are submitted based upon domestic and foreign steel and/or iron, both bids are to be submitted in the same envelope.

To qualify as domestic, all manufacturing processes (including the fabrication of any product containing steel and/or iron) must have been performed in the United States. To further define the coverage, a domestic product is a manufactured steel and/or iron construction material that was produced in one of the 50 States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States. Raw material used in the steel and/or iron may be imported. All manufacturing processes to produce steel and/or iron products must occur domestically. Raw materials are materials such as iron ore, limestone, waste products, etc., which are used in the manufacturing process to produce the steel and/or iron products. Waste products would include scrap; i.e., steel and/or iron no longer useful in its present form from old automobiles, machinery, pipe, railroad tracks, and the like. Also, steel and/or iron trimmings from mills or product manufacturing are considered waste. Extracting, crushing, and handling the raw material which is customary to prepare them for transporting are exempt from Buy America.

**AWARD OF CONTRACT.** Award of this contract will be made to the lowest bidder who submits the lowest total bid based upon furnishing domestic steel and/or iron unless such total bid exceeds the lowest total bid based upon furnishing foreign steel and/or iron by more than 25 percent, in which case award will be made to the lowest responsible bidder based upon furnishing foreign steel and/or iron.

**CONTROL OF MATERIALS.** All items, regardless of origin, shall comply with their individual specification requirements. In the event the contract is awarded based upon using only domestic steel and/or iron, the Contractor must supply only domestic steel and/or iron and will be paid the domestic steel and/or iron bid prices. The Contractor will be responsible for ensuring that the domestic steel and/or iron is supplied in conformance with the above referenced laws. Such responsibility extends to informing all affected subcontractors and material suppliers of these specific requirements and ascertaining that steel and/or iron being supplied is in conformance with the standard specifications.

## ATTACHMENT "E"

In the event that the contract is awarded based upon being allowed to permanently incorporate foreign steel and/or iron in the work, the Contractor may supply either domestic or foreign steel and/or iron and will be paid the foreign steel and/or iron bid prices. If the contract is awarded based upon the domestic steel and/or iron bid, the Contractor may permanently incorporate in the construction of this contract a minimal amount of foreign steel and/or iron if the combined cost of such materials does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or \$2,500.00, whichever is greater. The combined cost of foreign steel and/or iron will be that shown to be the value of the steel and/or iron products as they are delivered to the project.

**BUY AMERICA WAIVERS.** In addition to the award of a bid based on foreign steel and/or iron materials, waivers to the Buy America requirement may be requested by the State to the Division Federal Highway Administration if it can be demonstrated that the use of domestic steel and/or iron materials would be inconsistent with the public interest, such materials and products are not produced in the United States in sufficient and reasonably available quantities and of satisfactory quality provided one or more of the above requirements are met, the Contractor may submit a request for a waiver to the Engineer. The request shall include copies of all documentation verifying the unavailability of the material or product, and/or justification of the application for a waiver. For Federally Aided contracts, final approval of the Buy America Waiver request will be made by the Division Federal Highway Administration and concurred with by the Director, Construction Division. For non-Federally Aided contracts, upon final approval of the affected Department program areas, notification and approval of the Buy America Waiver request will be made by the Director, Construction Division.

**Note: The following is a list of materials or products which have been granted waivers or exclusions from the "BUY AMERICA" provisions:**

1. Hollow 'I'-shaped steel extrusions

**CERTIFICATIONS AND TRACKING OF FOREIGN STEEL/IRON.** In order to ensure compliance with this contract requirement, all manufacturer's certifications for steel and/or iron and items including steel and/or iron must contain a statement of domestic origin, and material suppliers must certify that what they provide is the same material certified by the manufacturer. If the material or product certification does not properly identify conformance to the specification the product will be rejected and must be removed from the project site. If however the manufacturer and/or material supplier requests to leave the product in place and provide a revised certification only, the revised certification must be accompanied with a letter of explanation to the satisfaction of the Resident Engineer. The explanation shall indicate the basis for using the revised certification rather than the original supplied. The letter shall also include corrective action to assure that future certifications will be representative of the material or product supplied. The letter must be signed by a company representative that can legally bind the firm.

If the Contractor proposes to use foreign steel/iron in small amounts under the threshold, the amount allowed will be based on the material price to the Contractor, as verified by invoice and approved by the Resident Engineer. The amount is cumulative for the entire contract, so subsequent requests will have to be added to any previous requests before comparison to the allowable threshold.

The "Buy America" contract specification does not apply to iron or steel that is to be used for temporary means which will be removed during or at the end of the project.

**DEFINITIONS:**

**Steel** - Steel material of any type, including welding rod.

**Iron** - Iron material of any type, including cast and ductile iron, but not pig iron.

**Domestic** - The 50 States, the District of Columbia, Puerto Rico and territories/possessions of the US.

**Foreign** - Any location other than those defined as Domestic.

**Manufacturing Processes** - Steel and/or iron manufacturing processes must be domestic; e.g. manufacture, fabrication, grinding, drilling, welding, finishing and coating of steel. Ore, scrap, and pig iron may be foreign or domestic; however, transformation into steel and/or iron and all subsequent processes and fabrication must be domestic. The fabrication of composite items using domestic steel (e.g. casting reinforced concrete box culvert using reinforcing cut and bent to final shapes) is not considered a manufacturing process, and the composite item is acceptable.

**Fabricated Product Containing Steel and/or Iron** - Items, products or materials containing any amount of steel and/or iron materials; e.g., a metal pipe may be steel or iron, a reinforced concrete pipe contains steel, a prestressed beam contains steel, iron castings are iron, a steel beam is steel and steel laminated bridge bearings contain steel.

**(NO TEXT ON THIS PAGE)**

**EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS**

**[SEE SECTION 102-11 OF THE  
NEW YORK STATE  
DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS]**

## GOALS FOR MINORITY PARTICIPATION IN THE CONSTRUCTION INDUSTRY

COUNTY	% GOAL	COUNTY	% GOAL	COUNTY	% GOAL
Albany	3.2	Herkimer	2.1	Richmond	*
Allegany	6.3	Jefferson	2.5	Rockland	22.6
Broome	1.1	Kings	*	St Lawrence	2.5
Bronx	*	Lewis	2.5	Saratoga	3.2
Cattaraugus	6.3	Livingston	5.3	Schenectady	3.2
Cayuga	2.5	Madison	3.8	Schoharie	2.6
Chautauqua	6.3	Monroe	5.3	Schuyler	1.2
Chemung	2.2	Montgomery	3.2	Seneca	5.9
Chenango	1.2	Nassau	5.8	Steuben	1.2
Clinton	2.6	New York	*	Suffolk	5.8
Columbia	2.6	Niagara	7.7	Sullivan	17.0
Cortland	2.5	Oneida	2.1	Tioga	1.1
Delaware	1.2	Onondaga	3.8	Tompkins	1.2
Dutchess	6.4	Ontario	5.3	Ulster	17.0
Erie	7.7	Orange	17.0	Warren	2.6
Essex	2.6	Orleans	5.3	Washington	2.6
Franklin	2.5	Oswego	3.8	Wayne	5.3
Fulton	2.6	Otsego	1.2	Westchester	22.6
Genesee	5.9	Putnam	22.6	Wyoming	6.3
Greene	2.6	Queens	*	Yates	5.9
Hamilton	2.6	Rensselaer	3.2		

\* The following goal ranges are applicable to the indicated trades in the counties of Bronx, Kings, New York, Queens, and Richmond:

Electricians.....	9.0 to 10.2
Carpenters.....	27.6 to 32.0
Steam Fitters.....	2.2 to 13.5
Metal Lathers.....	26.0 to 28.6
Operating Engineers.....	25.6 to 26.0
Plumbers.....	12.0 to 14.5
Iron Workers (Structural).....	25.9 to 32.0
Elevator Constructors.....	5.5 to 6.5
Bricklayers.....	13.4 to 15.5
Asbestos Workers.....	22.8 to 28.0
Roofers.....	6.3 to 7.5
Iron Workers (Ornamental).....	22.4 to 23.0
Cement Masons.....	23.0 to 27.0
Glaziers.....	16.0 to 20.0
Plasterers.....	15.8 to 18.0
Teamsters.....	22.0 to 22.5
Boilermakers.....	13.0 to 15.5
All Others.....	16.4 to 17.5

GOALS FOR WOMEN

Female Goals -6.9%

Goals for the utilization of women by Federal and Federally assisted construction contractors were last published on April 7, 1978 (43 CFR 4988, 149000). That April 7, 1978 publication included a 6.9% goal for the period from April 1, 1980 until March 31, 1981. Pursuant to 41 CFR 60-4.6, the 6.9% goal for female utilization is extended until further notice

**THESE MUST BE INCLUDED IN EACH BID ROPOSAL REGARDLESS OF WHOSE SPECIFICATIONS ARE USED.**

NO TEXT

ATTACHMENT "H"

**GOALS FOR DISADVANTAGED/MINORITY/WOMEN'S BUSINESS ENTERPRISE  
(D/M/WBE) PARTICIPATION**

The Department has established the following utilization goal(s) for this contract, expressed as a percentage of the total contract bid amount. For clarification of Disadvantaged Business Enterprise (DBE) Utilization, Minority Business Enterprise (MBE) Utilization or Women's Business Enterprise (WBE) Utilization requirements refer to §102-12 *D/M/WBE Utilization* of the Standard Specifications.

Disadvantaged Business Enterprise (DBE) Utilization Goal	<u>13</u> % (Federal-Aid Only)
Minority Business Enterprise (MBE) Utilization Goal	<u>0</u> % (Non Federal-Aid Only)
Women's Business Enterprise (WBE) Utilization Goal	<u>0</u> % (Non Federal-Aid Only)

Directories and/or Information related to the current certification status of Disadvantaged Business Enterprises can be obtained from the NYS Unified Certification Program website at:  
<http://biznet.nysucp.net>

Direct questions concerning Disadvantaged Business Enterprise Utilization to:

NYS Department of Transportation  
Office of Construction  
50 Wolf Road Pod 51  
Albany, New York 12232  
(518) 457-6472

Direct questions concerning Disadvantaged Business Enterprise Certification to:

NYS Department of Transportation  
Contract Audit Bureau  
DBE Certification  
50 Wolf Road, 6<sup>th</sup> Floor  
Avenue F, 1<sup>st</sup> Street  
Albany, New York 12232  
(518) 457-3180

Directories and/or information related to the current certification status of Minority and Women's Business Enterprises, can be obtained by contacting the:

Empire State Development Corporation  
Office of Minority and Women's Business Development  
30 S. Pearl Street  
Albany, NY 12245  
(518) 292-5250  
<http://www.empire.state.ny.us/MWBE.html>



**DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS  
FOR FEDERAL AID CONTRACTS**

**[SEE SECTION 102-12 OF THE  
NEW YORK STATE  
DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS]**

## Contract Requirements

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### REQUIREMENTS REGARDING TRAINING IN FEDERAL AID CONTRACTS TRAINING SPECIAL PROVISION

**GENERAL.** The primary objective of this Training Special Provision is to provide training opportunities to minority and disadvantaged<sup>1</sup> persons and women in construction trades for two purposes:

1. To maintain a pool of qualified minority and disadvantaged persons and women to replace those journeyworkers<sup>2</sup> who, to the natural course of events, will leave the workforce; and
2. To provide minority and disadvantaged persons and women as indentured apprentices or trainees in those geographic areas where shortages in minority and women journeyworkers are recognized because the Contractor's inability to meet the Equal Employment Opportunity (EEO) goals set forth in this contract.

This work shall consist of the employment and meaningful and effective training of minority and disadvantaged persons and women in training programs approved by the N.Y.S. Department of Transportation leading to their qualifications as journeyworkers in the skilled trades required in highway construction. This Training Special Provision supplements the Equal Employment Opportunity requirements included elsewhere in this Proposal entitled either "Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246) or "Equal Employment Opportunity Requirements." Each of the foregoing prescribe specific percentage goals for utilization of minorities and women in the performance of work for the geographic area location of the Contract.

Each contract which contains this Training Special Provision shall require the training of at least one minority or woman indentured apprentice or trainee. Such individual shall be either approved or selected by the Owner with concurrence by the Department of Transportation. Other than this initial training obligation, to be undertaken and provided by the Contractor, no additional training obligations will exist under this Training Special Provision unless the goals for minority and women employment and training in the skilled workforce (exclusive of laborers) are not continuously met on the contract and generally distributed amongst the trades. In the five counties of New York City, the goals specified for each trade are applicable. Whenever the goals are not met, additional minority and/or women indentured apprentices and/or trainees will be assigned or approved in numbers necessary to meet the goals. Data necessary to determine if goals are being met will be provided on Contractor and Subcontractor Monthly Employment Utilization Reports (Form AAP 33LL) submitted by the Contractor on a monthly basis to the Engineer-in-Charge of construction contract, or other agent of the Owner responsible for administering the contract, or other forms approved by the Department of Transportation.

The data will be verified by the visual observance of the Engineer-in-Charge, or designated project inspectors, or other agent of the Owner, and hours of employment reported on Contractor and Subcontractor certified weekly payrolls. The number of minority and women indentured apprentices and trainees required to be trained under this Item shall not exceed the equivalent of 12 1/2% of the total journeyworker workforce on the contract (counted in hours worked), i.e., no more than 1 in 8 of the skilled workforce is required to be a minority or woman indentured apprentice or trainee. This limitation applies regardless of minority or women representation in the trades. However, this limit on required training in no way absolves the Contractor of the responsibility to comply with the EEO contract requirements.

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<sup>1</sup> Disadvantaged means a person who is either. (a) a member of a family the receives public assistance, or (b) a member of a family whose income during the previous six (6) months or an annualized basis, was such that (1) the family would have qualified for public assistance, if it had applied for such assistance; or (2) it does not exceed the poverty level. NOTE: The name, address, and social security number of candidates to be trained under the disadvantaged criteria must be submitted to the Owner accompanied by related economic documentation for approval prior to commencing training.

<sup>2</sup> Journeyworker means a person who is capable of performing all the duties within a trade or a given work classification of a trade approval prior to commencing training, subject to concurrence by the Department of Transportation.

## Contract Requirements

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### REQUIREMENTS REGARDING TRAINING ON FEDERAL AID CONTRACTS

**PRECONSTRUCTION MEETING.** Before the Contractor will be allowed to begin work, the Contractor shall attend a Preconstruction Meeting and shall submit for the Owner's use and acceptance, a Manpower and Training Utilization Schedule (Form AAP 35LL) which shall be correlated to the Contractor's work schedule. The Schedule shall include at least the following information:

1. A work schedule for the entire contract,
2. An estimate of the work force required to conform to the work schedule on a monthly basis including an estimate of the work force in each trade and/or work classification projected to be used,
3. Separate estimates of the number of minority and women indentured apprentices or trainees that would be required in each skilled trade to meet the contract EEO employment goals for that trade assuming no minority or women journeyworkers in the workforce,
4. The approved training programs to be used and the proposed starting dates for training in each trade and/or work classification,
5. An estimate of the availability of minority and women journeyworkers in numbers sufficient to meet the EEO contract goals, and
6. Any proposal by the Contractor to use trainees or indentured apprentices to make up for anticipated EEO goal shortfalls. Such proposals shall include the name and craft of any individual proposed by the Contractor as the required trainee or indentured apprentice. In the case of an indentured apprentice, evidence of indentureship and registration of the approved apprenticeship program must be included.

No contract work may be undertaken until the Owner has accepted the Schedule and obtained the concurrence of the Department of Transportation. The Contractor shall submit a revised Manpower and Training Utilization Schedule at such times as major changes in the contract work schedule or a significant workforce buildup occurs which substantially affect the previously submitted Schedule.

**RECRUITMENT.** Although the training requirements of this Training Special Provision are not intended, and shall not be used to discriminate against any applicant for training, whether a member of a protected class or not, it is recognized that non-minority males have traditionally been and continue to be trained, either formally or on-the-job in an informal manner, for in the trades utilized in construction work. Therefore, until such time that representative numbers of minorities and women complete training and their utilization as journeyworkers is demonstrated to the extent of the participation goals set forth in the Department of Transportation's construction contracts, training required under this Training Special Provision will be primarily limited to minorities, women, and disadvantaged individuals.

Thus, the Contractor shall demonstrate compliance with the intent of this Training Special provision by affording the Owner, with the concurrence of the Department of Transportation's appropriate Regional Compliance Specialist (RCS), the opportunity to:

1. First, approve the use of a minority or woman indentured apprentice known to the Contractor through an existing Joint Apprenticeship Training Program, or
2. Second, provide a partially-trained minority or woman trainee who is currently enrolled in a New York State Department of Transportation approved training program, or
3. Third, work cooperatively with the Contractor in recruitment of new minority or women trainees, when needed.

In conformance with the foregoing, the Contractor should submit a Department of Transportation Form AAP-17, Request for Personnel, to the Owner at the Preconstruction Meeting, and the Owner should seek concurrence of that from Department of Transportation's Regional Compliance Specialist. The Contractor is responsible for ensuring that on-the-job orientation for approved indentured apprentices or assigned trainees is provided to such individuals within their first month of employment.

## Contract Requirements

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**WORK HISTORY.** No individual shall be employed as a trainee or indentured apprentice in any trade and/or work classification in which such person has successfully completed a training course providing journeyworker status in the same trade or work classification, or in which such person has been gainfully employed as a journeyworker by virtue of informal on-the-job training. Detection of individuals in the above categories may be accomplished by including appropriate questions on employee application forms, inquiries to the Department of Transportation Regional Compliance Specialist, checking personal references, or by other suitable means. Regardless of the method used, the Contractor shall document the findings for each indentured apprentice or trainee provided training under this requirement. A copy of the findings shall be given to the Owner's Engineer or agent in charge of the project, who shall request concurrence of the Department of Transportation. In the case of indentured apprentices, evidence of indentureship in a registered approved apprenticeship program shall also be provided.

**SUBCONTRACTING.** In the event the Contractor subcontracts a portion of the contract work, the Contractor shall ensure that the requirements of this Training Special Provision are physically incorporated into such subcontracts to ensure that the workforce utilized by the Subcontractor meets the goals for minority and women employment and training, either independently or in combination with the Contractor's workforce. The Contractor must determine the hours of training, if any, and in which trade or work classifications, minority or women indentured apprentices or trainees are to be trained by the Subcontractor(s). However, the Contractor shall retain the primary responsibility for meeting the training requirements of this Training Special Provision. Subcontractors are herewith advised that disregard of these requirements may result in the Department of Transportation either rescinding approval or disapproving their use on subsequent contracts let by the Department of Transportation or on contracts let by other agencies under agreement to the Department of Transportation.

**TRAINING AND APPRENTICESHIP PROGRAMS.** The minimum length, type of training, and rate of pay for the trade or the work classification of the trade will be specified in the training program approved or sanctioned by the New York State Department of Transportation with the concurrence of the Federal Highway Administration. Both of these agencies shall approve or sanction a training program if it meets the Equal Employment Opportunity obligation of the Contractor and qualifies the trainee for journeyworker status in the trade or work classification concerned by the end of the training period. Furthermore apprenticeship programs registered with the U. S. Department of Labor, Office of Manpower Development, Apprentice Training Section, and training programs approved, but not necessarily sponsored, by the U. S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training, shall also be considered acceptable provided they are administered in a manner consistent with the Equal Employment Opportunity obligations of New York State Department of Transportation construction contracts. A copy of the training programs approved by the NYSDOT will be made available by the NYSDOT upon request by the Owner or the Contractor. The Contractor shall provide a copy of the approved apprenticeship or training program to the indentured apprentice or trainee.

Where training is to be provided under this Training Special Provision, the Contractor shall obtain acceptance or approval of the training or apprenticeship program to be used, and the starting time for training, prior to commencing training. The Contractor shall provide on-the-job training directed toward developing journeyworkers in the trade, or work classification(s) of the trade, involved. To the extent that the work involved on the contract permits, such training should include all phases and facets of a trade, or work classification of a trade, to satisfy usual construction industry requirements for continued or future employment therein. Additionally, the Contractor shall provide a minimum of 144 hours per calendar year of related classroom training at an approved facility for each individual so enrolled, in accordance with Article 23 of the New York State Labor Law, Section 815.3.

**WAGES.** Indentured apprentices will be paid at least 60 percent of the appropriate prevailing wage rate specified in the contract for the same trade or work classification for which they are being trained for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period. Trainees will be paid the appropriate prevailing wage specified in the contract for the same trade or work classification for which they are being trained.

Indentured apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits apprentices must be paid the full amount of fringe benefits listed on the wage determinations for the applicable classification. On-the-job (OJT) trainees shall be paid fringe benefits in accordance with the provisions of the prevailing wage rates.

If the trainee program does not mention fringe benefits trainees shall be paid the full amount of fringe benefits listed on the wage determinations unless the Administrator of Wage and Hour Division determines that there is an

## Contract Requirements

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apprenticeship program associated with the corresponding journeyworker wage rate on the wage determination which provides for less than full benefits for apprentices.

**DURATION OF TRAINING.** Once an indentured apprentice is approved or a trainee is assigned to the contract under this Training Special Provision, that individual shall be trained in the designated trade throughout the duration of the contract whenever such trade is in use on the contract until the trainee or indentured apprentice has completed the approved training program. Where training is provided under a multi-phase apprenticeship or training program, it is expected that training will be provided continually through all phases to the extent that opportunities for such training exist in the work under contract. Upon satisfactory completion of a phase of training under a multi-phase apprenticeship or training program, if training in the remaining phases is not available and work in the completed phase is available, the minority or woman indentured apprentice or trainee shall continue employment, and be compensated at the prevailing journeyworker wage rate for such work. Hours of employment as a journeyworker described above will not be credited toward training hours required by the approved training or apprenticeship program.

A trainee may be terminated at any time during training for excessive absenteeism, lack of punctuality accident-proneness, lack of interest, poor attitude and continued failure to conduct his/herself in a professional manner. However, termination will not occur prior to proper counseling, documentation, and notification in writing to the Owner's Engineer or agent in charge of the project, and to the Department of Transportation's Regional Compliance Specialist, and subsequently the concurrence of the Owner's engineer or agent and the NYSDOT Regional Compliance Specialist, with that termination.

**REQUIRED RECORDS.** The Contractor shall provide each minority or woman trained under this provision with a certification showing the type and length of training satisfactorily completed. In addition, the Contractor shall keep records on the job site indicating the nature and hours of training provided to each trainee or indentured apprentice documenting performance under this Training Special Provision to the Owner's Engineer or agent in charge of the project and to the Department of Transportation's Regional Compliance Specialist Form AAP-42a, Training Report will be submitted once the trainee or indentured apprentice commences training, competes training, or is terminated and each December 31st that individual is in training. Form AAP 26LL, Monthly Training Progress Report, will be submitted every month after the individual commences training. No measurement will be made of training provided to indentured apprentices or trainees for whom no work history has been provided to the Owner's Engineer or agent in charge of the project. In addition, no measurement will be made of the training provided to apprentices for whom no evidence of indentureship in a registered program has been provided to the Owner's Engineer or agent in charge of the project.

**NO PAYMENT FOR TRAINING.** No payment will be made to the Contractor for the training required by this Training Special Provision. The required training is a labor cost which is included in the unit prices bid by the Contractor for the items of work comprising the contract.

**LISTS OF OJT & REGISTERED APPRENTICESHIP PROGRAMS.** Effective April 1, 1992, the New York State Department of Transportation commenced a demonstration program in NYSDOT Regions 2, 3, 5, and 11 requiring the exclusive use of apprenticeship training to fulfill the Training Special Provision and supplement EEO goal attainment. The remaining NYSDOT Regions, contractors will be allowed to use on-the-job training (OJT) programs during the period of the demonstration project. However, only OJT programs for crafts that have been deemed as apprenticeable occupations will be approved. In order to ease the transition from OJT to apprenticeship, it is required that all OJT will participants receive related classroom instruction.

It is the policy of the New York State Department of Transportation to afford equal employment opportunity to traditionally socially and economically disadvantaged persons by providing training opportunities to minority and disadvantaged persons and women to improve their potential for construction employment. NYSDOT, therefore, provides training as a contract requirement on selected construction contracts, including those let by other agencies and local governments under an agreement with NYSDOT.

When OJT is to be provided under this Training Special Provision, the Contractor shall obtain acceptance from the Owner and NYSDOT for the OJT Program to be utilized and the starting time frame for training, prior to commencing training. Accordingly, the following is a listing of OJT programs which have been approved by the NYSDOT and the Federal Highway Administration (FHWA) for utilization in NYSDOT Regions 1, 4, 6, 7, 8, and 10.

**NOTE: A contractor in these Regions may opt to use either OJT or apprenticeship programs. However, the use of apprenticeship programs is strongly encouraged.**

Contract Requirements

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**FOR LISTS OF CURRENTLY APPROVED APPRENTICESHIP PROGRAMS  
SEE THE FOLLOWING  
NEW YORK STATE  
DEPARTMENT OF LABOR's WEB SITE:**

<http://www.labor.ny.gov/apprenticeship/sponsor/index.asp>

**NO TEXT**

**CHANGED CONDITIONS AND DISPUTED WORK PROVISIONS:**

It is the goal of the Sponsor to resolve disputes that may arise under the contract in a timely, just and fair manner consistent with the terms of the contract. Towards this goal, the Sponsor is specifying the dispute resolution and disputed work provisions of this Section. This dispute resolution process may be undertaken at any time from the contract award to the submission of the final estimate for payment by the Sponsor. The process recognizes and will take into consideration the risks and controls inherent in construction which the Contractor or the Sponsor have agreed to assume pursuant to the terms of the contract.

If the Contractor considers its disputes unresolved after following the requirements of this Section then at any time prior to the submission of the final agreement for payment to the Sponsor, the Contractor may request in writing a meeting with the Sponsor, or its designated representative, to review any outstanding dispute or items of a dispute that have not been previously resolved to the satisfaction of the Contractor through the dispute resolution process. If the contractor fails to comply with the requirements of this section, any claim of the Contractor with respect thereto shall be deemed waived.

A. TIME RELATED DISPUTES. Whenever the Contractor believes that it is or will be entitled to additional compensation for time related disputes, whether due to delay, extra work, disputed work, breach of contract, or other causes, the Contractor shall follow the procedures set forth in this Section. All subcontracts, supply or equipment contracts shall incorporate these provisions of Dispute Resolution and Disputed Work Provisions. If such subcontracts or supply or equipment contracts do not have similar provisions, then the Sponsor's payments to the Contractor for such subcontract or supply or equipment work shall be limited to only that which are provided by the provisions of this Section as if it were in effect for such subcontract or supply or equipment contract.

1.

a. The term 'dispute' shall mean a matter of contract performance or contract compensation, including granting of extensions of time, in which there is or may be disagreement between the Contractor and the Sponsor and which may involve adjustment of contract items or the addition of new items to the contract, extension of time for performance and/or adjustments in compensation necessitated by the resolution of such disagreement.

b. The term 'time related dispute' shall mean any dispute arising from any event not within the Contractor's control, performance, action, force, or factor which affects the scheduled time of performance depicted in the Contractor's most recent Sponsor approved progress schedule submitted to the Sponsor. This Subsection is intended to cover all such events which include termination, major deductions or increases to quantities of work, Contingencies, Extra Work, Deductions, and suspension of work and cancellation of contract, Right to Suspend Work and Cancel Contract, as well as actions, forces or factors, whether they be termed 'delay', 'disruption', 'interference', 'inefficiencies', 'impedance', 'hindrance', 'acceleration', or otherwise. This subsection shall cover all such applicable events under Differing Site Conditions, Suspensions of Work, and Significant Changes in the Character of the Work Provisions. Notwithstanding the foregoing, for time related compensation requests, the Sponsor will compensate the Contractor for only those instances arising out of the issuance by the Sponsor of a stop work order relative to a substantial portion of the work, or arising out of the unavailability of critical rights of way parcels, either of which are determined by the Sponsor to significantly affect the scheduled completion of the work.

2. Strict compliance with the notice provisions of this Section and compliance with the record keeping provisions of this section and Extra, Force Account Work, Dispute



## ATTACHMENT "K"

Compensation and Record keeping, shall be an essential precedent condition under the contract provisions to any recovery of time related damages by the Contractor whether it be under the contract provisions, court actions and proceedings or otherwise.

3. Except for situations that come within the terms of Differing Site Conditions, Suspensions of Work, Significant Changes in the Character of the Work Provisions, subsection 2, Suspensions of Work, within ten work days after the Contractor has knowledge or should have had knowledge of an event, matter or occasion, that will result in time related damages, the Contractor must provide the Engineer with written notice of a dispute for time related damages.

The Sponsor shall have no liability and no adjustment will be made for any time related damages which accrued more than ten work days prior to the filing of such a notice with the Engineer. Failure of the Contractor to give such written notice in a timely fashion will be grounds for denial of the dispute and the Sponsor does not have to show prejudice to its interest before such denial is made. In the event the Contractor fails to provide the required written notice within the ten work day period and the Contractor demonstrates justifiable excuse or cause as determined by the Sponsor for not providing the required written notice, then said 10 day notice period may be lengthened but only if the Contractor has maintained and submits the specified records set forth in these provisions and the Sponsor has knowledge of the matter or occasion that may result in time related damages. In the event the Contractor fails to maintain and submit such specified records, or fails to demonstrate justifiable excuse or cause if such notice is not given, or demonstrates such justifiable excuse or cause but fails to maintain and continue to maintain and submit such specified records, the Contractor hereby agrees to waive the dispute for compensation, notwithstanding the fact that the Sponsor may have actual notice of the facts and circumstances which comprise such dispute and is not prejudiced by said failure.

As directed by the Engineer, the work shall continue during the pendency of the dispute. The Engineer shall make the initial determination in writing on the dispute and the Contractor, if it considers the issue unresolved, shall promptly notify, within ten (10) work days after receipt of the Engineer's decision, notify the Sponsor, in writing with copies to the Engineer of its contentions relative to the dispute, indicating the substance of previous communication on the issue with the Engineer and its rebuttal of his or her previous findings or determinations. The Sponsor, or its designee, shall make a finding thereon and notify the Contractor of same in writing.

Adjustments of contract items, or adjustments to the time of performance, or the addition of new items to the contract necessitated by such dispute determination may be made until the time the final agreement is submitted for payment to the Sponsor, provided that the requirements of this Section are complied with.

4. If time related damages are presumed to have been incurred and after giving the Sponsor notice of a dispute for time related damages, the Contractor must keep daily records of all labor, material, and equipment costs and hours incurred for the affected operations. These daily records must identify each operation affected and the specific locations where work is affected. On a <weekly basis,= beginning the week following the date of giving notice of a dispute for time related damages, the Contractor shall meet with the Engineer and present the daily records for the preceding week. If the Engineer disagrees with the accuracy, applicability, or reasonableness of any portion of the Contractor's submission, he/she shall promptly notify the Contractor who shall correct its records. If there is a dispute as to records, the Contractor must follow the requirements of this specification, Part (C). The dispute shall first be submitted to the Regional Director and if unresolved will be submitted in writing to the Sponsor or his/her

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designee whose decision shall be final and conclusive subject to the Contractor's right to assert a claim in New York State Court of Claims. Lack of substantial compliance with the requirements to attend weekly meetings or present its records will constitute a waiver by the Contractor of said dispute for time related damages.

5. After giving notice of a dispute for time related damages, the Contractor shall prepare and submit to the Engineer, if requested, weekly written reports until complete resolution of the dispute, which shall be available at the next scheduled job meeting, providing the following information:

- a. Potential effect to the Contractor's schedule caused by the time related dispute;
- b. Identification of all operations that have been affected or delayed, or are or may be affected or delayed;
- c. Explanation of how the Sponsor's act or omission affected or delayed each operation, and estimation of how much more time is required to complete the project;
- d. Itemization of all extra costs being incurred, including:
  - (1) An explanation as to how those extra costs relate to the effect or delay and how they are being calculated and measured.
  - (2) Identification of all project employees for whom costs are being compiled.
  - (3) Identification of all manufacturers' numbers of all items of equipment for which costs are being compiled.

6. In addition, after submitting the required notice specified in this section, the contractor shall complete its dispute submission by complying with Extra Force Account Work, Dispute Compensation and Record keeping, Part (E), Required Content of Dispute Submission, when such information is ascertainable by the contractor and Part (F), Required Certification of Disputes.

**B. ACCELERATION DISPUTES.** The Contractor may not maintain a dispute for costs associated with acceleration of the work unless the Sponsor has given prior express written direction by the Engineer to the Contractor to accelerate its effort. The Contractor shall always have the basic obligation to complete the work in the time frames set forth in the contract. For purposes of this Subsection, lack of express written direction on the part of the Sponsor shall never be construed as assent.

If the Contractor does accelerate its work efforts pursuant to a written order or express written approval by the Sponsor, the Contractor shall be compensated for its effort, in the same manner and as limited by Extra Force Account Work, Dispute Compensation and Record keeping, Part (D). The Sponsor, in determining whether or not any compensation under this Section is warranted, will evaluate the facts and circumstances which led to the acceleration to determine whether they were in the Contractor's control.

If the Contractor is claiming a <constructive acceleration,= it must follow the requirements of this section, Part (A).

**C. DISPUTED WORK.** If the Contractor is of the opinion that any work ordered by the Engineer to be done as contract work is extra work and not contract work, or that any order of the Engineer exceeds the work requirements of the provisions of the contract, the Contractor shall promptly, within ten work days of receipt of the order or direction, notify the Engineer in writing of its contentions thereto. The Contractor must progress the work as required and ordered. In the meantime, the Contractor, if it considers the issue unresolved, shall promptly,

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within ten work days of receipt of the Engineer's written decision, notify the Sponsor in writing with copies to the Engineer, of its contentions relative to the dispute, indicating the substance of previous communication on the issue with the Engineer and its rebuttal of their previous findings. The Sponsor, or its designated representative, shall make a finding thereon and notify the Contractor of same in writing. If such work is determined by the Sponsor or its designee to be extra work pursuant to the provisions of this Section, compensation will be made pursuant to Extra Force Account Work, Dispute Compensation and Record keeping, Part B. In addition, after submitting the required notice specified in this section, the contractor shall complete its dispute submission by complying with Extra Force Account Work, Dispute Compensation and Record keeping, Part (E), Required Content of Dispute Submission, when such information is ascertainable by the contractor and Part (F), Required Certification of Disputes. This subsection shall cover all such applicable extra work under Differing Site Conditions, Suspensions of Work, Significant Changes in the Character of the Work Provisions. During the progress of such disputed work, the Contractor and Engineer shall keep daily records and make reports of all labor, material and equipment used in connection with such work and the cost thereof as specified in Extra Force Account Work, Dispute Compensation and Record keeping, Part (C), Force Account Reports.

If the Sponsor or its designated representative determines that the work in question is contract work and not extra work, or that the order complained of is proper, he/she shall again direct the Contractor to continue the disputed work and the Contractor must promptly comply. The Contractor's right to pursue a dispute under this Section for extra compensation or damages will not be affected in any way by the Contractor's complying with the directions of the Sponsor or Engineer to proceed with the work, provided the Contractor continues to keep and furnish the Engineer with Force Account Reports as specified in Extra Force Account Work, Dispute Compensation and Record keeping, Part (C).

If the Sponsor, or its designated representative, determines that such work is extra work and not contract work, or that the order complained of is not proper, then the Sponsor or his/her designated representative shall have prepared, if necessary, an order on contract covering such work as soon as is practical after the determination is made. Payment will be made for such work via agreed price or force account pursuant to Extra Force Account Work, Dispute Compensation and Record keeping, Part (B), New Item Charges. The Sponsor, or its designee, will notify the Contractor in writing of the date upon which the Sponsor has approved the order on contract. Performance of work until receipt of the order on contract by the Contractor shall be considered disputed work. The Contractor must progress the work of the contract, including the work covered by any such order on contract, as directed by the Engineer. Adjustments to contract items, or adjustments to the time of performance, or the addition of new items to the contract necessitated by such determination may be made up until the time the final agreement is submitted for payment to the Sponsor, provided that all the requirements of Extra Force Account Work, Dispute Compensation and Record keeping are complied with. In addition, documented, additional, actual and reasonable costs incurred by the Contractor pursuant to following a written order to perform work (that was subsequently contained in an order on contract which was disapproved) will be considered as reimbursable. This work will be considered disputed work for which the Contractor will be compensated. Eligibility for compensation shall cease upon notification of the order on contract's disapproval. Failure by the Contractor to promptly notify, in writing, the Engineer and the Sponsor of its contentions relative to any dispute or to maintain and furnish force account reports for disputed work shall constitute a waiver of the disputed work claim.

D. AUDITING OF RECORDS. The Contractor who has filed a dispute must have the following records available for audit at any time following the filing of such dispute, whether or not such dispute is part of a suit pending in the courts of this State. If a dispute is filed on behalf

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of a subcontractor or supplier, such subcontractor or supplier must also have substantially the following records available for audit any time following the filing of such dispute, whether or not such dispute is part of a suit pending in the courts of this State. The audit may be performed by employees of the Sponsor or by an independent auditor appointed by the Sponsor. The audit may begin on ten days' notice to the Contractor, subcontractor, or supplier as is appropriate. The Contractor, subcontractor, or supplier shall cooperate with the auditors. The Sponsor will maintain the audit, its backup, reports, schedules and conclusions as confidential material. Failure of the Contractor, subcontractor, or supplier to maintain and retain sufficient records shall constitute a waiver of that portion of such dispute that cannot be verified and shall bar recovery thereunder.

Without limiting the generality of the foregoing, the auditors shall have available to them and the Contractor agrees to provide access to substantially the following documents:

1. Daily time sheets, job superintendent diaries or log sheets and foreman's daily reports.
2. Union agreements and reports, if any.
3. Insurance policies, welfare and benefits records or plans for union and non-union personnel.
4. Payroll register.
5. Individual employee earnings records.
6. Payroll tax returns.
7. Material invoices, purchase orders, and all material and supply acquisition contracts.
8. Material cost distribution work sheet.
9. Equipment records (list of company equipment, rates, depreciation schedules, daily equipment reports or logs, fueling logs or records, equipment lease purchase agreements, and equipment purchase invoices).
10. Vendor rental agreements, subcontractor invoices, agreements and back charge records.
11. Subcontractor payment certificates.
12. Canceled checks (payroll and vendors).
13. Job cost ledger or report.
14. Job payroll ledger, petty cash journal and supporting vouchers.
15. General ledger, general journal (if used), and all subsidiary ledgers and journals together with all supporting documentation pertinent to entries made in these ledgers and journals.
16. Cash receipts, cash disbursements journal, and purchase journal.
17. Audited and unaudited financial statements for all years reflecting the operation on this project.

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18. Depreciation records on all company equipment whether such records are maintained by the company involved, its accountant, or others.
19. If a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.
20. All documents which reflect the Contractor's actual overhead during the years this Project was being performed.
21. All documents related to the preparation of the Contractor's bid including the final calculations on which the bid was based.
22. All documents which relate to each and every dispute together with all documents which support the amount of damages as to each dispute.
23. Work sheets used to prepare the dispute establishing the cost components for items of the dispute including, but not limited to, labor, benefits, insurance, materials, equipment, subcontractors, and all documents which establish the time periods, individuals involved, the hours and the rates for the individuals.

In the event the Contractor fails to substantially furnish the above required reports and accounting records, such failure shall constitute a waiver of the dispute for payment other than for payment at contract unit prices for the work performed.

**CONTRACTOR'S RESPONSIBILITY FOR WORK.** The Contractor is responsible for carrying out the provisions of the contract at all times, regardless of whether an authorized inspector is present or not. Any work or item that is, at any time, found to be out of specification or not in compliance with the plans shall remain the responsibility of the Contractor and shall be subject to such corrective measures that are approved in writing by the Engineer.

**A. CONTRACT ITEM CHARGES.** When an order-on-contract provides for similar items of work or materials which increase or decrease the itemized quantity provided for in the primary contract, the price to be paid therefor shall not exceed the unit bid price in the primary contract for such items.

**B. NEW ITEM CHARGES.**

1. **Agreed Prices.** Agreed prices for new items of work or materials may be incorporated in the order-on-contract as the Sponsor may deem them to be just and fair and beneficial to the Sponsor. These prices must be supported by a complete price analysis in the order-on-contract or, by reference to average bid prices for similar type and quantity of work from other recent contracts. The price analysis will be based on an estimated breakdown of charges listed in the following paragraph 2. "Force Account Charges," unless some other basis is approved by the Sponsor.

2. **Force Account Charges**

3. **Contractor Charges.** Where there are no applicable unit prices for extra work ordered and agreed prices cannot be readily established or substantiated, the Contractor shall be paid the actual and reasonable cost of the following:

(1) **Necessary Materials** (including transportation to the site.) Materials is defined to include all products incorporated in the temporary or permanent work. The following items consumed in

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progressing the work are also considered to be materials for which reimbursement with an allowance for profit and overhead will be made. These are oxygen, acetylene, propane, welding rods, grinding wheels, and saw blades. Separate reimbursement will not be made for all other products which may be consumed in progressing the work and reimbursement for these items is considered to be included in the reimbursement for overhead. Material used, if acquired by direct purchase, must be documented by bills or acceptable invoices. All prices on used material incorporated in either temporary or permanent work shall be billed at a fair value, less than the original cost when new. A reasonable salvage credit shall be given for substantial salvageable material recovered. Salvage value of substantial material recovered shall be determined by the Engineer-in-Charge in coordination with the Contractor.

(2) Necessary labor costs including supplemental benefit payments. Each class of labor shall be billed separately at actual payroll rates. Average rates based on different classes of labor will not be accepted.

(3) Necessary payroll taxes and insurance payments and other such reasonable charges that are paid by the Contractor pursuant to existing written agreements with its employees and/or labor organizations.

(4) Sales taxes, if any, required to be paid on materials not permanently incorporated into the work under the order-on-contract.

(5) Equipment, truck and plant rentals, other than small tools. The Contractor shall be reimbursed for the number of hours that the equipment truck or plant is actually used on a specified force account job. Equipment used by the Contractor shall be specifically described by the manufacturer, model number and date of manufacture and be of suitable size and suitable capacity required for the work to be performed. In the event the Contractor elects to use equipment of a higher rental rate than the equipment suitable for the work, payment will be made at the rate applicable to the suitable equipment. The equipment actually used and the suitable equipment upon which the rental rate is based will be recorded as a part of the record for force account work. The Engineer shall determine the suitability of the equipment. If there is a differential in the rate of pay of the operator of oversize or higher rate equipment, the rate paid for the operator will likewise be related to the suitable equipment.

(a) Contractor Owned Equipment, Trucks and Plant -- Contractor shall be reimbursed for its ownership costs and for its operating costs for self owned equipment at the rates listed in the Rental Rate Blue Book published by the Dataquest, Inc. applied in the following manner as modified by the 'Rate Adjustment Table'.

[1.0] Ownership Costs -- It is mutually understood that the rates for ownership costs reimburse the Contractor for all nonoperating costs of owning the equipment, truck or plant including depreciation on the original purchase, insurance, applicable taxes, interest on investment, storage, overhead, repairs, moving the equipment onto and away from the project or work site, and profit. Reimbursement will be made for the hours of actual use as described below:

[1.1] Less than 8 hours of actual use, the product of the actual number of hours used or fraction thereof multiplied by the hourly rate, or the daily rate, whichever is less.

[1.2] Between 8 hours and 40 hours of actual use, the product of the actual number of hours used divided by 8 multiplied by the daily rate, or the weekly rate, whichever is less.

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[1.3] Between 40 and 176 hours of actual use, the product of the actual number of hours used divided by 40 multiplied by the weekly rate, or the monthly rate, whichever is less.

[1.4] Over 176 hours of actual use, the product of the actual number of hours used divided by 176 multiplied by the monthly rate.

[2.0] Operating Costs -- the rate for operating costs includes fuel, lubricants, other operating expendables, and preventative and field maintenance. Operating cost does not include the operator's wages. The Contractor shall be reimbursed the product of the number of hours of actual use multiplied by the Estimated Operating Cost/Hour.

[3.0] The rates used shall be those in effect at the time the force account work is done as reflected in the then current publication of the Rental Rate Blue Book. When force account type analysis are used to establish agreed prices in accordance with Section B.1 above, the rates used shall be those in effect when the agreed price is developed by the Contractor and submitted to the Engineer-in-Charge.

[4.0] The geographic Area Adjustment Factor shown on the map at the beginning of each section of the Rental Rate Blue Book shall not be applied to the equipment rates subsequently listed in each section, and shall not be used as a basis for payment.

[5.0] In the event that a rate is not established in the Rental Rate Blue Book for Construction Equipment for a particular piece of equipment, truck or plant, the Owner shall establish rates for ownership costs and operating costs for that piece of equipment, truck or plant that is consistent with its cost and expected life.

(b) Rented Equipment, Trucks and Plant --

[1.0] In the event that the Contractor does not own a specific type of equipment and must obtain it by rental, it shall be paid the actual rental rate for the equipment for the time that the equipment is used to accomplish the work or is required by the Engineer-in-Charge to be present, not to exceed the adjusted rental rate in the Rental Rate Blue Book, plus the reasonable cost of moving the equipment onto and away from the project site.

[2.0] The Contractor shall also be reimbursed for the operating cost of the equipment unless reflected in the rental price. Such operating cost shall be determined in the same manner as specified for Contractor Owned Equipment above.

[3.0] In the event that area practice dictates the rental of fully manned or fueled and maintained equipment, truck or plants, payment will be made on the basis of an invoice for the rental of the fully manned, fueled and/or maintained equipment, trucks or plants including all costs incidental to its use, including costs of moving to and from the site, provided the rate is substantiated by area practice.

(c) Maximum Amount Payable -- The maximum amount of reimbursement for the ownership costs of Contractor owned or the rental cost of rented equipment, trucks or plant is limited to the original purchase price of the equipment, truck or plant for any force account work as listed in the Green Guide for Construction Equipment published by the Dataquest, Inc. In the specific event when the ownership or rental reimbursement is limited by the original purchase price, the Contractor shall, nevertheless, be reimbursed for the Operating Cost/Hour for each hour of actual use.

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(6) Profit and Overhead. Profit and overhead cost shall be computed at 20 percent of the following:

(a) Total Direct Labor Cost (actual hours worked multiplied by the basic hourly wage rate) plus supplemental benefits payments, payroll taxes, insurance payments and other labor related fringe benefits payments, payroll taxes, insurance payments and other related fringe benefit payments as defined in (2) and (3) above, but not including the overtime additive payments. Profit and overhead shall not be paid on the premium portion of overtime.

(b) Total Cost of Materials as defined in (1) above including the cost of transportation to the project site.

(7) Overhead shall be defined to include the following:

(a) Premium on bond;

(b) Premium on insurance required by the owner other than Workers Compensation Insurance, premium on public liability and property damage insurance, unemployment insurance, Federal old-age benefits, other payroll taxes and such reasonable charges that are paid by the Contractor pursuant to written agreement with its employee;

(c) All salary and expenses of executive officers, supervising officers or supervising employees;

(d) All clerical or stenographic employees;

(e) All charges for minor equipment such as small tools, including shovels, picks, axes, saws, bars, sledges, lanterns, jacks, cables, pails, wrenches, etc, and other miscellaneous supplies and services;

(f) All drafting room accessories such as paper, tracing cloth, reproduction costs, etc.

(2) Subcontractor Charges. When the work is performed by a subcontractor, the Contractor shall be paid the actual and reasonable cost of such subcontracted work as outlined above in items (1) through (5) under a. Contractor Charges, but profit and overhead shall be figured at (25%) unless some other basis is approved by the Owner.

(3) Service Charges. When work is performed by, or a fee is paid to, a service provider, the contractor shall be paid the actual cost of the service fee plus a maximum five percent (5%) for contract supervision, overhead and profit. This 5% shall be applied once to the service fee regardless of who makes direct payments to the service provider.

H. FORCE ACCOUNT REPORT. Payment for force account work will be made on the basis of the following reports.

1. The Contractor will deliver to the Engineer-in-Charge a daily summary of FORCE ACCOUNT WORK done on the contract. This summary on 8 2" x 11" paper will be delivered to the Engineer-in-Charge not later than closing time on the day following that for which the work is reported.

The summary shall contain:

a. A list of materials used indicating the amount and nature of each material. The cost (if known) should also be included. This must be documented later by proper receipts.



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- b. A list of equipment used indicating the number of hours used and the kind, type, and size of equipment.
  - c. A list of personnel by name, including the hours worked, and labor classification at which they were used on the force account work and the location by station or station of the work proposed.
  - d. A statement of the work accomplished by force account for that day.
  - e. This summary will be dated and signed by the Contractor's authorized representative and the Engineer-in-Charge.
  - f. The contract number and other identification as well as the name of the Contractor shall appear on the statement.
  - g. The Engineer-in-Charge will make any notations, remarks or comments on this form that may assist in final payments.
2. Within 5 calendar days after the end of each pay period, the Contractor shall deliver to the Engineer-in-Charge a FORCE ACCOUNT SUMMARY OF LABOR used on the work which shall include the name, hourly rate of pay, hours worked, fringe benefits, and/or other items as shown on the actual payroll.
  3. On completion of the specific force account work, the Contractor shall within 10 calendar days, deliver to the Engineer-in-Charge a Force Account Summation wherein all materials, equipment, and labor charges are shown and totaled together with such other expenditures as are concerned with the force account item. This summation shall be dated and signed by the Contractor's authorized representative and the Engineer-in-Charge.
  4. In the event the contractor fails to deliver the required force account documentation to the EIC within the time period specified in subsection c, of these General specifications, and as a result the Order-on-Contract for the force account work is not fully approved at the date of final acceptance, the number of calendar days of the time period between final acceptance and the issuance of this force account Order-on-Contract, attributable to the Contractor's late force account submissions will extend the required payment data by an equal period of time.

### D. TIME RELATED DISPUTE COMPENSATION.

1. As limited by Differing Site Conditions, Suspensions of Work, Significant Changes in the Character of the Work Provisions, the following elements of damage, and only the following elements, will be recoverable by the Contractor as <time related dispute damages= provided that they are actual and reasonable:
  - a. Documented additional or escalated job site labor expenses;
  - b. Documented additional or escalated costs for materials;
  - c. Documented additional or escalated equipment costs less appropriate credits, as such are determined in accordance with this Section;
  - d. Documented costs of extended job-site overhead (field costs, including field supervision); job-site overhead would include job superintendent, office engineer and clerical staff, but would not include working foremen;

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- e. An additional 10 percent of the total of items a, b, c and d for home office overhead and 10% for profit thereon except for the differing site conditions or significant change in character of the work clauses (Differing Site Conditions, Suspensions of Work, Significant Changes in the Character of the Work Provisions, Part (A) (1) and (3)) apply, no anticipated profits shall be allowed and where the suspension of work clause (Part (A) (2)) applies, no profit or anticipated profits shall be allowed;
- f. Documented additional or escalated insurance and bond costs;
- g. When the work is performed by a subcontractor, the Contractor shall be paid the actual and reasonable cost of such subcontracted work as outlined above in paragraphs 1(a) through 1(d) and the Contractor's main office overhead and profit shall be figured at 15% and 10% respectively, except for where the differing site conditions or significant change in character of the work clauses ('10.06 (A) (1) and (3)) apply, no anticipated profits shall be allowed and where the suspension of work clause ('10.06 (A) (2)) applies, no profit or anticipated profits shall be allowed;
- h. The phrase <additional expenses= shall include expenses above or below those normally incurred in the performance of the work, less any appropriate credit. The phrase <escalation expenses= shall include unanticipated higher or lower costs and expenses attributable, with appropriate credits, to the performance of work or portions of work in a different time period than that which was indicated on the Owner approved progress schedule.

### 2. Equipment, truck or plant rentals, other than small tools:

a. Equipment used by the Contractor shall be specifically described by the manufacturer, model number and date of manufacture and be of suitable size and capacity required for the work to be performed. In the event the Contractor elects to use equipment of a higher cost than the equipment suitable for the work, payment will be made at the actual cost rate applicable to the suitable equipment unless otherwise provided for in this section. The Engineer shall determine the suitability of equipment.

For purposes of computing Contractor's self-owned equipment, truck or plant costs, the rate used shall be based on the rate listed in the Rental Rate Blue Book published by Dataquest, Inc., with the appropriate adjustments noted in this specification, Part (B) (2).

- b. In the event that a rate is not established in the Rental Rate Blue Book for Construction Equipment for a particular piece of equipment, truck or plant, the Owner shall establish a rate for ownership costs and operating costs for that piece of equipment, truck or plant that is consistent with its cost and expected life.
- c. The Contractor shall be reimbursed for its operating costs for self-owned equipment based on actual cost data. Operating costs shall include fuel, lubricants, other operating expendables and preventive and field maintenance. Operating costs do not include the operator's wages. In the event, after documented and demonstrated due diligence, actual operating costs are not ascertainable, then the Contractor will be compensated utilizing not more than 50% of the operating costs set forth in the <Rental Rate Blue Book= and the Contractor shall be reimbursed the product of the number of hours of actual use multiplied by the operating cost per hour.
- d. The rate for idle equipment and stand-by equipment, shall be based upon the rate of depreciation specified in the Contractor's books and records, or 50% of the rate set forth in the <Rental Rate Blue Book,= published by Dataquest, Inc. with the appropriate adjustments noted

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in this specification, whichever is greater. In the event the equipment is fully depreciated, the Sponsor will pay the actual ownership costs based upon Sponsor audit of the Contractor's books and records.

e. The maximum amount of reimbursement for the ownership costs of Contractor owned or the rental cost of rented equipment, trucks or plant is limited to the original purchase price of the equipment, truck or plant as listed in the Green Guide for Construction Equipment published by the Dataquest, Inc. In the specific event when the ownership or rental reimbursement is limited by the original purchase price, the Contractor shall, nevertheless, be reimbursed for the operating cost per hour for each hour of actual use.

f. For purposes of rented equipment, the provisions of this specification, Part (B), New Item Charges, are controlling.

3. The parties agree that, in any dispute for time related damages, the Sponsor will have no liability for the following items and the Contractor further agrees it shall make no claim for the following items:

- a. Profit, in excess of that provided in this specification, Part (D) (1)(e) and (g);
- b. Loss of anticipated or unanticipated profit;
- c. Labor inefficiencies and loss of productivity;

d. Home office overhead in excess of that provided in this specification, Part (D) (1)(e) and (g);

e. Consequential damages, including but not limited to interest on monies in dispute, including interest which is paid on such monies, loss of bonding capacity, bidding opportunities, or interest on retainage or investment, or any resultant insolvency;

f. Indirect costs or expenses of any nature;

g. Direct or indirect costs attributable to performance of work where the Contractor, because of situations or conditions within its control, has not progressed in a manner satisfactory to the Engineer.

h. Attorneys fees, or claims preparation expenses.

4. REMEDIES EXCLUSIVE: With respect to time related dispute compensation provisions, the parties agree that the Sponsor shall have no liability to the Contractor for expenses, costs, or items of damage other than those which are specifically identified as payable under this specification, Part D. In the event any legal action is instituted against the Sponsor by the Contractor on account of any such dispute for additional compensation, whether on account of time related dispute, delay, acceleration, breach of contract, or otherwise, the Contractor agrees that the Sponsor's liability will be limited to those items which are specifically identified as compensable under this specification, Part D. The Contractor further agrees to make no claim for expenses other than those which are specifically identified as compensable under this specification, Part (D). Nothing in this Section is intended to create any liability of the Sponsor not existing at common law or pursuant to the terms of this contract or to prevent the Contractor from filing a claim in a court of law.

E. REQUIRED CONTENT OF DISPUTE SUBMISSION. All disputes must be submitted in writing to the Engineer, and must be in sufficient detail to enable the Engineer to ascertain the basis and the amount of each dispute. If requested and as a minimum, the following information must be provided when such information is ascertainable by the Contractor:

**1. TIME RELATED DISPUTE SUBMISSIONS.**

- a. A description of the operations that were delayed, the reasons for the delay, how they were delayed, including the report of all scheduling experts or other consultants, if any.
- b. An as-built chart, <Critical Path Method= scheme or other diagram or chart depicting in graphic form how the operations were or are presumed to be adversely affected.
- c. The date on which actions resulting in the dispute occurred or conditions resulting in the dispute became evident.
- d. A copy of the notice of dispute required as per Dispute Resolution and Disputed Work Provisions, Part (A)(3) for the specific dispute by the Contractor.
- e. To the extent known, the name, function, and activity of each Sponsor official, or employee or agent, involved in, or knowledgeable about facts that gave rise to such dispute.
- f. The name, function, and activity of each Contractor or subcontractor official, or employee, involved in, or knowledgeable about facts that gave rise to such dispute.
- g. The identification of any pertinent documents, and the substance of any material oral communication relating to such dispute.
- h. A statement as to whether the additional compensation or extension of time if requested is based on the provisions of the contract or is an alleged breach of contract.
- i. The amount of additional compensation sought and a breakdown of that amount into the categories specified as payable under this specification, Part (D) above.
- j. If an extension of time is also requested, the specific days for which it is sought and the basis for such request as determined by an analysis of the construction progress schedule.

**2. FOR OTHER DISPUTES INCLUDING ACCELERATION DISPUTES.**

- a. A detailed factual statement of the dispute providing all necessary dates, locations and items of work affected by the dispute.
- b. The date on which actions resulting in the dispute occurred or conditions resulting in the dispute became evident.
- c. A copy of the <notice of dispute= required for the specific dispute by the contract pursuant to Dispute Resolution and Disputed Work Provisions, Parts (B) or (C).
- d. The name, function, and activity of each Sponsor official or employee or agent involved in, or knowledgeable about facts that gave rise to such dispute.
- e. The name, function and activity of each Contractor or subcontractor official, employee or agent involved in or knowledgeable about facts that gave rise to such dispute.
- f. The specific provisions of the contract which support the dispute and a statement of the reasons why such provisions support the dispute.

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- g. The identification of any pertinent documents and the substance of any material oral communications relating to such dispute.
- h. A statement as to whether the additional compensation or extension of time requested is based on the provisions of the contract or an alleged breach of contract.
- i. If an extension of time is also requested, the specific days for which it is sought and the basis for such request as determined by an analysis of the construction schedule.
- j. The amount of additional compensation sought and a breakdown of that amount shall conform to the requirements of this specification, Part (B) except for acceleration disputes which shall conform to the requirements and categories specified in Part (D) above.

F. REQUIRED CERTIFICATION OF DISPUTES. When submitting any dispute over \$50,000, the Contractor must certify in writing, under oath and in accordance with the formalities required by the contract, as to the following:

1. That supportive data is accurate and complete to the Contractor's best knowledge and belief;
2. That the amount of the dispute and the dispute itself accurately reflects what the Contractor in good faith believes to be the Sponsor's liability;
3. If the Contractor is an individual, the certification shall be executed by that individual. If the Contractor is not an individual, the certification shall be executed by:
  - (1) Senior company official in charge at the Contractor's plant or location involved;

or

- (2) An officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs.

CONTRACTOR'S COST RECORDS. The Contractor shall maintain records of all required payrolls, and of the details that comprise its total cost pursuant to any and all records maintained pursuant to Dispute Resolution and Disputed Work Provisions and Extra Force Account Work, Dispute Compensation and Recordkeeping, and it shall, at any time within six years following the date of final payment of the project, make such records available, upon request therefor, to the Sponsor for review and audit, if deemed necessary by the Sponsor. In case all or a part of such records are not made so available, the Contractor understands and agrees that any items not supported by reason of such unavailability of the records shall be disallowed, or if payment therefor has already been made, the Contractor shall, upon demand in writing by the Sponsor, refund to the Sponsor the amount so disallowed.

**DIFFERING SITE CONDITIONS, SUSPENSIONS OF WORK, SIGNIFICANT CHANGES IN THE CHARACTER OF THE WORK PROVISIONS.**

**The following provisions shall apply to this contract:**

(1) Differing site conditions.

(i) During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.

(ii) Upon written notification, the Engineer will investigate the conditions and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The Engineer will notify the Contractor of the determination whether or not an adjustment of the contract is warranted.

(iii) No contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.

(v) The aforesaid differing site condition clause (Part (A) (1)) shall be governed by the notice provisions set forth above, and the recordkeeping and other requirements of Dispute Resolution and Disputed Work Provisions, and additional compensation via order on contract(s), if any, shall be made pursuant to Extra Force Account Work, Dispute Compensation and Recordkeeping, Part (B), New Item Charges, 1 (Agreed Price) or 2 (Force Account Charges) and E. Required Content of Dispute Submission (2) and F, Required Certification of Dispute. However, the equipment compensation provisions shall be governed and controlled by the provisions of Part (D) (2).

(2) Suspensions of work ordered by the Engineer.

(i) If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the Contractor shall submit to the Engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment. The record keeping requirements of Section 10.02 must be complied with in connection with any requests for reimbursement.

(ii) Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the Engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The Contractor will be notified of the Engineer's determination whether or not an adjustment of the contract is warranted.

## ATTACHMENT "K"

(iii) No contract adjustment will be allowed unless the Contractor has submitted the request for adjustment within the time prescribed.

(iv) No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided for or excluded under any other term or condition of this contract.

(v) The aforesaid suspension of work clause (Part (A)(2)) shall be governed by the notice provisions set forth above, and the recordkeeping and other requirements of Dispute Resolution and Disputed Work Provisions, and additional compensation via order on contract(s), if any, shall be made pursuant to Extra Force Account Work, Dispute Compensation and Recordkeeping, Part (D), Time Related Dispute Compensation, E., Required Content of Dispute Submission and F, Required Certification of Dispute.

(3) Significant changes in the character of work.

(i) The Engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the Contractor agrees to perform the work as altered.

(ii) If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work, or by affecting other work, cause such other work to become significantly different in character, an adjustment excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the Contractor in such amount as the Engineer may determine to be fair and equitable.

(iii) If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.

(iv) The term <significant change= shall be construed to apply only to the following circumstances:

(A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or

(B) When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

(C) The term "major item" of work shall mean any item for which the original bid price multiplied by the original contract quantity exceeds \$50,000 or 2% of the total contract bid price, whichever is less.

(D) Certain items of work may be <fixed quantity= items. That is, payment will be restricted to the quantity stated in the Estimate of Quantities. If, during the progress of the work the stated quantity is determined to be in error, the terms of Dispute Resolution and Disputed Work Provisions, Part (3)(iv) (B) shall apply with the following alterations:

## ATTACHMENT "K"

1. The major item of work requirement shall not apply.

2. Significant change shall be defined as an actual quantity in excess of 125 percent of the stated quantity, or less than 75 percent of the stated quantity.

(v) The aforesaid significant change in character of work clause (Part (A)(3)) shall be governed by the notice, recordkeeping and other requirements of Dispute Resolution and Disputed Work Provisions, and additional compensation via order on contract(s) shall be made for time related costs, if any, pursuant to Extra Force Account Work, Dispute Compensation and Recordkeeping, Parts (D) and (E) and (F) and for increased costs, if any, pursuant to Part (B), New Item Charges, 1 (Agreed Price) or 2 (Force Account Charges) and E (2), Required Content of Dispute Submission and F, Required Certification of Dispute, but, the equipment compensation shall be governed and controlled by the provisions of Part (D) (2).

(vi) In respect to the aforesaid significant changes in the character of work clause (this specification, Part (A) (3)), the contractor or the sponsor, as the case may be, must make written notification to the other party of the existence of the 'significant change'. This notice shall be given in a timely manner with respect to the date that either party had, or should have had, knowledge of an event, matter, occurrence of work order which results in a significant change in the work. If the affected work is in progress, notice shall be given within 3 days of knowledge of the change. If the affected work is not in progress, notice shall be given within 10 days of knowledge of the change. The timely issuance of a notice of 'significant change' shall be a necessary requirement for consideration of contract alterations as provided in this section.

B. If the Sponsor determines that as a result of the aforesaid differing site condition, suspension of work clauses and significant change in the character of work clauses, that an adjustment in the contract price is warranted, the Sponsor shall first attempt to arrive at an agreed price with the contract. If unsuccessful, the Sponsor may make such adjustments to the contract as is determined to be fair and equitable utilizing Owner estimates. Commencing with the issuance of notice, and through the date of agreement between the Sponsor and the contractor, all work subject to these provisions shall be treated as Disputed Work, with daily recordkeeping in accordance with the provisions of Dispute Resolution and Disputed Work Provisions.

C. If any of the notice or other provisions of this specification, Part (A) are in conflict with any other of the provisions of the Standard Specifications, then the provisions of this specification, Part (A) shall prevail and take precedence and be of force over and against any said conflicting provision of said contract.

D. Solely for purposes of the aforesaid specification, Parts (A)(1),(2) and (3), and solely for purposes of disputes as to records pursuant to Dispute Resolution and Disputed Work Provisions, Part (A)(4), the Engineer shall be the Engineer-in-Charge.



**CONTRACTOR INITIATED VALUE ENGINEERING CHANGE PROPOSAL  
(CIVEC)**

**A. Purpose and Scope**

The term "proposal" as used in this Subsection is construed to mean a Contractor Initiated Value Engineering Change (CIVEC) Proposal submitted by the Contractor for changing the Plans, Specifications, or other requirements of the Contract. The Value Engineering Change Proposal shall conform with the following:

It is the intent of this provision to share with the Contractor any cost savings which may be generated on this Contract as the result of CIVEC proposals offered by the Contractor and approved by the Department. The purpose is to encourage the use of the Contractor's ingenuity and experience in arriving at a lower cost alternative with any time-saving construction methods other than those reflected in the Contract Documents, by the sharing of savings resulting therefrom. The proposals contemplated are those that could produce a savings to the Department, without, in the sole judgment of the Deputy Chief Engineer, impairing the essential functions and characteristics of the Project or a portion of the Work involved. They include, but are not limited to: safety, service, life, stage construction, economy of operation, ease of maintenance and desired appearance.

**B. Submittal of CIVEC Proposal**

**The Contractor may submit a CIVEC only after Award of the Contract. The CIVEC may be accepted within 30 (thirty) days after Award of Contract and should be approved by the New York State Department of Transportation.**

**B-1. Submittal of Initial CIVEC Proposal**

An initial proposal is required for all CIVEC proposals and shall outline the general technical concepts associated with the proposal and the estimated savings which will result. The initial proposal will be reviewed by the Department and, if found to be conceptually acceptable, approval to submit a Final Proposal will be granted by the Department. A finding of "conceptual acceptability" of the initial proposal however, in no way obligates the Department to approve the final proposal. Further, the Contractor shall have no claim against the City as a result of the rejection of any such initial or final proposal.

**B-2. Submittal of Final CIVEC Proposal**

At a minimum, the following materials and information shall be submitted with each CIVEC proposal, plus any additional information requested by the Department.

- a) A statement that the CIVEC is submitted as the "Final Value Engineering Change Proposal," as per Department approval of the Initial CIVEC Proposal.
- b) A description of the difference between the existing contract requirements and the proposed change, and the comparative advantages of each, including considerations of service life, economy of operation, ease of maintenance, desired appearance and safety.
- c) Complete plans and specifications showing the proposed revisions relative to the original contract features and requirements.
- d) A complete cost analysis indicating the Final Estimate costs and quantities to be replaced by the CIVEC proposal, the new costs and quantities generated by the CIVEC proposal, and the cost effects of the proposed changes on operational, maintenance and other considerations.
- e) Pursuant to Article 25 of the Agreement, Value Engineering Change Proposals are considered Change Orders, therefore, a statement of the time, by which adopting of the proposal must be executed so as to obtain the maximum benefit during the remainder of the Contract, is required. The date must be selected to allow the Department ample time for review and processing of the Change Order, but without affecting the Contractor's schedule. Should the Department find that insufficient time is available for review and processing, it may reject the CIVEC proposal solely on such basis. If the Department fails to respond by the date specified, the Contractor shall consider the CIVEC proposal rejected unless otherwise notified in writing by the Department; and shall in any event have no claims against the City as a result thereof.
- f) A statement as to the effect the CIVEC proposal will have on the time for completion of the contract.
- g) A description of any previous use or testing of the CIVEC proposal on another Department project, indicate the date, contract number and the action taken by the Department.

**C. Conditions**

CIVEC proposals will not be considered in determining the lowest responsible bidder. CIVEC proposals will only be considered after award, and only when all of the following conditions are met:

1. The Contractor is cautioned not to base any bid prices on the anticipated approval of the CIVEC proposal and to recognize that such proposal may be rejected and that the Contractor will thus, be required to complete the Contract in accordance with the plans and specifications bid.
2. All CIVEC proposals, whether or not approved by the Department for use in this contract, apply only to the on-going Contract or Contracts referenced in the CIVEC proposal and become the property of the Department without restriction as may otherwise be imposed by the Contractor, on their use and disclosure. The Department shall have the right to use, duplicate and disclose in whole or in part any data necessary for the utilization of the proposal. The Department retains the right to utilize any accepted CIVEC proposal or part thereof, on any subsequent project without any obligation to the Contractor submitting the same.
3. If the Department already has under consideration certain revisions to the Contract or has approved certain changes in specifications or standards for general use which are then subsequently incorporated in a CIVEC proposal submitted by the Contractor, the Department shall reject the Contractor's proposal and proceed with such revisions if it so desires without any obligation to the Contractor.
4. The Contractor shall have no claim against the City for any costs or delays incidental to the Department's rejection or approval of a CIVEC proposal, including but not limited to development costs, anticipated profits, or increased material and labor costs resulting from delays in the review of such CIVEC proposal.
5. The Department shall be the sole judge as to whether a CIVEC proposal qualifies for consideration and evaluation. It may reject, at will, any CIVEC proposal that requires excessive time or costs for review, evaluation and/or investigations, or which is not consistent with the Department's design policies and basic design criteria for the project; as well as, for any other reason the Department deems appropriate, without explanation.

## ATTACHMENT "L"

6. The Engineer may reject all or any portion of the work performed pursuant to an approved CIVEC proposal if it is believed that unsatisfactory results are being obtained. The Engineer may direct the removal of such rejected work and require the Contractor to proceed in accordance with the original Contract requirements without reimbursement for any work performed under the CIVEC proposal, or for its removal. Where modifications to the CIVEC are approved in order to adjust to field or other conditions, reimbursement will be limited to the total amount payable for the work at the Contract bid prices as if it were constructed in accordance with the original Contract requirements. Such rejection or limitation of reimbursement shall not constitute the basis of any claim against the City for delay or for any other costs.
7. The CIVEC proposal shall not be experimental in nature but shall have been proven to the Department's satisfaction under similar or acceptable conditions on another Department project or at another location acceptable to the Department.
8. CIVEC Proposals shall be considered only if equivalent options are not already provided in the Contract documents.
9. The savings generated by the CIVEC proposal must be of sufficient significance, in the sole judgment of the Department, to warrant review and processing.
10. A CIVEC proposal changing the types and or thickness of the pavement structure will not be considered.
11. If additional information is deemed necessary by the Engineer to evaluate the CIVEC proposal, this information must be provided in a timely manner to allow sufficient time for review. Failure to do so will result in rejection of the CIVEC proposal. Such additional information should include but not be limited to design changes, field investigation and survey results, design computations, and field change sheets.
12. No changes to the work shall be considered as CIVEC eligible, if they are the result of design errors or omissions which would have needed correction notwithstanding any CIVEC provision in the specification; even if the need for such correction is first brought to the Engineer's attention by the Contractor.

**D. Payment**

If the CIVEC proposal is accepted by the Department, the changes and payments will be made in accordance with the applicable sections of the Procurement Policy Board (PPB) Rules and this contract. Reimbursement to the Contractor shall be made as follows:

1. The changes will be incorporated into the original Contract proposal as submitted by the Contractor via changes in the quantity of unit bid items, changes in the amounts of lump sum items and new agreed priced items, as appropriate.
2. The cost of the revised work as determined from the aforementioned changes in quantities, or new items will be paid directly. In addition to such payment, the Department will pay to the Contractor, via a separate item, 50 percent of the savings to the Department as reflected by the difference between the above payment and the cost of the related construction required by the original Contract plans and specifications computed at Contract bid prices.
3. The Contractor's costs for development, design and implementation of the CIVEC proposal are not eligible for reimbursement.
4. **The Contractor may submit CIVEC proposals on behalf of an approved subcontract, provided that reimbursement is made by the Department to the Contractor and that the terms of the pass through to the subcontractor are satisfactorily negotiated and accepted by the Contractor and Subcontractor before the CIVEC proposal is submitted to the Department. Subcontractors may not otherwise submit a CIVEC proposal, except through the prime Contractor.**

**NO TEXT**

**ITEMIZED PROPOSAL**

**To the State Department of Transportation:**

In submitting this bid the undersigned declares to be the only person or persons interested in the said bid; that it is made without any connection with any person making another bid for the same contract; that the bid is in all respects fair and without collusion, fraud or mental reservation; and that no official of the State, or any person in the employ of the State is directly or indirectly interested in said bid or in the supplies or work to which it relates, or in any portion of the profits thereof.

The undersigned also hereby declares to have carefully examined the plans, specifications and form of contract, and to have personally inspected the actual location of the work together with the local sources of supply, to be satisfied as to all the quantities and conditions, and understands that in signing this proposal waives all right to plead any misunderstanding regarding the same.

The undersigned further understands and agrees to furnish and provide for the respective item price bid all the necessary material, machinery, implements, tools, labor services and other items of whatever nature, and to do and perform all the work necessary under the aforesaid conditions, to complete the improvement of the aforementioned project in accordance with the plans and specifications for said improvement, which plans and specifications it is agreed are a part of this proposal, and to accept in full compensation therefore the amount of the summation of the products of the approximate quantities multiplied by the unit prices bid. This summation will hereinafter be referred to as the gross sum bid.

The undersigned further agrees to accept the aforesaid unit bid prices as compensations for any additions or deductions caused by variation in quantities due to more accurate measurement, and for use in the computation of the value of the work performed for monthly estimates.

The undersigned further agrees that at any time during the progress of work the State adds, alters or omits portions of the work it shall so perform such work and accept compensation in accordance with the Standard Specifications.

The undersigned further understands and agrees not to start any work until the contract agreement is signed by the Commissioner or the Commissioner's duly authorized representative. In case the undersigned voluntarily undertakes to start work, other than that expressly prohibited in this Subsection, after the contract agreement is signed by the Commissioner but prior to approval by the State Comptroller, the undersigned does so entirely at its own risk and without obligation or responsibility on the part of the State unless and until the awarded contract becomes effective pursuant to Section 112 of the State Finance Law by approval of the State Comptroller and filing in the Office of the State Comptroller; and hereby agrees and warrants that, as a prerequisite to the start of any such voluntary work, accepts, assumes and undertakes all of the provisions of this proposal and of the plans and specifications of the proposed contract, including all of the provisions and responsibilities thereof relative to (1) damage, indemnification and holding the State harmless as set forth in said contract documents, and (2) actually furnishing in advance of any contract operations, the required insurance policies of each and every kind and amount as called for in said contract documents, particularly with relation to workers compensation and liability insurance policies as set forth in the related specifications; and also agrees and warrants that all of such policies will be in force and effect on the date of the start of any such contract operations, whether or not the contract documents have been executed and filed as aforesaid. In no event shall the undersigned start any contract work which involves a disturbance of the contract site prior to execution of the contract by the Comptroller.

**UNITED STATES DEPARTMENT OF TRANSPORTATION HOTLINE**

Persons with knowledge of bid collusion (i.e. contractors, suppliers, workpersons, etc.), or other questionable contract related practices (inadequate materials, poor workmanship, theft of materials, etc.), are encouraged to report such activities by calling the **U.S. D.O.T. HOTLINE**. The **HOTLINE** number is 1-800-424-9071 and calls will be answered from 8:00 A.M. to 5:00 P.M. EST, Monday through Friday.

This **HOTLINE** is under the direction of the U.S.D.O.T.'s Inspector General. All information will be treated confidentially and the caller's anonymity will be respected.

**NEW YORK STATE INSPECTOR GENERAL HOTLINE**

Reports of New York State Governmental Misconduct may be made in strict confidence to the New York State Inspector General on the Toll Free Statewide **HOTLINE** or by writing to the Office of the Inspector General. The Toll Free Statewide **HOTLINE** telephone number is 1-800-367-4448 and calls will be answered between 8:00 A.M. and 4:30 P.M., Monday through Friday. The address of the Office of the State Inspector General is the State Capital, Executive Chamber, Albany, New York 12224.



## **ATTACHMENT "P"**

**PROMPT PAYMENTS BY THE CONTRACTOR.** In accordance with Section 139-f(2) of the State Finance Law, the Contractor shall pay each Subcontractor and materialman for the value of work performed pursuant to contract no later than seven (7) calendar days from the receipt of each payment the Contractor receives from NYC Department of Design and Construction (NYCDDC). Payment by the Contractor to Subcontractors or materialmen shall reflect the quantities or percentage of work completed by the Subcontractor or materials furnished by the materialmen, and paid by NYCDDC; and such payment shall be based upon the actual conditions of the subcontract or purchase order. The Contractor shall not hold any retainage, but may deduct an amount necessary to satisfy any claims, liens or judgments against a Subcontractor or materialman which have not been fully discharged.

The Contractor shall maintain an accounting system acceptable to the NYCDDC to track payments made by the City to the Contractor and payments made by the Contractor to each Subcontractor, Manufacturer, Fabricator or Material Supplier by item and by date.

### **CIVIL RIGHTS MONITORING AND REPORTING.**

SEE SECTION 105-21 OF THE  
NEW YORK STATE  
DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS

The Contractor shall use the current version of NYS Department of Transportation approved Construction Civil Rights Reporting Software (EBO) which is available at the following website:

<https://ebo.dot.ny.gov>

The software is free. Prime contractors, vendors (subcontractors, suppliers, etc.), and agency compliance staff will have access to the software. The prime contractor shall be required to print reports from EBO for submission to the Resident Engineer each month, not later than the 15th of the following month. Data shall be current through the end of the last full payroll week for that month, or as otherwise approved by the Engineer to coordinate with contract payment submittals.

**APPENDIX 2  
IRAN DIVESTMENT ACT**

As a result of the Iran Divestment Act of 2012 (Act), Chapter 1 of the 2012 Laws of New York, a new provision has been added to the State Finance Law (SFL), § 165-a, effective April 12, 2012. Under the Act, the Commissioner of the Office of General Services (OGS) will be developing a list (prohibited entities list) of "persons" who are engaged in "investment activities in Iran" (both are defined terms in the law). Pursuant to SFL § 165-a(3)(b), the initial list is expected to be issued no later than 120 days after the Act's effective date, at which time it will be posted on the OGS website.

By entering into this Contract, Contractor (or any assignee) certifies that once the prohibited entities list is posted on the OGS website, it will not utilize on such Contract any subcontractor that is identified on the prohibited entities list. Additionally, Contractor agrees that after the list is posted on the OGS website, should it seek to renew or extend the Contract, it will be required to certify at the time the Contract is renewed or extended that it is not included on the prohibited entities list. Contractor also agrees that any proposed Assignee of the Contract will be required to certify that it is not on the prohibited entities list before the New York State Department of Transportation (NYSDOT) may approve a request for Assignment of Contract

During the term of the Contract, should NYSDOT receive information that a person is in violation of the above-referenced certification, NYSDOT will offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then NYSDOT shall take such action as may be appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring the Contractor in default.

NYSDOT reserves the right to reject any request for assignment for an entity that appears on the prohibited entities list prior to the award of a contract, and to pursue a responsibility review with respect to any entity that is awarded a contract and appears on the prohibited entities list after contract award.

**ATTACH TO CONTRACT DOCUMENTS**

**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

**PROJECT ID: HMMWTCA7E**

**RECONSTRUCTION OF WORTH STREET**

**FROM HUDSON STREET TO PARK ROW**

**INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK**

**Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK**

**ADDENDUM NO. 3**

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**DATED: March 23, 2009**

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**This Addendum is issued for the purpose of amending the requirements of the Contract Documents and is hereby made part of said Contract Documents to the same extent as if it was originally included therein.**

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**GAS COST SHARING (EP-7) STANDARD SPECIFICATIONS**

# EP-7 GAS COST SHARING STANDARD SPECIFICATIONS

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## **I - NOTICE TO ALL BIDDERS; GAS COST SHARING WORK**

All prospective bidders are hereby advised that, pursuant to the "Gas Facility Cost Allocation Act", ("the Act"), the City of New York has entered into an agreement ("the Agreement") with the gas companies (Con Edison or National Grid (formerly KeySpan Energy Delivery)) operating in their respective areas of the City to "share" the cost of facility relocation and/or support and protection of facilities disturbed by proposed water and/or sewer and related City work specified in this contract. Therefore, bid items, specifications and estimated quantities for the incremental costs of support and protection of certain gas facilities have been included in this contract. The low bid for this contract shall be determined by examining each bid for all work to be performed under this contract including any work of support and protection of gas facilities to be performed. The Contractor shall not seek additional compensation from gas companies except as specifically set forth in its contract.

## **II - GENERAL PROVISIONS; GAS COST SHARING WORK**

### **1. General:**

The Contractor shall perform City work with interferences from existing live and abandoned gas facilities. This shall be defined as utility work. Therefore, this contract include bid items, specifications and estimated quantities designed to fully compensate him/her for the incremental costs of supporting, protecting, provide accommodations and, avoid disturbing gas facilities located in the streets shown on the contract drawings. In the event that any other provisions of this contract related to gas facilities (or private utilities) conflict with these provisions, these provisions shall supersede and govern all work related to gas facilities owned by the companies operating in the project area. All utility work, as defined in these specifications, including changes and additions thereto shall be paid solely by the City except when specified otherwise in this contract. Contractor hereby agrees that the facility operator shall not be liable to pay him/her for any work performed including extra utility work. Contractor agrees that its bid prices include all compensation for loss of productivity and efficiency, idle time, delays (including any delays occasioned by negotiation of a contract change), change in operations, mobilization, demobilization, remobilization, added cost or expense, lost of profit, other damages or impact costs that may be suffered by or because of utility work, or the presence of gas facilities in the proximity of City work and that it will not seek additional compensation for these items. All disputes shall be resolved as specified in the contract.

Pursuant to the Act, Agreement, and the New York City Administrative Code, the gas company(ies) has been directed by the Commissioner and is required to perform all maintenance, repairs, replacement, shifting, alteration, relocation, and/or removal work that are not part of this contract. By having bid on this contract, the Contractor understands and agrees that the Commissioner has preasserted any right the City has to require, including the issuance of any directives or so called "order outs" under the New York City Administrative Code, any or all gas companies to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove all gas facilities that are about to be disturbed by the City contract work. The issuance of additional such directives during the performance of the contract work, where necessary in the sole judgment of the Commissioner, shall be initiated by such Commissioner as set forth in the relevant sections of the Act and Agreement. Contractor further agrees to insert such requirements as set forth herein above into any contracts with its approved subcontractors so that its subcontractors also understand and agree to such contract requirements.

### **2. Gas Interferences And Accommodations:**

During the performance of sewer and water main work funded by the New York City Department of Environmental Protection (NYCDEP), as instructed by the Engineer, the use of any applicable contract bid item is allowed in order to resolve and accommodate all gas facilities interferences with such City work, including the removal of contaminated soil in associated trench excavation. This is in addition to the specified EP-7 bid items in the contract. Payment for such accommodation shall be funded by EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" (F.S. Fixed Sum). The value of such accommodation shall be computed by multiplying the appropriate unit prices bid to the

quantity of work performed, as determined by the Engineer, and applying the total amount thus to be paid to EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS". When EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" does not exist, such additional accommodation work shall be at no cost to the City but shall be a matter of adjustment between gas facility operator and Contractor. Private facilities, other than gas, that become in interference due to gas interferences accommodations shall also be accommodated, if so directed by the Resident Engineer, at no additional cost to the City and, provided that its owner agrees to be responsible for all additional costs to Contractor, otherwise, such facility shall be ordered by the City to be maintained, shifted, relocated or replaced by its owner at his/her expenses.

#### **2a. Water Main Accommodations:**

When water main construction is to be performed in this contract, Contractor shall be required, if warranted by field conditions, and at locations designated by the Resident or Borough Engineer, to change the vertical or horizontal alignment of water mains including but not limited to all additional labor, material, work method accommodations, furnishing, delivering and laying offset fittings and pipes, etc., necessary in order to complete water main installation and, avoid gas interferences in the project area, including street intersections. Typical work method accommodations shall include, but not be limited to, pier and plate, installation of filter fabric and select fill, etc. Such work shall be performed as directed by the Engineer and in accordance with contract specifications and latest edition of water mains standards and specifications.

#### **2b. Sewer Accommodations:**

When sewer construction is to be performed in this contract, Contractor shall be required, if warranted by field conditions, and at locations designated by the Resident or Borough Engineer, to change the horizontal alignment of sewer facilities (if possible) including but not limited to all additional labor, material, work method accommodations, furnishing, delivering and construction of additional manholes or modification of manholes/catch basins, extending chute connections, house connections, using alternate materials and methods, poured-in-place structures, etc., necessary in order to complete sewer installation and, avoid gas interferences in the project area, including street intersections. The term sewer facility shall include, but not be limited to, all sewer pipe and appurtenances, manholes, catch basins, catch basin chutes, etc. Such work shall be performed as directed by the Engineer and in accordance with contract specifications and latest edition of sewer standards and specifications.

#### **3. Quantity Overruns, EP-7 Funded Bid Items:**

No quantity overrun, in excess of one hundred twenty five (125) percent, shall be permitted for EP-7 funded bid items (gas) included in this contract, except when Resident Engineer determines that such overruns are caused by field modifications to planned City work, or approved construction methods, or contract scope changes. Overruns not paid by City shall be negotiated and paid to Contractor by gas facility operator who then shall be entitled to reimbursement by NYCDEP under established cost sharing procedures.

#### **4. Changes And Extra Work:**

This section is not applicable to work defined under "Emergency Reconstruction Contracts" or so-called "Where and When Contracts" since these projects, by definition, inherently encounter unanticipated gas facilities and cannot be pre-engineered. In all other cases, any contract changes proposed for City work shall also cover and include all associated changes to support and protection of gas facilities affected by such changes to City work. In all other cases where the Contractor finds that City work cannot be performed as planned and specified and/or, as approved because of a need to support, protect and/or alleviate interferences from gas facilities that were not listed and/or shown, or incorrectly shown in contractor plans and specifications, he shall immediately notify the Resident Engineer and the facility operators' representative of his findings. Resident Engineer shall promptly examine such claims and determine whether or not such work is covered by contract bid items and /or specifications (contract bid items and specifications shall include city contract items as well as EP-7 items). The Resident Engineer shall also examine the claim to determine if the application of EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" is appropriate to resolve the claim. If upon examination, the Engineer determines that such field conditions were unanticipated (not shown and/or listed, or incorrectly shown in contract documents) and are not covered by bid items and contract specifications, he

shall then direct the Contractor and the affected facility operator to negotiate the cost of supporting and protecting, and/or alleviating the impact on City work caused by such unanticipated gas facilities with each other with the understanding that the performance of City work shall continue during negotiations. If a cost agreement is reached, the Contractor and facility operator shall adjust such costs between themselves at no additional costs to the City contract. If the Contractor and affected facility operator do not reach an agreement concerning the price to be paid for the extra work within five (5) business days of the Engineer's directive to engage into such negotiations and, after considering: public safety and inconvenience, requirements of laws and regulations applicable to private utilities, integrity of all utility systems, including but not limited to sewer and water, gas, electric, telephone and, cable TV facilities, sound engineering practices, cost (long and short term) to all affected parties, and potential City work delays, then the Resident Engineer, depending on nature and severity of interferences with City work, shall either, direct the facility operator to relocate or replace its facilities at its own discretion and cost, reimbursable by NYCDEP under established gas cost sharing procedures or, direct the Contractor to perform the utility work on actual time, material and equipment costs basis pursuant to relevant contract requirements and amendments. Contract bid prices for any applicable items of work involved shall be applied, or converted to an allowance for time and material charges. Changes shall be for affected portions of utility work and, shall be processed with EP-7 funds.

#### **5. Excavation:**

All excavators shall notify the NYC/LI One Call Center at 1-800-272-4480 at least two (2) working days, not including the day of the call, but not more than ten (10) working days in advance of the start of any excavation work. The gas company(ies) will mark out its facilities within the project limits and provide Construction Inspector(s) during all excavation work in close proximity (within twelve (12) inches) to gas facilities. The Contractor shall exercise extreme caution when excavating in the vicinity of any gas facilities. Hand excavation shall be performed within twelve (12) inches of gas facilities. The Contractor prior to excavating underneath these facilities shall adequately support all gas facilities. Standard support details for gas facilities have been included in the specifications. Any damage to gas facilities shall be reported immediately to the gas company(ies). The Contractor shall be responsible for all cost associated with repairs made necessary by damages caused by his operations.

#### **6. Backfilling And Street Restoration:**

Backfilling operations and street restorations shall be in accordance with contract requirements.

#### **7. Non-Responsive Bids:**

Every gas (EP-7) bid item has a suggested "Not less than" value per unit indicated on contract bid sheet. Bids resulting in cost of less than suggested for EP-7 items are hereby prohibited and if submitted shall be considered NON-RESPONSIVE.

#### **8. Minimum Clearances:**

Clearance requirements for City work shall govern and supersede any clearance requirement of gas facility operator. Therefore, a minimum of twelve (12) inches clearance between private utilities and City water mains, sewers or related structures to be installed in this contract shall be maintained. When this clearance is not attainable, the Resident Engineer may allow a minimum of four (4) inches clearance. With less than twelve (12) inches clearance a neoprene/polyethylene shield (to be provided by facility operator) shall be installed as part of all work item specifications. However, if Resident Engineer determines that City work cannot be performed within allowable clearance and no reasonable City accommodation (no-cost change to City work) is possible, the City shall direct the facility operator to remove, relocate, shift, or alter their facility(ies) pursuant to the New York City Administrative Code.

#### **9. Work By Facility Operator:**

The facility operator may find it necessary to perform the following types of work during performance of City work: accommodating a contractor's request for gas facilities modifications (in order to facilitate City contractor's proposed construction method) or, remedial and emergency work on gas facilities proper with their own resources and materials if an approved method of construction for City work causes unanticipated disturbances to gas facilities or, replacing defective gas facilities when they are exposed by the Contractor and their actual conditions are observable by the facility operator. Also included in the

above category of defective gas facilities are: the presence of environmental contaminants attributable to the gas facility in or around gas facilities. If such work is deemed required by the facility operator or if facility operator is directed by the City to address such deficiencies at any time during the course of construction, the Contractor shall modify the construction schedule at no cost to the City and allow the facility operator five (5) business days to perform such work without interferences. Additional costs to the facility operator (in cases of accommodations) or, Contractor (in cases of defective gas facilities) due to such gas work, if any, shall be the responsibility of the parties involved and not of the City. Such costs shall be a matter of adjustment between the Contractor and the facility operator.

#### **10. Materials Furnished By Facility Operator:**

It shall be the Contractor's responsibility to inspect material to be installed by him immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. The Contractor at no additional costs to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

#### **11. Liability And Insurance:**

Notwithstanding the provisions of this contract, the existing division of liabilities to third parties shall remain the same as between the City and the company. Therefore, it is specifically agreed by the City, company and Contractor (by bidding on this contract) that for the purpose of any liabilities to third parties, that the City contractor performing work directly and physically relating to gas company facilities in this project, shall be deemed an agent of the company and not an agent of the City, the New York City Municipal Water Finance Authority, or the New York City Water Board. Contractor shall include the company as an additional insured on all insurance policies maintained to comply with the City's insurance requirements.

#### **12. Width And Depth Of Excavation:**

Contractor shall not be authorized to deliberately change trench or excavation widths and/or depth specified without Engineer's approval. Enlargement of any side of excavation up to eighteen (18) inches beyond pay limits (or inside face of sheeting) requested by the Contractor for the installation of certain types of sheeting may be granted. However, such enlargements or those greater than allowable shall not be approved when, in the sole judgment of the City, field conditions allow the water mains and sewer work to be performed within the limits specified and, the sole purpose of such enlargement request is to impact adjacent utilities (public or private) whose support and protection are part of this contract. Any approval shall be given at no additional cost to the City contract, including EP-7 funding, and all costs associated with unauthorized enlargements shall be the sole responsibility of the Contractor.

#### **13. Depth And Crossing Angles Of Gas Facilities:**

Where gas facilities are shown (or specified as) crossing proposed alignment of sewers, water mains, catch basins and chute connections or any other proposed excavations at specific angles (as measured off plans or sketches or specified in contract), it shall be understood that actual field measurements may deviate (plus or minus) forty-five (45) degrees from those shown or specified. The cover, or depth from street surface to top of facilities, shall be as shown or specified in contract documents, no deviation is to be assumed. Where gas facilities are not shown on contract documents, but their support and protection are otherwise included in this contract then, all references to facilities crossing at "various angles and depth" in the gas sections shall mean that such facilities are crossing sewer, water, catch basin and, catch basin chute, and other excavations at a ninety (90) degree angle to the proposed sheeting line or side of excavation (for unsheeted trenches) with an allowable deviation of forty-five (45) degrees in any direction, except for catch basin chute excavation where the allowable deviation shall be sixty (60) degrees. Where the cover is not noted or specified, the bottom face of such facilities shall be assumed to be crossing catch basin chutes at a depth of three (3) foot eight (8) inches or less from the street surface. Paragraph No. 2 above shall apply in cases of distribution water main construction. Appropriate bid items and specifications are provided for cases where angle and depth are greater than stated above. This section also applies to work defined in "Emergency Reconstruction Contracts" or so-called "Where and When Contracts". These contracts are not pre-engineered and consequently have no drawings, sketches or determined locations and so, gas facilities encountered will be crossing existing and proposed sewer, water, catch basin/catch basin chutes and all appurtenances at various angles and depths.



#### **14. Maintenance Of Traffic For Gas Work:**

All work pertaining to gas bid items and specifications shall be performed within the contract maintenance of traffic plan as specified in the contract document. The bid price for the Maintenance and Protection of Traffic shall cover all work pertaining to gas items. The City shall make compensation for additional maintenance and protection of traffic items in connection with gas item of work only when such additional work is deemed reasonable and necessary by the Resident Engineer and is approved by him prior to its performance.

#### **15. Relocated Gas And Temporary Systems Installation:**

In cases where the Contractor is allowed to select the location for temporary construction such as, installation of dewatering headers, wells, well points, etc., he shall not disturb any gas facilities shown on sketches provided in this section. The only exception shall be, if the affected gas company agrees to such relocation and provided that the cost of such relocation is a matter of adjustment between the company and Contractor, and at no cost to the City.

#### **16. Role Of Company Inspector:**

In any case in which the City elects to perform some or all support and protection work with its own employees, personnel or contractors, the facility operator shall provide onsite inspectors to approve and certify such support and protection work (exclusive of City accommodations) performed by the City's own employees, personnel, and contractors. Facility operator's inspectors are not authorized to direct City contractor during the performance of contract work. They shall act through the City Resident Engineer and provide him/her required approvals and certifications, prior to preparing partial payments of EP-7 items, in a format and frequency to be prescribed by the appropriate City Head of Construction.

#### **17. Coordination With Gas Company:**

The Contractor shall be required to notify the gas company(ies), in writing, at least two (2) weeks prior to the start of final paving in order to allow companies to complete any unfinished gas work located within the area to be paved. Every effort shall be made to maintain gas service with minimum inconvenience to the public.

### **III - TECHNICAL SECTION**

#### **SECTION 6.01 - Trench Crossings; Support And Protection Of Gas Facilities And Services.**

##### **1. Description:**

Under this section, the Contractor shall provide all labor, materials, equipment, and incidentals required to support and/or protect the integrity of gas mains, services and appurtenances of any sizes, configurations, and operating pressures crossing trench excavations above subgrade for planned construction of sewers and water mains facilities. A gas service shall be defined as a gas pipe of three (3) inches in diameter or less branching from the main to a customer pick up point or property valve box. A gas main may be any size pipe that is part of a distribution or transmission network other than services described above. Crossings shall be defined as gas facilities spanning the width of excavation (one side to the other side). These crossings may be at various angles and depth as shown on "Gas Cost Sharing Work Standard Sketches Nos. 1 and 1A", and as specified in "General Provisions; Gas Cost Sharing Work Paragraph No. 13" and, at the locations shown or listed in contract documents. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with contract specifications, plans, and at the directions of the Resident Engineer in consultation with the authorized representatives of the facility operator.

## 2. Method Of Construction:

- A. Protection: In general, the gas facilities shall be protected as required by New York State Industrial Code 753. In particular, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) directly below the pavement base to expose the gas facilities (marked out by facility operators) and to ascertain the clearances and cover of the facilities with respect to the proposed excavation. Upon exposing the affected facilities sufficiently, at the discretion of the Resident Engineer, to ascertain the foregoing, Contractor shall be permitted to proceed with a combination of hand and machine excavation, as appropriate, outside a zone of protection whose limit shall be defined as a perimeter located twelve (12) inches from the outside face of each gas facility crossings (See "Gas Cost Sharing Work Standard Sketch No. 2"). If the facilities are in direct interference with City work, meaning that "Minimum Clearances" described in "General Provisions; Gas Cost Sharing Work Paragraph No. 8" cannot be maintained, and excavation has to be temporarily or permanently abandoned then this particular location shall become a test pit and dealt with as specified in Section 6.07, and "General Provisions; Gas Cost Sharing Work Paragraphs Nos. 2 and 8".
- B. Support: Gas mains or services crossing excavations equal or less than four (4) feet wide are generally self supporting, unless field conditions as determined by the Resident Engineer require otherwise. The support requirements for gas mains and services crossing excavations greater than four (4) feet wide shall be as shown on the attached "Gas Cost Sharing Work Standard Sketch No. 1" and Contractor shall use sheeting methods that permit the maintenance of gas facilities in their existing locations and configurations. Alternate methods equivalent to those shown on the sketch or accommodations by the facility operator proposed by the Contractor in order to facilitate the execution of the specified work shall be allowable, provided that prior approval is obtained by the Contractor from the Engineer and the facility operator. The support and protection of gas facilities crossings shown on plans, drawings, listings or otherwise identified in this contract shall not be circumvented with the issuance of so called "order outs".

## 3. Method Of Measurement:

The Contractor shall be paid for supporting and/or protecting gas facilities crossing trench excavations under the appropriate bid items covered by this section. The Contractor shall be directly responsible to the facility operator for the total cost of using any alternate method requiring the use of resources owned by the facility operator. Regardless of the method used, the City shall pay the bid price for the appropriate support and/or protect item of work. The average rate charged by the facility operator for alternate support and protection work such as, disconnecting and reconnecting gas services is listed in attached "Schedule GCS-A".

## 4. Payment Restrictions:

This item shall not be paid for: gas services crossing unsheeted water main trench excavation; abandoned gas main/services identified by facility operator; gas mains/services crossing trench excavations for fire hydrant branch connections pipes, catch basins and/or chutes (sewer drain pipe), house sewer and/or water services; gas facilities encroaching any face of excavation for sewer and/or water construction, all of which are covered under other contract sections. Also this item shall not be paid for new gas mains and services crossing water trenches when trenching for such new facilities has been performed by the Contractor in common with trench excavation for City work (overlapping trench limits). The cost of supporting and protecting such gas facilities crossings shall be deemed included in the cost of trench excavation for the new gas facilities. This payment restriction shall apply even if such common trench gas excavation is not part of the contract. The prices bid for items covered by this section represent full compensation to Contractor to completely perform the work described. No other bid items shall be combined with these items in order to pay for gas main and/or services crossing excavations specified herein.

## 5. Method Of Payment:

Each (Ea.) gas facility crossing trench excavation as described in these specifications shall be counted for payment.

6. Price To Cover:

The cost of timber/steel supports installed for gas facilities shall be included in the bid price. The bid price for each crossing shall also cover all additional supervision, labor, material (except those provided by the facility operator), equipment and insurance necessary to completely maintain the gas facilities without disruption of service to the customers and in accordance with contract plans, specifications and facility operator standards. The price shall also include: changes of method of operations; sheeting modifications where necessary to accommodate the gas facilities crossings; installation and removal of water pipe under gas facilities (so called "snaking"); extra care during excavation (including hand excavation under existing single and multiple gas facilities); extra backfilling and compaction around, over and under gas facilities; installation and removal of sheeting around gas facilities; associated maintenance and protection of traffic; barricades; and traffic plates that may be required to temporarily close and/or complete the work.

**SECTION 6.02 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Gas Interferences.**

1. Description:

Under this item, the Contractor shall provide all labor, materials, equipment, insurance, and incidentals for the extra excavation associated with the installation of catch basin sewer drain pipes (chute) under gas facilities of various sizes crossing the trench excavation at various angles and depth at the locations shown in the contract documents and also, for the support and protection of these facilities during associated excavation and backfill operations. The gas company operating in the area, (facility operator), owns these facilities.

2. Method Of Measurement:

The bid price shall be per location (Each) where extra excavation is required when catch basin sewer drain pipes are installed at an upstream invert depth lower than four (4) feet (up to a maximum of six (6) feet) from the proposed pavement grade because the bottom faces of interfering gas mains and appurtenances are located at a depth greater than three (3) foot eight (8) inches from proposed pavement surface (See "Gas Cost Sharing Work Standard Sketch No. 4").

3. Method Of Construction:

Incremental cost responsibility for chute excavation is determined by the first private facility encountered starting from catch basin structure proper and that prevents the installation of the chute connection at an upstream cover less than or equal to three (3) feet or any other minimum cover required to avoid City facilities (e.g. water, sewer, etc.) as directed by the Resident Engineer.

4. Payment Restrictions:

This item shall not apply and related bid item shall not be paid in cases where:

- A. Upstream invert chute is more than six (6) feet deep because of gas facilities.
- B. Chute cannot be installed above existing gas facilities because of interferences with other private facilities that are not otherwise covered under this contract, regardless of upstream invert depth.

The above cases shall be at no cost to the City, but shall be a matter of adjustment between the Contractor and the facility operator(s).

5. Price To Cover:

The bid price shall cover the additional cost of all additional supervision, labor, materials, equipment and insurance, to complete the installation of catch basins and associated sewer connections in accordance with the contract plans and specifications. The price shall include: excavation by hand around and under single and multiple gas facilities; locating, supporting and protecting gas facilities; backfilling and all other items necessary to perform all work incidental thereto including: installation and removal of drain pipe under gas facilities ("snaking"); widening of trenches to facilitate the above work; subsequent additional backfill and pavement restoration; modifying precast catch basin window to accommodate connection; changing sheeting method and configuration to accommodate gas facility crossings; maintenance and protection of traffic; barricades; and installation of traffic plates that may be required to temporarily close and/or complete the work. The price shall not include removal of ledge rock and/or excavation of boulders in open cut.

### **SECTION 6.02.1 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Upstream Inverts Greater Than Six (6) Feet.**

#### **1. Description:**

Under this item, the Contractor shall provide all labor, materials, equipment, insurance and incidentals for the extra excavation of catch basin chutes where the upstream invert is greater than six (6) feet under gas facilities of various sizes crossing the trench excavation at various angles and depth at the locations shown in the contract documents or as determined by field conditions and also, for the support and protection of these facilities during the associated excavation, sheeting and backfilling operations.

#### **2. Method Of Measurement:**

The bid price shall be per location (Each) where extra excavation and sheeting is required when the catch basin chute installed at an upstream invert depth lower than six (6) feet from the proposed pavement grade because the bottom faces of the interfering gas mains and appurtenances are located at a greater depth than three foot eight inches from the proposed pavement surface only.

#### **3. Method Of Construction:**

Incremental cost responsibility for chute excavation is determined by the first private facility encountered during such excavation when initiated from catch basin structure and that prevents the installation of the chute at an upstream cover less than or equal to three (3) feet or any other cover required to avoid City facilities as directed by the Resident Engineer.

#### **4. Payment Restriction:**

This item shall not apply and related bid item shall not be paid in cases where:

Upstream invert chute is less than or equal to six (6) feet deep because of gas facilities. Section 6.02 shall be paid.

#### **5. Price To Cover:**

The bid price shall cover the additional cost of all supervision, labor, materials, equipment and insurance to complete the installation of catch basin and associated sewer connections in accordance with the contract plans and specifications. The price shall include: excavation by hand around and under single and multiple gas facilities; locating, supporting and protecting gas facilities incidental thereto; widening of trenches to facilitate the above work; subsequent additional backfilling and pavement restoration; modifying pre-cast basin window to accommodate connection; the installation of catch basin with deeper sumps as specified; additional sheeting and changes in sheeting method and configuration to accommodate gas facility crossings; maintenance and protection of traffic; barricades; and installation of traffic plates that may be required to Temporarily close and/or complete the work.

### **SECTION 6.03 - Removal Of Abandoned Gas Facilities. All Sizes.**

1. Description:

Under this section the Contractor shall provide all labor, materials, equipment, insurance and, incidentals required for the removal of abandoned gas mains, services, or appurtenances thereof, located within the street shown on the contract plans, owned by gas company operating in the project area (facility operator), used or to be used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural or manufactured or mixture of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distributing or furnishing of gas in enclosed containers. Such removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work.

2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on facility operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and, Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities to be removed by the Contractor. However, facility operator may prefer to make this test during performance of City work, in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any resulting from this choice shall be a matter of adjustment between the Contractor and facility operator only, and at no cost to the City.

3. Restrictions:

The facility operator shall be solely responsible for its contaminated gas facilities, surrounding contaminated soil and their disposal and abatement procedures, unless contract bid items are applicable and provided for such work. In such cases, the quantity removed shall be charged to EP-7 bid item "UTL-GCS-2WS - GAS INTERFERENCES AND ACCOMMODATIONS" at the City bid prices.

4. Method Of Measurement:

Abandoned gas pipeline removal shall be measured for payment per linear foot of pipe and appurtenances removed.

5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment, and insurance necessary to complete this work in accordance with the contract plans and specifications, including excavation by hand around and under other City and facility operator owned properties and, where necessary, support and protection of such properties. The price shall also cover breaking, cutting, and/or burning of abandoned gas pipes and their disposal from the site; sealing open ends remaining in the excavation with concrete or caps (caps to be provided by the facility operator) and backfilling of the area where the pipeline has been removed with clean backfill. The price shall also include any required dump charges. This item does not include any type of extra excavation, backfilling, compaction, pavement removal and restoration associated with abandoned gas facilities removal, all of which are covered under Section 6.06.

**SECTION 6.03.1 - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap.  
All Sizes. (For National Grid Work Only)**

1. Description:

Under this section the Contractor shall provide all labor, materials, equipment, insurance and, incidentals required for the removal of abandoned gas mains, services or appurtenances thereof, located within the

street shown on the contract plans, owned by the gas company operating in the project area (facility operator), used or to be used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural or manufactured or mixture of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distributing or furnishing of gas in enclosed containers. Such removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work. These gas facilities may be coated with Coal Tar Wrap and so, may require special handling and disposal methods as specified in National Grid Standard Operating Procedure 12-2, Coal Tar Wrap Handling and 12NYCRR56.

## 2. Determination Of Operating Status Of Gas Facilities:

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on the facility operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and, the Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities to be removed by the Contractor. However, the facility operator may prefer to make this test during performance of City work, in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any, resulting from this choice shall be a matter of adjustment between the Contractor and the facility operator only, and at no cost to the City contract. Should such investigation result in the determination that the abandoned gas facilities do not contain Coal Tar Wrap then the removal of said facilities shall be covered under separate item (See Section 6.03).

## 3. Requirements:

The City Contractor shall excavate abandoned gas facility sufficiently, either in its entirety, or at locations determined by Contractor to allow the removal of Coal Tar Wrap (if present on the abandoned gas facility) and to facilitate the safe extraction of manageable lengths of abandoned pipe without damage to adjacent facilities, utilities or City structures either parallel to or crossing above or below abandoned gas facility. The Contractor is to allow access to the designated cutting points within the Contractor's trench by authorized National Grid personnel who will remove the Coal Tar Wrap as per National Grid procedures. This work by National Grid personnel shall be performed in a timely fashion and shall not unduly impede the Contractor's progress and/or productivity. Upon completion of the coating removal, the Contractor shall be allowed to cut, burn or grind the gas facility and remove the section of abandoned pipe. The Contractor at a site designated by the Contractor shall stockpile the removed pipe. The facility operator will be responsible to provide trucking and disposal services with its own personnel and shall remove the stockpiled pipes during off hours or during such time as agreed to by the Contractor. Since the pipe removed will remain the property of the facility operator and is to be disposed of by the facility operator, the facility operator shall be responsible for any required notifications, filings, dump charges and incidentals associated with the disposal of abandoned gas facilities found to contain Coal Tar Wrap.

## 4. Method Of Measurement:

Abandoned gas pipeline removal shall be measured for payment per linear foot of pipe and appurtenances removed.

## 5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment and insurance necessary to complete this work in accordance with the contract plans and specifications, including excavation by hand around and under other City and facility operator owned properties and, where necessary, the support and protection of such properties. The cost shall also include hand excavation in the area(s) of proposed abandoned pipe cut(s), cutting and/or burning of abandoned gas pipes and stockpile of removed sections of abandoned pipe and associated maintenance and protection of traffic, blocking and temporary fencing if required. The unit price shall also cover sealing open ends remaining in the excavation with concrete or end caps (end caps to be provided by the facility operator) and backfilling of the area where the abandoned pipeline has been removed with clean backfill material. This

item does not include any type of extra excavation, backfilling, compaction, pavement removal and/or restoration (temporary and permanent) associated with abandoned pipe removal ("lost trench"), all of which are covered under separate Section 6.06. The price shall also include allowance for any loss of productivity by the Contractor due to required facility operator work to remove pipe coating and prepare pipe for cutting as well as any change in Contractor's excavation method, additional trucking and/or stockpiling costs.

### **SECTION 6.03.1a - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For Con Edison Work Only)**

#### **1. Description:**

Under this section the Contractor shall provide all labor, material, equipment, insurance and, incidentals required to prepare abandoned gas mains, services and appurtenances thereof located within the street shown on contract plans, owned by the gas company operating in the project area (facility operator), for removal due to interference with proposed City work. These abandoned gas facilities were, at one time, used for or in connection with or to facilitate the conveying, transportation, distribution or furnishing of gas (natural, manufactured or a combination of both) for light, heat, or power, but does not include property used solely for or in connection with business of selling, distribution or furnishing of gas in enclosed containers. Such preparation for removal shall include only abandoned gas facilities that interfere with (i.e. cause additional work) City work. These gas facilities may be coated with Coal Tar Wrap which may contain asbestos or PCB's and so, may require special handling and disposal methods as specified in Con Edison - ASBESTOS MANAGEMENT MANUAL, CHAPTER 6 - ASBESTOS WORK PROCEDURES, SECTION 06.04 - COAL TAR WRAP REMOVAL. For under 25' (feet) in length and an approved NYC-DEP variance for over 25' (feet).

#### **2. Determination Of Operating Status Of Gas Facilities:**

The Contractor shall notify facility operator, as required by New York State Industrial Code 753. Gas Facilities shall not be removed without the approval of the facility operator whose authorized representative shall certify in writing (specific facility or area wide facilities certification) and in a timely manner acceptable to the Resident Engineer that abandoned facilities are free of combustible gas and any other environmental contaminants prior to removal. The Resident Engineer shall rely on the facility operator's certification. The facility operator may request the excavation of test pits (See Section 6.07) for this determination ahead of City work and Contractor shall provide safe access, facilitate and permit facility operator to enter test pit excavations for the purpose of testing gas facilities. However, the facility operator may prefer to make this test during performance of City work in order to issue the above certification. This shall be permitted provided that it is agreed that additional costs, if any, resulting from this choice shall be a matter of adjustment between the Contractor and the facility operator only, and at no cost the City contract. Should such investigation result in the determination that the abandoned gas facilities do not contain Coal Tar Warp then the removal of said facilities shall be covered under separate item (See Section 6.03).

#### **3. Requirements:**

The Contractor shall excavate abandoned gas facility sufficiently, either in it's entirety, or at locations determined by Contractor to allow the removal of Coal Tar Wrap (if present on the abandoned gas facility) and to facilitate the safe extraction of manageable lengths of abandoned pipe without damage to adjacent facilities, utilities or city structures either parallel to or crossing above or below abandoned gas facility. The Contractor is to allow access to the designated cutting points within the Contractors trench by authorized Con Edison personnel who will remove the Coal Tar Wrap as per Con Edison and/or NYC-DEP approved procedures. This access shall conform to all applicable codes, rules & regulations. This work by Con Edison personnel shall be performed in a timely fashion and shall not unduly impede the Contractors progress and/or productivity. Upon completion of the coating removal, the Contractor shall be allowed to cut, burn or grind the gas facility and remove the section of abandoned pipe. Contractor shall designate a specific site to stockpile those removed pipes. The facility operator will be responsible to provide trucking and disposal services with its own personnel and shall remove the stockpiled pipes

during off hours or during such time as agreed to by the Contractor. Since the pipe removed will remain the property of the facility operator and is to be disposed of by the facility operator, the facility operator shall be responsible for any required notifications, filings, dump charges and incidentals associated with the disposal of abandoned gas facilities found to contain Coal Tar Wrap.

4. Method Of Measurement:

Abandoned gas facility removal shall be measured for payment per linear foot of pipe and appurtenances removed.

5. Price To Cover:

The price shall cover all additional cost of supervision, labor, materials, equipment and insurance necessary to complete this work in accordance with the plans and specifications, including, but not limited to, excavation by hand around and under other City and facility operator owned properties and, where necessary, the support and protection of such properties. The cost shall also include hand excavation in the area(s) of proposed abandoned pipe cut(s), cutting and/or burning of abandoned gas pipes and stockpile of removed sections of abandoned pipe and associated maintenance of traffic, blocking and temporary fencing if required. The unit price shall also cover sealing open ends remaining in the excavation with concrete or end caps (end caps to be supplied by facility operator) and backfilling of the area where the abandoned pipeline has been removed with clean backfill material. This item does not include any type of extra excavation, backfilling, compaction, pavement removal and/or restoration (temporary and permanent) associated with abandoned pipe removal ("lost trench"), all of which are covered under separate Section 6.06. The price shall also include allowance for any loss of productivity by the Contractor due to required facility operator work to remove pipe coating and prepare pipe for cutting as well as any change in Contractor excavation method, additional trucking and/or stockpiling costs.

**SECTION 6.04 - Adjust Hardware To Grade Using Spacer Rings/Adaptors. (Street Repaving.)**

1. Description:

Under this section, the Contractor shall provide all labor, supervision, materials, equipment, insurance and incidentals required to adjust to final grade gas street surface hardware located within the contract area boundaries shown on the plans. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in concurrence with authorized representative of the facility operator.

2. Materials:

The facility operator shall furnish and deliver all prefabricated hardware parts required. These include adaptors for the grade adjustment proper and new street hardware if existing ones are found to be defective, all in accordance with the facility operator standards and City rules and regulations. The Contractor shall notify the facility operator of the installation schedule at least three (3) business days before materials are required on the site. Should the facility operator fail to deliver the necessary material according to any schedule mutually agreed upon by the Contractor and facility operator, the City shall not be responsible for any delays attributable thereto, nor for the failure of delivery of such materials. On project where material storage is not permitted on site, the facility operator shall deliver the required material to the Contractor's yard and it shall be the Contractor's responsibility to transport the material to the work site when needed for installation. It shall also be the Contractor's responsibility to inspect the materials to be installed by him immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. The Contractor at no additional expense to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

3. Method Of Measurement:



The Contractor shall be paid for each six (6) inch round box and/or nine (9) inch square box adjusted to grade regardless of adjustment height requirements.

4. Price To Cover:

The unit price bid for this item shall include all additional labor, supervision, insurance, equipment and material (except those to be provided by the facility operator), required to adjust each box to grade as required in the contract plans and specifications. The bid price shall also include the removal of existing frames and covers from existing facilities to be salvaged and returned to the facility operator and, all material transportation from the Contractor's material storage yard to the work site. In addition the bid price shall include "chipping" around existing box using appropriate means and methods where grinding is required.

**SECTION 6.05 - Adjust Hardware To Grade By Resetting. (Road Reconstruction.)**

1. Description:

Under this item, the Contractor shall provide all labor, supervision, materials, equipment, insurance and incidentals required to adjust to the proposed grade gas street surface hardware located within the contract area boundaries shown on the plans. The gas company operating in the area, (facility operator), owns these facilities. The work shall consist of either building up or lowering or resetting the casting by removing the existing frame and cover building up or decreasing the existing installation, replacing the frame and/or cover if damaged or worn out, as determined by the Resident Engineer, with a new frame and/or cover furnished by the owner, and setting the frame and cover to new elevation. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer.

2. Materials:

The facility operator shall furnish and deliver all new hardware parts required. The Contractor shall furnish materials such as mortar, bricks and concrete in compliance with contract requirements. At locations where high-early strength concrete is required under this contract to be placed adjacent to gas facilities, then the requirement for concrete shall be high-early strength complying with the current New York State Department of Transportation, Standard Specifications for Class F concrete. Existing castings may be replaced as required and deemed necessary by the Engineer and by City rules and regulations. The Contractor shall install the new castings of various sizes furnished by the facility operator. The Contractor shall notify the facility operator of the installation schedule at least three (3) business days before materials are required on the site and, shall provide off-loading services to the facility operator. Should the facility operator fail to deliver the necessary material according to any schedule mutually agreed upon by the Contractor and facility operator, the City shall not be responsible for any delays attributable thereto, nor for the failure of delivery of such materials. Such delays shall be a matter of adjustment between the Contractor and the facility operator. On project where material storage is not permitted on site, the facility operator shall deliver the required material to the Contractor's yard and it shall be the Contractor's responsibility to transport the material to the work site when needed for installation. It shall also be the Contractor's responsibility to inspect the materials to be installed by him, immediately upon delivery and advise the facility operator through its authorized representative, of all damaged materials. The Contractor at no additional expense to the City or the facility operator shall replace any material that is damaged or lost after the Contractor's inspection.

3. Methods Of Construction:

The Contractor shall remove and reinstall existing castings or install new castings to the proposed grade. Setting and resetting the castings shall be done with mortar and brick according to the standards of the facility operator. Work shall be performed in a workmanlike manner. Castings that are deemed unacceptable for resetting shall remain the property of the facility operator and he shall be responsible for their removal and proper disposal from site. No traffic shall be allowed on adjusted street hardware until permitted by the Engineer.

4. Method Of Measurement:

The Contractor shall be paid for each gas hardware adjusted to grade regardless of size or adjustment height requirements (up or down).

5. Price To Cover:

The unit price bid for this item shall include all additional labor, supervision, insurance, equipment and material (except those to be provided by the facility operator), required to adjust each gas hardware to grade as required in the contract plans and specifications. The bid price shall also include the removal of existing frames and covers from existing facilities; building up the existing installations with bricks and mortar, or lowering the existing installation by removing bricks and mortar; replacing damaged frames and/or covers with new frames and/or covers furnished by the facility operator; setting the frames and covers to the new elevations; protect existing installations; repair minor structural damages to existing installations prior to resetting frames; unloading of furnished castings at the Contractor's yard and transporting castings from the Contractor's yard to the job site as required; completing the work in accordance with the contract plans, specifications and, at the directions of the Engineer. In addition the bid price shall include "chipping" around existing gas facilities using appropriate means and methods where grinding is required.

**SECTION 6.06 - Special Care Excavation And Backfilling.**

1. Description:

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to support and protect the integrity of live gas facilities including mains, services, related structures and appurtenances during excavations. The gas company operating in the area, (facility operator), owns these facilities. The work shall be performed in accordance with the contract plans, specifications and at the directions of the Resident Engineer in consultation with authorized representatives of the facility operator.

2. Applicability Of Section:

This section shall apply to live gas facilities of various sizes located within two (2) feet of any face of unsheeted excavation, (unsheeted excavation refers to any excavation performed for city work and includes excavations performed that are to be subsequently sheeted using approved methods) and paralleling or, encroaching any face of excavation. Also, for crossings greater than forty-five (45) degrees and/or located at a cover depth greater than five (5) feet from existing street surface. Parallel facilities are not exposed at any time during excavation (See "Gas Cost Sharing Work Standard Sketch No. 5"). Encroaching facilities are partially exposed inside the limit of excavation (See "Gas Cost Sharing Work Standard Sketch No. 5"). This section shall also apply to gas facilities crossing catch basins excavation, and catch basins sewer connections (chutes) trench excavation only when extra depth (covered in other section), is not required for chutes installations because of such utilities interferences (See "Gas Cost Sharing Work Standard Sketch No. 3"). This section shall also apply to gas services (if shown or otherwise listed in contract documents) crossing unsheeted excavations for water mains, gas facilities crossing fire hydrant branch connections, house sewer and/or water service connections excavations. This section shall also apply for so called "loss trench", as described further, and for additional excavation (pavement and/or soil), backfilling, compaction, roadway base and pavement restoration due to abandoned gas facilities, only if removed by Contractor. If operating status of gas facilities cannot be determined prior to excavation then such facilities shall be considered live and this section shall fully apply. The excavation around fully exposed live gas facilities along and within limits of excavation (not crossings) shall be covered by this section also (not shown on "Gas Cost Sharing Work Standard Sketch No. 5"), however the support requirement, if any is required, of such facilities is beyond the scope of these specifications and therefore shall be the responsibility of facility operator to determine and prescribe, at no cost to the City contract, but shall be a matter of adjustment between the Contractor and facility operator.

3. Payment Restriction:

No special care excavation shall be paid for abandoned gas facilities paralleling and/or encroaching excavation and therefore are not in direct interference with City work. Except as allowed in this section, the bid item specified under this section shall not be used in combination with items covered under other

sections for work done due to a particular gas facility. This item shall not be paid for new gas facilities when trenching for such new facilities has been performed by the Contractor of record in common with trench excavation for City Work (overlapping trench limits). The cost of excavating with care as defined in this section shall be deemed included in the cost of trench excavation for the new gas facilities. This restriction shall apply even if such gas common trench excavation is not part of the contract. If facilities are in direct interference with City work, meaning that "Minimum Clearances" described in "General Provisions; Gas Cost Sharing Work Paragraph No. 8" cannot be maintained and excavation has to be temporarily or permanently abandoned then this particular location shall become a test pit and dealt with as specified in Section 6.07 and "General Provisions; Gas Cost Sharing Work Paragraphs Nos. 2 and 8".

4. Method Of Construction:

All excavation in the vicinity of gas facilities shall be as required by NYS Industrial Code 753. Where these facilities are paralleling and located two (2) feet or less from the limits of the proposed excavation, the Contractor shall use hand excavation methods (pick and shovel or hand held power tools) to ascertain the clearances of these facilities with respect to the proposed excavation. Once the location of these facilities with respect to the proposed excavation is verified to the satisfaction of the Resident Engineer, the Contractor shall then proceed with a combination of hand and machine excavation as required preserving the integrity of the facilities. The installation of timber supports or underpinning, when soil foundation cannot fully support partially exposed pipes, may be required to prevent pipe movement as directed by the Resident Engineer.

5. Method Of Payment:

The unit price for this work item shall be based on cubic yard (CY) of average excavation with care and, is to be considered as an incremental cost for performing City work with gas facilities interferences.

6. Method Of Measurement:

- A. For Paralleling Facilities: Volume calculated as: Depth as measured from existing street surface to the bottom of unsheeted trench excavation allowable by OSHA regulations, multiplied by, the width measured as one (1) foot from the face of excavation toward the center of excavation, multiplied by the length of parallel facility, divided by twenty-seven (27) cubic feet per cubic yard (See "Gas Cost Sharing Work Standard Sketch No. 5"). The gas facility is no longer considered to be in interference once sheeting has been installed, therefore no further compensation for paralleling facilities as described above will be made.
- B. For Encroaching Facilities: Volume calculated as: Depth of trench excavation multiplied by, the width of partially exposed pipe plus one (1) foot, multiplied by the length of facility encroachment, divided by twenty-seven (27) cubic feet per cubic yard (See "Gas Cost Sharing Work Standard Sketch No. 5").
- C. Fully Exposed Gas Facilities: (Not shown on "Gas Cost Sharing Work Standard Sketch No. 5") along and inside trench and/or crossing trench at an angle greater than forty-five (45) degrees and/or a cover depth greater than five (5) feet from the existing street surface. The volume shall be measured as the depth of trench excavation multiplied by the distance measured along the sheeting line between two (2) points of intersections of the gas facilities and the sides of trench excavation, multiplied by the width of trench excavation.
- D. For Additional Excavation And Restoration Due To So Called "Loss Trench", When The Integrity Of Pavement And Soil Above And Around Existing Live Gas Facilities Cannot Be Maintained Due To Its Lack Of Cohesiveness: Volume shall be calculated as: Depth of unsheeted trench excavation multiplied by width measured as distance of facility from closest edge of unsheeted excavation plus, width of facility proper plus, one (1) foot or a maximum width of three (3) feet multiplied by length of facility fully exposed divided by, twenty-seven (27) cubic feet per cubic yard (not shown on "Gas Cost Sharing Work Standard Sketch No. 5").
- E. For Facilities Crossing Excavation For Catch Basins, Or Chutes Installations (When NYCDEP Funded) Or Fire Hydrant Branch Connections, Or Unsheeted Water Main Trench, Or House Sewer And/Or Water Services: Volume calculated as: Depth as defined above multiplied by, the width taken as the outside diameter of pipe or the width of structure plus one (1) foot on either side (two (2)

feet), multiplied by, the length of exposed facility crossing the trench, divided by twenty-seven (27) cubic feet per cubic yard (not shown on "Gas Cost Sharing Work Standard Sketch No. 5").

Overlapping volume dimensions measured as described above may occur when multiple facilities are paralleling excavations, encroaching excavations or crossing catch basins and catch basin chute installations. In such cases, all such facilities shall be counted as one limited by the extreme pipes, faces (See "Gas Cost Sharing Work Standard Sketch No. 2"). The volume shall then be calculated as described above.

#### 7. Price To Cover:

The bid price shall also cover all additional supervision, labor, material, equipment and insurance necessary to excavate while protecting and maintaining (excluding supports for fully exposed live gas) gas facilities without disruption of service to the public and in accordance with contract specifications. The price shall also include, changes of sheeting method and excavation width configuration where necessary to accommodate gas facilities in their existing locations; difficulties during the installation of catch basins, chute connections, hydrant branch, and house sewer and water connections under or over gas facilities; loss of productivity due to slower rate of excavation (special care) during excavation, including the use of such methods as: hand excavation around existing single and multiple facilities, extra excavation and backfilling due to lost trench because of existing and adjacent gas facilities, compaction, removal of sheeting from the facilities, extra roadway base restoration and temporary pavement, associated maintenance and protection of traffic, barricades, and traffic plates that may be required to temporarily close and/or complete the work.

### **SECTION 6.07 - Test Pits For Gas Facilities.**

#### 1. Description:

Under this section, the Contractor shall furnish all labor, materials, insurance, equipment and appliances necessary to excavate, sheet and, maintain test pits at locations approved by the Resident Engineer in consultation with the facility operator. Test pits shall be dug in order to ascertain exact locations, cover and invert elevations, clearances, alignment and operating status (live or dead) of existing gas facilities. The Contractor shall inspect jointly with the Resident Engineer and facility operator, gas facilities and other structures uncovered, take all relevant measurements and elevations as directed by the Resident Engineer. Tests to determine operating status of gas facilities shall be performed by facility operator. The pits shall be covered with steel plates during daytime nonworking hours, and uncovered, as required, until the inspection work is completed. Testing of gas facilities may require a maximum of four (4) hours. Then, the pits shall be backfilled with clean fill, and resurfaced with temporary pavement. All traffic shall be maintained and all safety measures as stipulated shall be complied with.

#### 2. Methods Of Construction:

A. Excavation: Existing pavement to be removed shall be neatly cut along lines of removal with a saw or other approved equipment which leaves a neat straight joint line along the juncture with subsequently replaced pavement. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. Use of hand operated pneumatic and electric jackhammers will be permitted only for breaking pavement and removal of masonry, concrete and boulders, or as otherwise directed by the Resident Engineer. The Contractor shall properly dispose of all materials excavated from test pits away from site. Test pits shall be excavated at locations shown on the contract drawings or as directed by the Resident Engineer. Additional test pits may be required and shall be excavated where required, as ordered by the Resident Engineer. All test pits shall be excavated to a depth and size necessary to locate the existing facilities. Shheeting shall be used when depth of excavation exceeds five (5) feet. The sheeting required shall be furnished and installed in full compliance with the State of New York and Federal Safety Codes requirements and as specified in contract, whichever is more stringent. Care shall be taken that no existing gas facilities or other structures are broken or damaged. All broken or damaged facilities shall be reported immediately to facility operator who shall decide whether such facilities shall be repaired or replaced by company forces or by City contractor and in conformance with "General Provisions; Gas Cost Sharing Work Paragraph No. 9". Contractor shall excavate all material encountered, including

large masses of concrete, cemented masonry and boulders, as directed by the Resident Engineer. Any type of excavation protection used, shall satisfy the following:

- (a) Industrial Code Rule 753.
- (b) Prevent injury to workers and the public, and avoid damage to existing water, sewer, and gas pipes or other structures, and to pavements and their foundations, through caving or sliding of the banks of the excavation.

Should it become necessary, as determined by the Resident Engineer, to enlarge any test pit in any dimension after sheeting has been placed, the Contractor shall remove portions of the sheeting, as necessary, enlarge the test pits as directed, and replace the sheeting without additional compensation for this work other than for the additional volume of material excavated.

- B. **Maintenance Of Test Pits:** Excavated test pits shall be maintained free of debris and kept dry by the Contractor in order to permit the inspection and measurements and to determine the locations of facilities. In order to accomplish this, Contractor shall, upon completion of excavation and placement of sheeting (if depth greater than five (5) feet), furnish and install adequate steel plates and posting over the excavated pits and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during nonworking hours. The Contractor shall then, at no additional cost, relocate such barricades, barrels, cones and other warning devices and remove steel plates, as and when directed by the Resident Engineer to facilitate the inspection of exposed facilities. When work is being performed and the pits are not covered with steel plates, the Contractor shall provide complete and safe access to the test pits as may be required, and he shall provide construction barricades and maintain traffic at all times as shown or as directed by the Resident Engineer. Upon completion of test pit inspection by the Resident Engineer, the pit shall be backfilled by the Contractor as specified in contract, except that backfill material shall conform to contract specifications for such purpose.
- C. **Pavement And Sidewalk Restoration:** After backfilling is completed, the Contractor shall construct a temporary pavement consisting of a minimum of four (4) inches thick asphaltic concrete mixture in roadway areas or a two (2) inches thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent pavement and sidewalk replacement is constructed as specified in contract.

### 3. Measurements:

The quantity to be measured for payment shall be the number of cubic yards of material removed from within the limits of the pit dimensions as directed by the Resident Engineer. The volume occupied by existing pipes or other structures remaining within the maximum payment lines will not be deducted from the total volume measured except, where the cross sectional area of these facilities exceeds four (4) square feet. As determined by the Resident Engineer, the quantity measured for payment may be proportionate to a fair and reasonable estimate of gas responsibility in the total volume excavated.

### 4. Price To Cover:

The contract price bid per cubic yard for test pits shall cover all additional costs of labor, material, insurance, equipment, appliances and incidentals required to excavate test pits, including removal and disposal of excavated materials, sheeting, steel plating, backfill, compaction and temporary pavement and sidewalk restoration all in accordance with the specifications and as direction of the Resident Engineer. The price shall also include the cost of providing safe access to the excavation by facility operator for the performance of certain test to determine operating status of gas facilities prior to City work. The price shall also include support and protection of all gas facilities crossing excavation, paralleling and/or encroaching any face of excavation.

**GAS COST SHARING STANDARD SPECIFICATIONS**  
**SCHEDULE GCS-A**

**Average rate charged by utility companies to Disconnect and Reconnect Gas Services:**

- 1. National Grid - \$586.90 per Service/and Visit
- 2. Con Edison - \$524.00 per Service/and Visit

#### **IV - STANDARD SKETCHES; GAS COST SHARING WORK**

Hereinafter attached are the following Standard Sketches for Gas Cost Sharing Work:

- Sketch No. 1 - Support Requirements For Gas Mains And Services Crossing Excavation Greater Than 4' - 0" Wide At Any Angle
- Sketch No. 1A - Support Requirements For Gas Mains Over 16" Diameter Up To And Including 48" Diameter Crossing Excavation At Any Angle
- Sketch No. 2 - Typical Methods Of Measurement For Gas Crossings
- Sketch No. 3 - Utility Crossings During Catch Basin Chute Connection Pipe Installation
- Sketch No. 4 - Utility Crossings During Catch Basin Chute Connection Pipe Installation (Extra Depth)
- Sketch No. 5 - Gas Main Encroachment On And/Or Parallel To Excavation Of Unsheeted Trench

**V - PRELIMINARY GAS WORK TO BE PERFORMED BY  
FACILITY OPERATOR**

**APPLICABLE TO ALL GAS DRAWINGS:**

- ALL RELOCATION WORK SHOWN IN THIS ADDENDUM IS TO BE PERFORMED BY FACILITY OPERATOR.
- ALL SUPPORT AND PROTECTION WORK TO BE PERFORMED BY CITY CONTRACTOR
- IF ADDITIONAL INFORMATION IS NEEDED REGARDING THE FACILITY OPERATOR RELOCATION WORK, THE CONTRACTOR IS ADVISED TO CONTACT THE GAS COMPANY REPRESENTATIVE:

MS. THERESA KONG  
CONSOLIDATED EDISON  
4 IRVING PLACE, 17<sup>TH</sup> FLOOR NE  
NEW YORK, NY 10003  
TEL.: 212-460-4834

(NO TEXT IN THIS AREA, TURN PAGE)



GAS FACILITY COST ALLOCATION AGREEMENT  
PROJECT NO. HWMWTC7E (WORTH STREET)  
CAPITAL GAS MAIN INSTALLATION

SHEET #	LOC.	ON STREET	FROM	TO	ITEM SIZE	TYPE	LENGTH	REIMB LENGTH	REMARKS					
1,2	1	WORTH STREET	HUDSON STREET	WEST BROADWAY					RET.	10	+/-	6"	STL	1962
1,2	1	"	"	"					RET.	45	+/-	6"	PE	1992
1,2	1	"	"	"					RET.	10	+/-	6"	STL	1979
1,2	1	"	"	"					RET.	10	+/-	6"	STL	1936
1,2	1	"	"	"					RET.	60	+/-	6"	STL	1929
1,2	2	"	"	"					RET.	285	+/-	6"	CI	1929
2	3	WORTH STREET	AT WEST BROADWAY	"	82k	PE	420' +/-	420' +/-	RET.	95	+/-	8"	CI	1884
2	3	"	"	"					RET.	20	+/-	8"	STL	1961
2	3	"	"	"					RET.	10	+/-	8"	STL	1929
2	4	"	"	"					RET.	5	+/-	8"	STL	1936
2	5	"	"	"	82k	PE	130' +/-	130' +/-	RET.	110	+/-	12"	CI	1884
2	6	"	"	"	82k	PE	110' +/-	110' +/-	RET.	220	+/-	6"	PE	1992
2,3	7	WORTH STREET	WEST BROADWAY	CHURCH STREET					RET.	25	+/-	6"	STL	1974
2,3	7	"	"	"	80l	STL	400' +/-	400' +/-	RET.	30	+/-	24"	STL	1988
2,3	8	WORTH STREET	AT CHURCH STREET	"	80o	STL	30' +/-	30' +/-	RET.	120	+/-	8"	STL	1930
3	9	"	"	"	80l	STL	120' +/-	120' +/-	RET.	365	+/-	6"	STL	1973
3	10	"	"	"					RET.	110	+/-	6"	CI	1884
3	11	"	"	"					RET.	20	+/-	6"	STL	1914
3	12	"	"	"					RET.	10	+/-	4"	STL	1977
3,4	13	WORTH STREET	CHURCH STREET	BROADWAY					RET.	35	+/-	16"	CI	1875
3,4	13	"	"	"	80m	STL	35' +/-	35' +/-	RET.	30	+/-	20"	STL	1965
3,4	13	"	"	"					RET.	60	+/-	20"	CI	1884
3,4	13	"	"	"					RET.	25	+/-	8"	PE (HP)	2001
3,4	13	"	"	"	82k	PE	635' +/-	635' +/-	RET.	10	+/-	4"	STL	1976
3,4	14	"	"	"					RET.	15	+/-	6"	STL	1915
3,4	14	"	"	"					RET.	15	+/-	6"	STL	1909
4	15	WORTH STREET	AT BROADWAY	"	83i	PE(HP)	25' +/-	25' +/-	RET.	15	+/-	6"	STL	1909
4	16	"	"	"					RET.	10	+/-	4"	STL	1976
4	17	"	"	"					RET.	15	+/-	6"	STL	1915
4	17	"	"	"					RET.	15	+/-	6"	STL	1909
4	18	"	"	"					RET.	15	+/-	6"	STL	1909
4	19	"	"	"					RET.	15	+/-	6"	STL	1909
4	20	"	"	"					RET.	15	+/-	6"	STL	1909
4,5,6	21	WORTH STREET	BROADWAY	LAFAYETTE STREET					RET.	10	+/-	4"	STL	1976
4,5,6	21	"	"	"					RET.	15	+/-	6"	STL	1915
4,5,6	21	"	"	"					RET.	15	+/-	6"	STL	1909

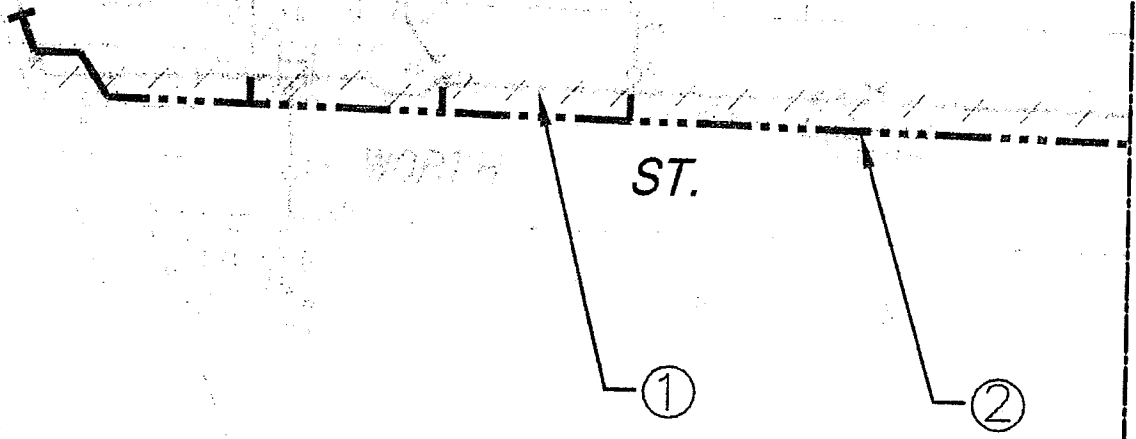
A3-22A

GAS FACILITY COST ALLOCATION AGREEMENT  
 PROJECT NO. HWMWTC07E (WORTH STREET)  
 CAPITAL GAS MAIN INSTALLATION

SHEET #	LOC.	ON STREET	FROM	TO	ITEM	SIZE	TYPE	LENGTH	REIMB LENGTH	REMARKS			
4,5,6	21	"	"	"					RET.	6" +/-	135	CI	1893
4,5,6	21	"	"	"					RET.	6" +/-	10	STL	1926
4,5,6	21	"	"	"					RET.	6" +/-	270	STL	1966
6	21	WORTH STREET	AT LAFAYETTE STREET	"					RET.	6" +/-	95	STL	1972
6	22	"	"	"					RET.	6" +/-	15	CI	1883
6	23	"	"	"					RET.	6" +/-	105	CI	1900
7	24	MULBERRY STREET	F/O HSE # 36	WORTH STREET	80n	20"	STL	120' +/-					
7	24	"	"	"	80q	30"	STL	85' +/-					
7	24	"	"	"					RET.	6" +/-	185	CI	1895
7	24	"	"	"					RET.	6" +/-	10	STL	1949
7	24	"	"	"					RET.	6" +/-	35	PE	2011
7	24	"	"	"					RET.	6" +/-	10	STL	1990
7	24	"	"	"					RET.	6" +/-	10	STL	1961
7	24	"	"	"					RET.	6" +/-	70	STL	1980
7	25	"	"	"									
7	26	MOSCO STREET (PARK STREET)	MULBERRY STREET	MOTT STREET	82k	12"	PE	290' +/-					
7	27	"	"	"	82h	6"	PE	75' +/-					
7	28	WORTH STREET	MULBERRY STREET	MOTT STREET					RET.	6" +/-	75	CI	1896
7	28	"	"	"					RET.	6" +/-	125	CI	1893
7	28	"	"	"					RET.	6" +/-	20	PE	2001
7	28	"	"	"					RET.	6" +/-	10	PE	1992
7	29	"	"	"					RET.	6" +/-	35	PE	1993
8	30	WORTH STREET	AT PARK ROW	"	82k	12"	PE	215' +/-					
8	31	"	"	"	80m	16"	STL	20' +/-					

A3-22B





MATCH LINE SEE SHEET 2 OF 8

A3-22C

JULY 2014

SCALE = 1 : 50

SHEET 1 OF 8



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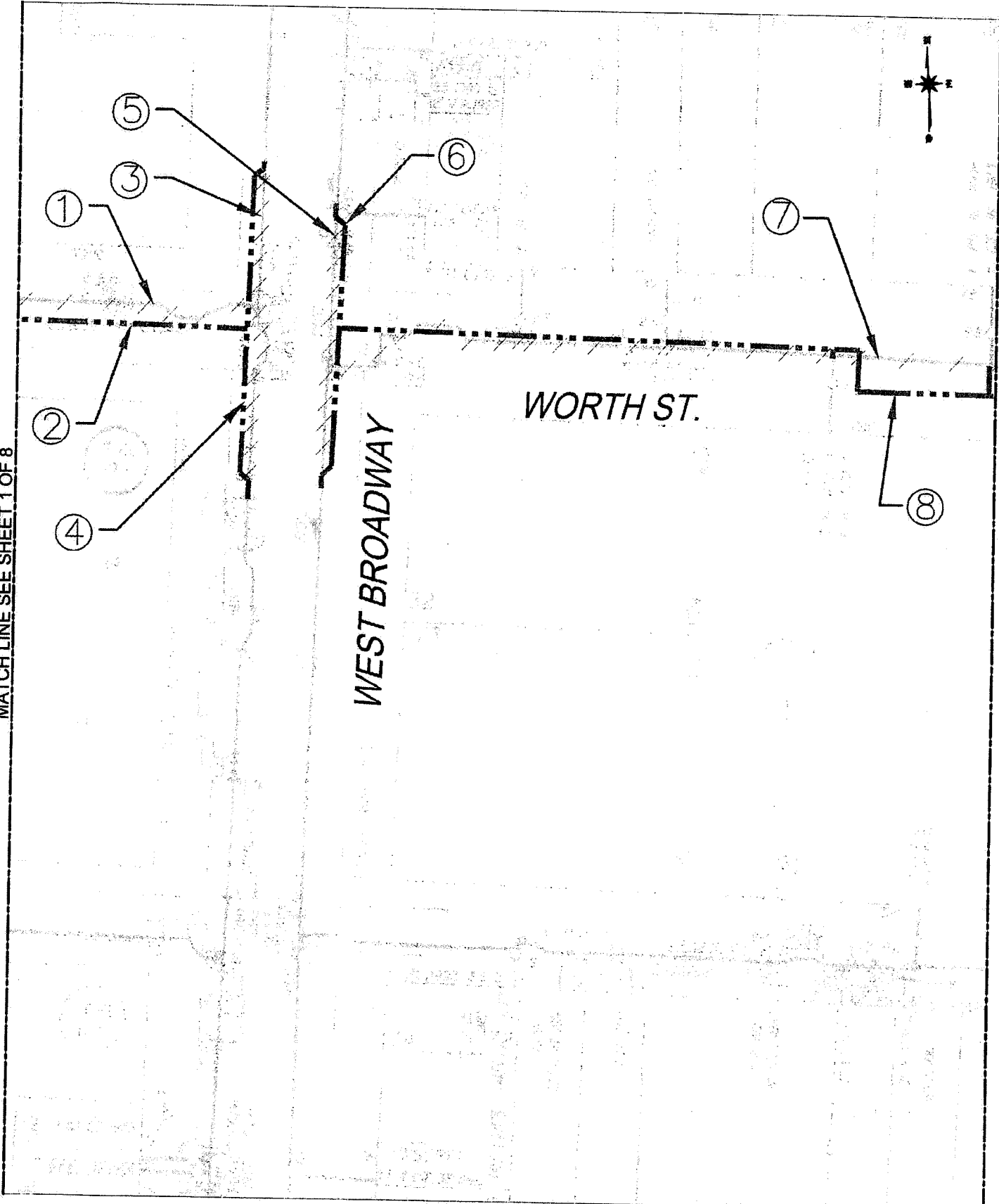
Consolidated Edison Company of New York, Inc.

CAPITAL PROJECT: HWMWTC7E  
WORTH STREET RECONSTRUCTION

BOROUGH OF MANHATTAN

MATCH LINE SEE SHEET 1 OF 8

MATCH LINE SEE SHEET 3 OF 8



A3-22 D

JULY 2014

SCALE = 1 : 50

SHEET 2 OF 8

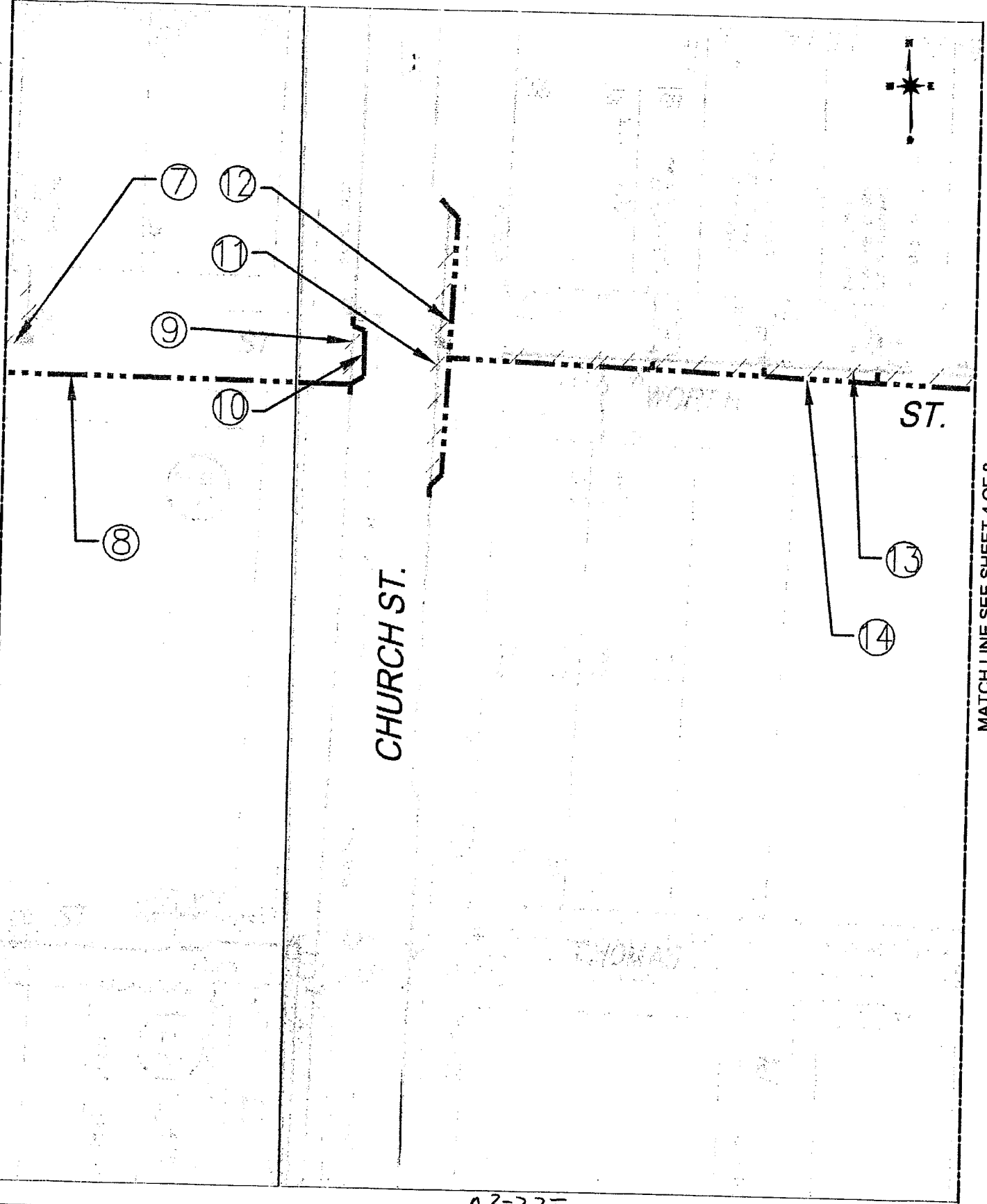


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CAPITAL PROJECT: HWMWTCA7E  
WORTH STREET RECONSTRUCTION

BOROUGH OF MANHATTAN



MATCH LINE SEE SHEET 2 OF 8

MATCH LINE SEE SHEET 4 OF 8

CHURCH ST.

WORTH ST.

A3-22E

JULY 2014

SCALE = 1 : 50

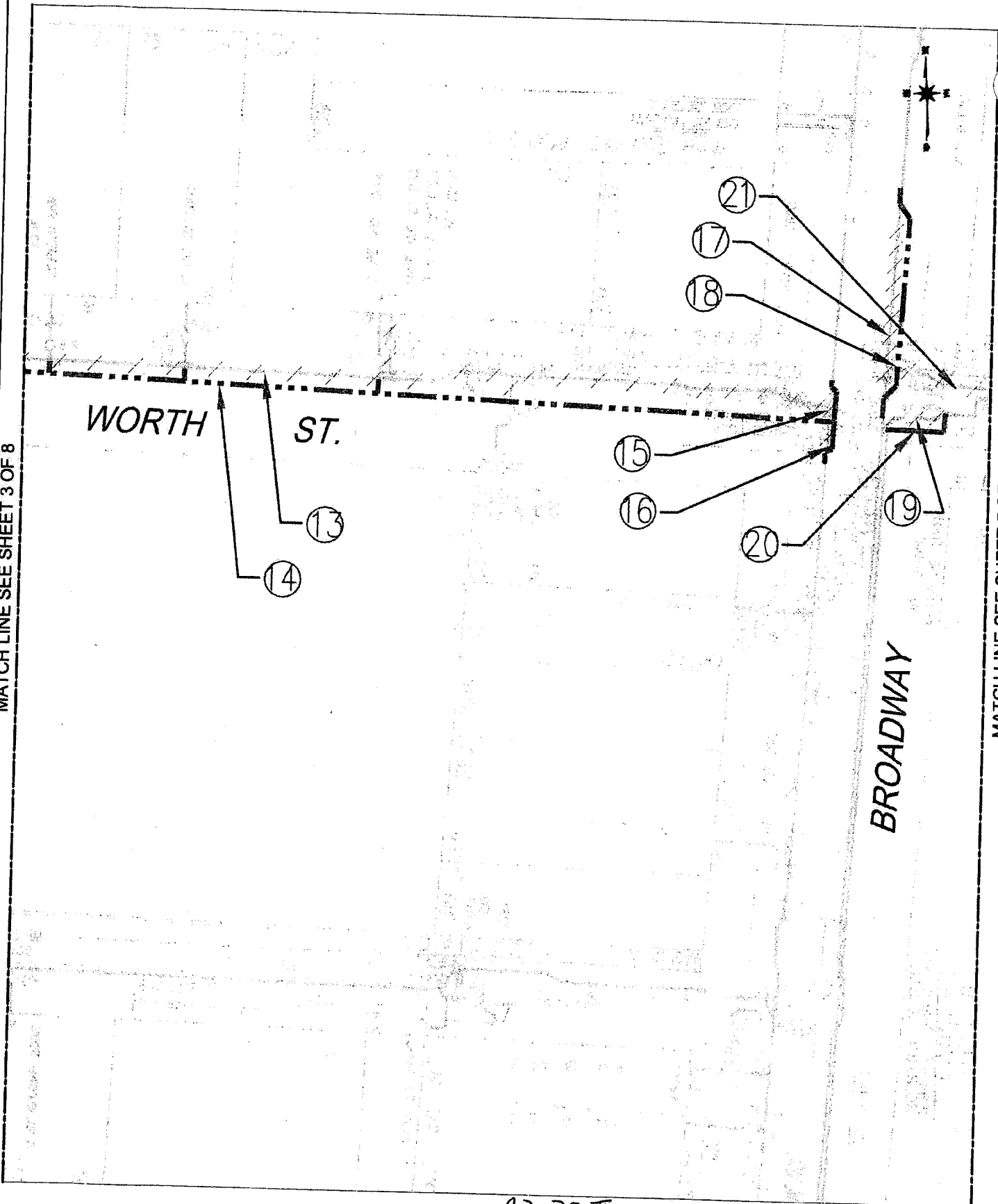
SHEET 3 OF 8



Consolidated Edison Company of New York, Inc.  
CAPITAL PROJECT: HWMWTC7E  
WORTH STREET RECONSTRUCTION  
BOROUGH OF MANHATTAN

MATCH LINE SEE SHEET 3 OF 8

MATCH LINE SEE SHEET 5 OF 8



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SHEET 4 OF 8



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Consolidated Edison Company of New York, Inc.

CAPITAL PROJECT: HWMWTCA7E  
 WORTH STREET RECONSTRUCTION

BOROUGH OF MANHATTAN



21

WORTH ST.

M. MATCH LINE SEE SHEET 4 OF 8

MATCH LINE SEE SHEET 6 OF 8

A3-22G

JULY 2014

SCALE = 1 : 50

SHEET 5 OF 8

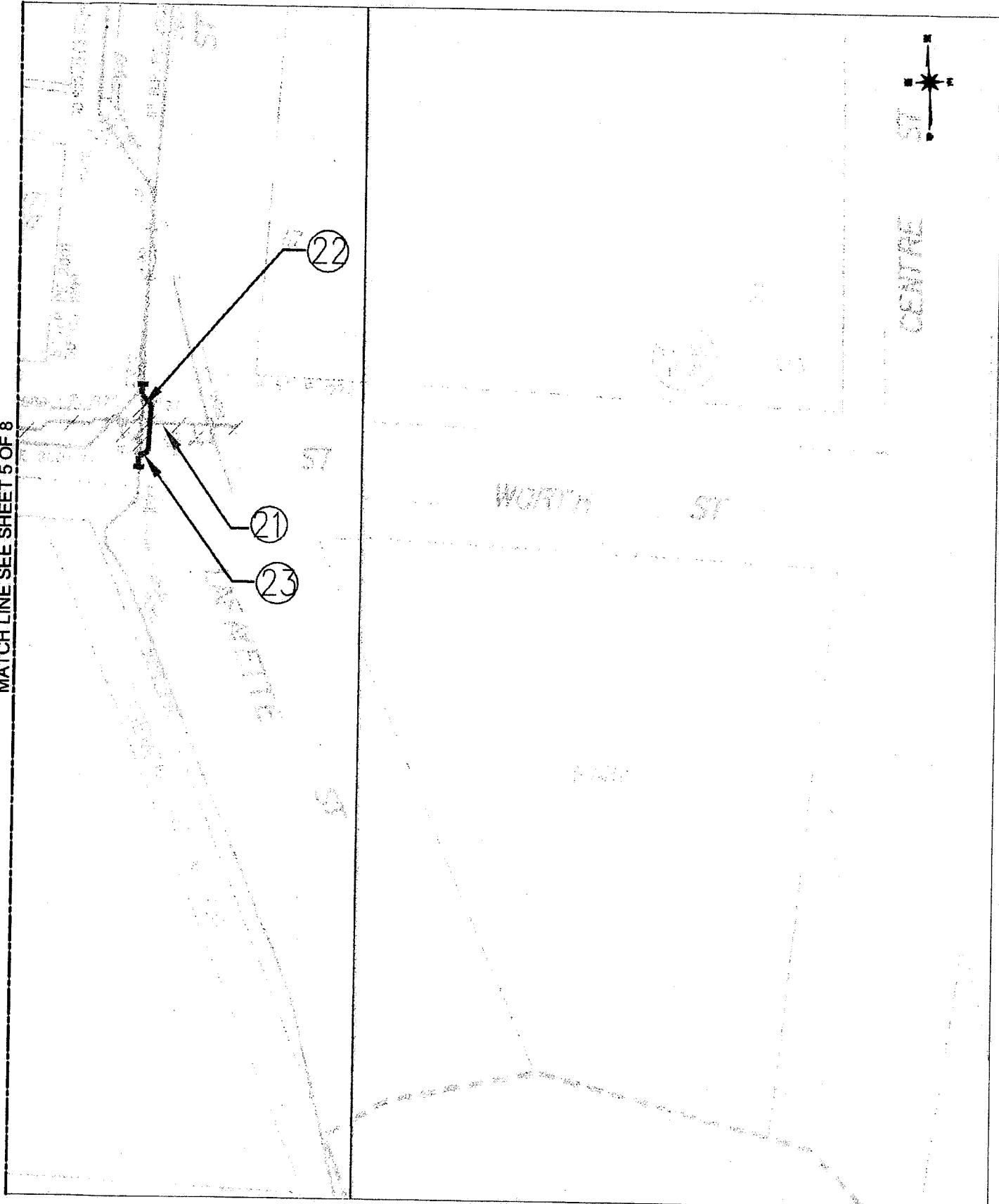


Consolidated Edison Company of New York, Inc.

CAPITAL PROJECT: HWMWTCA7E  
WORTH STREET RECONSTRUCTION

BOROUGH OF MANHATTAN

MATCH LINE SEE SHEET 5 OF 8



A3-22H

JULY 2014

SCALE = 1 : 50

SHEET 6 OF 8



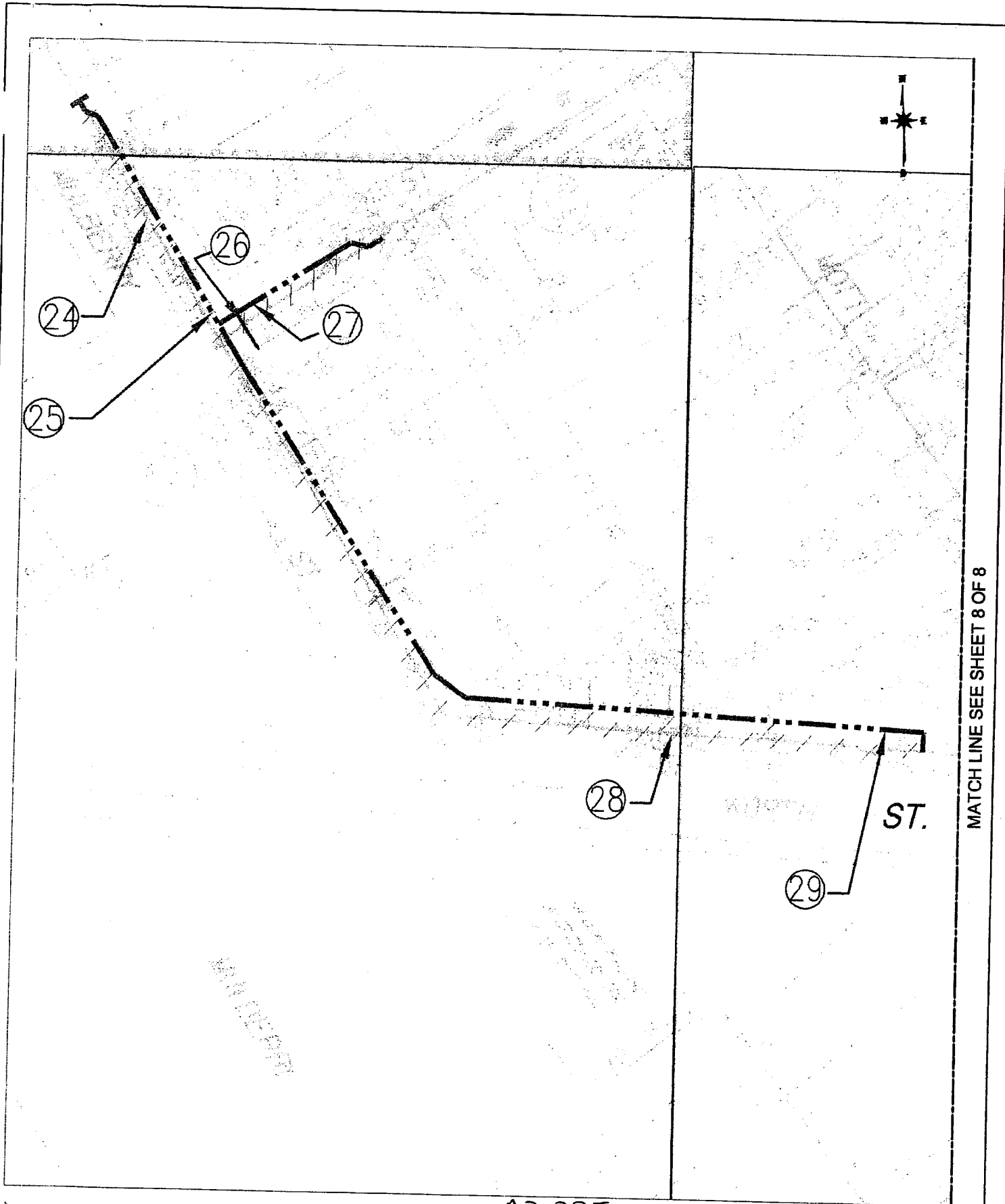
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Consolidated Edison Company of New York, Inc.

CAPITAL PROJECT: HMMWTC7E  
WORTH STREET RECONSTRUCTION

BOROUGH OF MANHATTAN





MATCH LINE SEE SHEET 8 OF 8

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JULY 2014

SCALE = 1 : 50

SHEET 7 OF 8



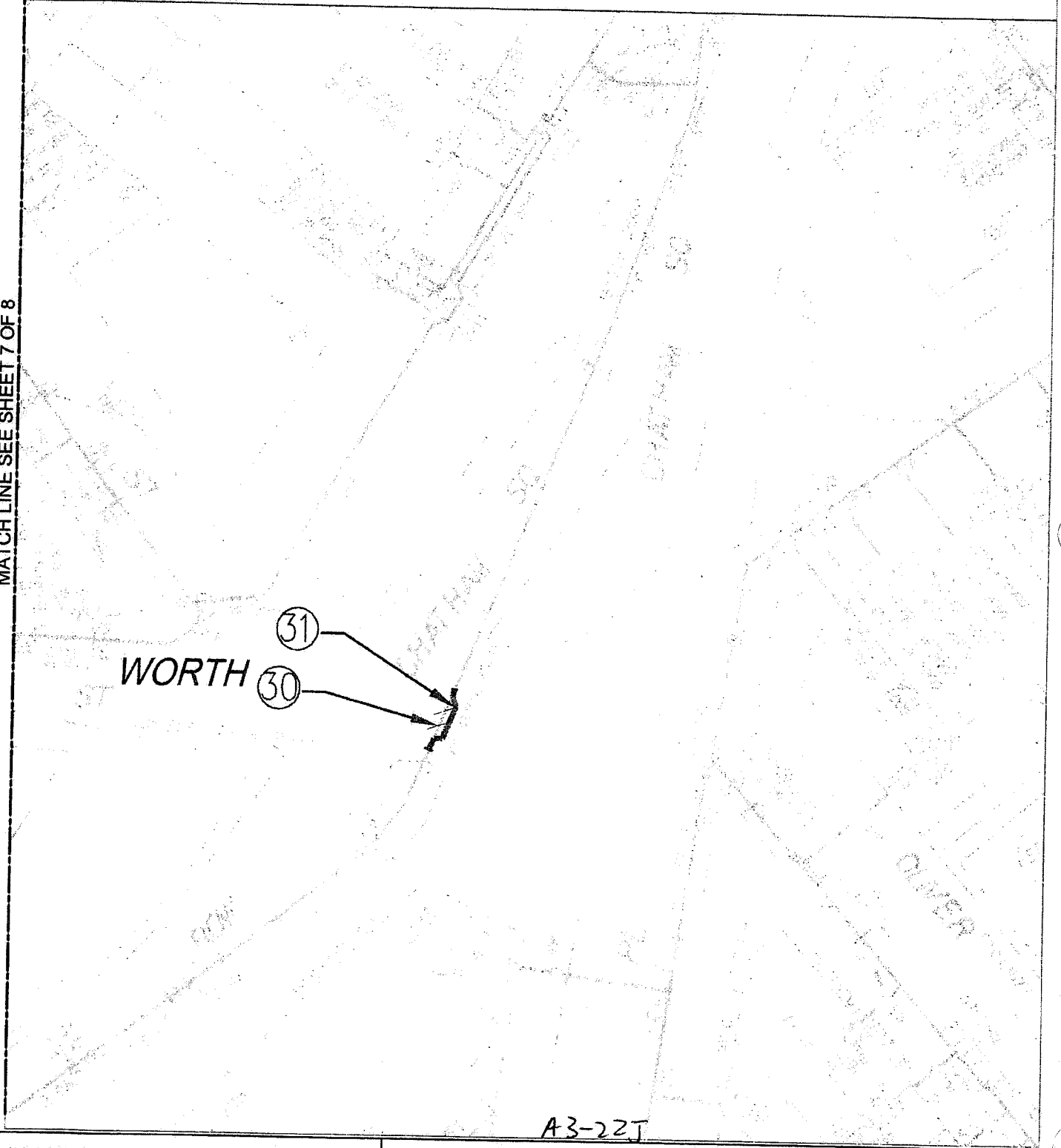
Consolidated Edison Company of New York, Inc.

CAPITAL PROJECT: HWMWTC7E  
 WORTH STREET RECONSTRUCTION

BOROUGH OF MANHATTAN



MATCH LINE SEE SHEET 7 OF 8



A3-22J

JULY 2014

SCALE = 1 : 50

SHEET 8 OF 8



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CAPITAL PROJECT: HWMWTCAT7  
WORTH STREET RECONSTRUCTION

BOROUGH OF MANHATTAN

**VI - LISTING OF APPROXIMATE LOCATIONS OF EP-7 BID  
ITEMS QUANTITIES**

(NO TEXT IN THIS AREA, TURN PAGE)

**SCOPE OF WORK  
SUPPORT AND PROTECTION  
FOR CONTRACT NUMBER HWMWTC7E**

The City of New York Department of Design and Construction is planning to install sewers and/or water mains and all appurtenances in various locations in The City of New York along with all work incidental thereto.

**6.01.1 - Support & Protect Gas Main Crossing Sewer Up To 24" In Diameter (Ea.)**

2 in Worth Street Bet. Hudson St. & West Broadway  
1 in West Broadway @ Worth St.  
3 in Worth St. @ West Broadway

**6.01.8 - Support & Protect Gas Services Crossing Trenches And/Or Excavations (Ea.)**

2 in Worth St. Bet. West Broadway & Church St.  
4 in Worth St. Bet. Church St. & Broadway  
1 in Worth St. Bet. Broadway & Lafayette St.  
1 in Mosco (Park) St. Bet. Mulberry St. & Mott St.

**6.01.9 - Support & Protect Gas Main Crossing Water Main Up To 20" In Diameter (Ea.)**

2 in Worth St. Bet. Hudson St. & West Broadway  
8 in Worth St. @ West Broadway  
1 in Worth St. Bet. West Broadway & Church St.  
3 in Worth St. @ Church St.  
9 in Worth St. @ Broadway  
2 in Worth St. @ Lafayette St.  
1 in Mulberry St. @ Mosco (Park) St.

**6.01.10 - Support & Protect Gas Main Crossing Water Main 24" Thru 30" In Diameter (Ea.)**

2 in Worth St. @ Church St.

**6.01.11 - Support & Protect Gas Main Crossing Water Main 36" Thru 42" In Diameter (Ea.)**

2 in Worth St. @ West Broadway  
1 in Worth St. Bet. West Broadway & Church St.  
3 in Worth St. & Broadway  
5 in Worth St. & Lafayette St.

**6.01.12 - Support & Protect Gas Main Crossing Water Main 48" Thru 54" In Diameter (Ea.)**

4 in Worth St. Bet. Hudson St. & West Broadway  
1 in Worth St. @ West Broadway

**SCOPE OF WORK  
SUPPORT AND PROTECTION  
FOR CONTRACT NUMBER HWMWTCA7E**

The City of New York Department of Design and Construction is planning to install sewers and/or water mains and all appurtenances in various locations in The City of New York along with all work incidental thereto.

- 6.02 - Extra Excavation For The Installation Of Catch Basin Sewer Drain Pipes With Gas Interferences (Ea.)**  
2 in Various Locations As Required
- 6.03 - Removal Of Abandoned Gas Facilities. All Sizes (L.F.)**  
2000 in Various Locations As Required
- 6.03.1a - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For Con Edison Work Only) (L.F.)**  
1500 in Various Locations As Required
- 6.04 - Adjust Hardware To Grade Using Spacer Rings / Adaptor (Street Repaving) (Ea.)**  
10 in Various Locations As Required
- 6.05 - Adjust Hardware To Grade By Resetting (Road Reconstruction) (Ea.)**  
40 in Various Locations As Required
- 6.06 - Special Care Excavation & Backfilling (C.Y.)**  
1000 CY In Various Locations As Required, Including But Not Limited To All Gas Services Crossing Unsheeted Water Main Trenches.
- 6.07 - Test Pits For Gas Facilities (C.Y.)**  
300 in Various Locations As Required.
- 6.08A - Pier and/Or Plate Method Of Protection For ductile Iron Water Main With Less Than 24" Cover (Ea.)**  
2 in Various Locations As Required, Including But Not Limited To The Following Location:  
  
Int. of Worth St. & Centre St.

**SCOPE OF WORK  
SUPPORT AND PROTECTION  
FOR CONTRACT NUMBER HWMWTCA7E**

The City of New York Department of Design and Construction is planning to install sewers and/or water mains and all appurtenances in various locations in The City of New York along with all work incidental thereto.

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- 6.03.1a - Removal Of Abandoned Gas Facilities With Possible Coal Tar Wrap. All Sizes. (For Con Edison Work Only) (L.F.)**  
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- 6.04 - Adjust Hardware To Grade Using Spacer Rings / Adaptor (Street Repaving) (Ea.)**  
10 in Various Locations As Required
- 6.05 - Adjust Hardware To Grade By Resetting (Road Reconstruction) (Ea.)**  
40 in Various Locations As Required
- 6.06 - Special Care Excavation & Backfilling (C.Y.)**  
1000 CY In Various Locations As Required, Including But Not Limited To All Gas Services Crossing Unsheeted Water Main Trenches.
- 6.07 - Test Pits For Gas Facilities (C.Y.)**  
300 in Various Locations As Required.
- 6.08A - Pier and/Or Plate Method Of Protection For ductile Iron Water Main With Less Than 24" Cover (Ea.)**  
2 in Various Locations As Required, Including But Not Limited To The Following Location:  
Int. of Worth St. & Centre St.

**SCOPE OF WORK  
SUPPORT AND PROTECTION  
FOR CONTRACT NUMBER HWMWTCA7E**

The City of New York Department of Design and Construction is planning to install sewers and/or water mains and all appurtenances in various locations in The City of New York along with all work incidental thereto.

**6.09 - Trench Excavation & Backfill For New Gas Mains & Services. Gas Installed By Others (C.Y.)**

2220 in Various Locations As Required, Including But Not Limited To The Following Locations:

Worth St. Bet. Broadway & Lafayette St.  
Mosco (Park) St. Bet. Mulberry St. & Mott St.  
Worth St. Bet. Hudson St. & West Broadway  
Worth St. @ West Broadway  
Mulberry St. Bet. Bayard St. & Worth St.  
Worth St. Bet. Mulberry St. & Mott St.  
Worth St. Bet. West Broadway & Church St.  
Worth St. @ Church St.  
Worth St. Bet. Church St. & Broadway  
Worth St. @ Broadway  
Worth St. @ Park Row  
Worth St. @ Lafayette St.

HWMWTCAT/E - RECONSTRUCTION OF WORTH STREET, BOROUGH OF MANHATTAN  
 Trench Excavation/ Backfill Calculation (Item 6.09)

SHEET	CAPITAL ITEMS	Trench Dimensions			(CY)
		L	W	D	
EP7-2	INSTALL 8" HP PE GAS MAIN WORTH STREET BETWEEN BROADWAY AND LAFAYETTE STREET	25.00	2.67	4.25	10.50
EP7-2	INSTALL 6" LP PE GAS MAIN MOSCO STREET (PARK STREET) BETWEEN MULBERRY STREET AND MOTT STREET	75.00	2.50	4.08	28.33
EP7-1	INSTALL 12" LP PE GAS MAIN WORTH STREET BETWEEN HUDSON STREET AND WEST BROADWAY	420.00	3.00	4.50	210.00
EP7-2	INT. OF WORTH STREET AND WEST BROADWAY MULBERRY BETWEEN BAYARD STREET AND WORTH STREET	240.00	3.00	4.50	120.00
EP7-2	WORTH STREET BETWEEN MULBERRY STREET AND MOTT STREET	290.00	3.00	4.50	145.00
		215.00	3.00	4.50	107.50
EP7-1	INSTALL 12" LP STL GAS MAIN WORTH STREET BETWEEN WEST BROADWAY AND CHURCH STREET	400.00	3.00	4.50	200.00
EP7-1	INT. OF WORTH STREET AND CHURCH STREET	120.00	3.00	4.50	60.00
EP7-2	WORTH STREET BETWEEN CHURCH STREET AND BROADWAY	635.00	3.00	4.50	317.50
EP7-2	INSTALL 16" LP STL GAS MAIN INT. OF WORTH STREET AND BROADWAY	35.00	4.33	4.83	27.11
EP7-2	INT. OF WORTH STREET AND PARK ROW	20.00	4.33	4.83	15.49
EP7-2	INSTALL 20" LP STL GAS MAIN INT. OF WORTH STREET AND BROADWAY	90.00	4.67	5.17	80.48
EP7-2	INT. OF WORTH STREET AND LAFAYETTE STREET	120.00	5.50	6.00	146.67
EP7-1	INSTALL 24" LP STL GAS MAIN INT. OF WORTH STREET AND CHURCH STREET	30.00	5.00	5.50	30.56
EP7-2	INSTALL 30" LP STL GAS MAIN INT. OF WORTH STREET AND LAFAYETTE STREET	85.00	5.00	5.50	86.57

(A) Gas trench volume 1585.71  
 (B) Tie in pits volume 216.44  
 25 ea.  
 (C) Test Pits for gas services 46.22  
 26 ea.  
 (A)+(B)+(C) 1848.36  
 add 20% 369.67  
 Total 2218.04  
 say 2,220 CY

A3-23D



**SECTION 6.08A – Pier and/or Plate Method of Protection for Ductile Iron Water main with less than 24" Cover**

**A. Description:**

Under this item, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to protect ductile iron water mains that are installed with a cover of 24 inches or less crossing over gas facilities of various sizes. The work shall be performed in accordance with the contract plans, specifications and at the direction of the facility operator(s), upon approval from the Resident Engineer.

**B. Materials:**

The Contractor shall supply all materials (concrete, beams, plates, etc.) necessary to provide the pier and plate method of protection as shown on BWS Standard Drawing No. 46464-Z.

**C. Method of Construction:**

The Contractor shall provide pier and plate protection in accordance with BWS Standard Drawing No. 46464-Z. The Contractor shall support, maintain and accommodate the water main and all other utility facilities during the installation of the pier and plate components. The Contractor shall be solely and totally responsible for the disturbances and/or any damages to such facilities.

**D. Method of Measurement:**

The quantity to be measured for payment shall be each (EA.) location wherein an additional area of square foot (S.F.) of steel plate is required to be installed to protect ductile iron water mains with a cover of 24 inches or less crossing over gas facilities of various sizes, as directed by the Facility Operator(s) upon approval from the Resident Engineer. The additional area of square foot (S.F.) of steel plate shall be in accordance with BWS Standard Drawing No. 46464-Z.

**E. Price to Cover:**

The price shall cover the cost of all supervision, labor, material, equipment, and incidentals necessary to construct the specified method of protection. The work shall also cover the cost to cut, break, and remove additional pavement, additional excavation, sheeting, maintenance of traffic, traffic plates, and to furnish and install additional backfill and pavement restoration. This item does not cover the costs for special care excavation around gas facilities that are covered under separate items.

**F. References:**

1. BWS Standard Drawing No. 46464-Z.

**SECTION 6.09 - Trench Excavation and Backfill for New Gas Mains and Services  
(To be performed by City Contractor)**

**1. Description:**

Under this section, the contractor shall furnish all labor, materials, equipment, insurance, permits and incidentals required to break/remove roadway and sidewalk pavement, excavate, backfill and restore gas trenches. The trench to be excavated shall be determined by the size of the gas facility to be installed. The work shall be performed in accordance with applicable specifications, and/or at the direction of the Resident Engineer in consultation with the facility operator.

**2. Materials:**

All materials used to excavate and prepare trenches shall be supplied by the Contractor and be approved by the facility operator in consultation with the Resident Engineer. Clean sand backfill material shall be used and shall conform to Con Edison specification EO-1181-rev.6, General Specification for Backfilling of Trench and Small Openings, which is included in this contract.

**3. Method of Construction:**

Excavation – The Contractor shall saw cut and/or break and remove existing roadway which may include but is not limited to, asphalt, concrete and cobblestone, utilizing approved equipment that leaves a neat straight joint line along the juncture with subsequently replaced pavement. Prior to starting the trenching operation, the contractor shall excavate the appropriate gas main tie-in pits at the extremities of the gas main sections to be replaced. Test pits shall be excavated to determine exact location of all tie-in pits and at appropriate intervals along proposed trench excavation to verify lane and clearances as shown on the contract plans. The tie-in pits shall be adequately protected by the contractor using wood fencing or steel traffic plates until such time when the facility operator has completed the tie-in work. The Contractor shall be permitted to excavate utilizing a combination of machine and hand excavation, as field conditions warrant, and as directed by the facility operator. The trench shall be adjusted so as to provide for a nominal cover on the new gas facilities or as required based on field conditions, applicable specifications, or as directed by the facility operator in consultation with the Resident Engineer. The width of the trench shall be as directed by the facility operator in consultation of the Resident Engineer. The bottom of the trench shall be graded smooth with a minimum cushion of 3 inches of clean sand and in conformance with applicable specification and be compacted, to minimize initial settlement and to avoid "point" support of new gas facilities. All stones projecting into the trench bottom shall be removed, and the voids backfilled before the new gas facilities are installed. Where streets are not to final grade, the cover shall be measured from the final grade, or the existing grade, whichever provides the deeper trench. Excavation in the vicinity of utilities and other structures shall be performed using hand tools. The contractor shall properly dispose of all materials excavated away from site. Size and location of excavation shall be as directed by the facility operator in consultation with the Resident Engineer. Trenches shall be excavated to a depth and size necessary to facilitate the installation of the new gas facility and in conformance with the applicable specification. All existing facilities that are encountered during trench excavating shall be protected in a manner suitable to the facility operator in consultation with the Resident Engineer. Tight sheeting shall be used, as required, based on field conditions and/or when the depth of excavation is equal to or greater than five feet. Skeleton type sheeting will not be permitted. The sheeting required

shall be furnished and installed in full compliance with the State of New York and Federal Safety Code requirements and in compliance with applicable specifications and/or as directed by the facility operator in consultation with the Resident Engineer. Care shall be taken that no existing gas facilities or other structures are broken or damaged. Contractor shall excavate all material encountered necessary to facilitate the installation of the new gas facilities, and as directed by the facility operator. Care should be taken to avoid damage to existing utility facilities and structures, and to pavements and their foundations, and to avoid caving or sliding banks within the excavation.

**Maintenance of Trench Excavation** - Excavated trenches shall be maintained free of debris and kept dry by the contractor. In order to accomplish this, contractor shall, upon completion of excavation and placement of sheeting (as required and/or if depth is equal to or greater than five feet), furnish and install adequate steel plates, as directed by the facility operator in consultation with the Resident Engineer, and posting over the excavated trenches and shall temporarily remove all equipment debris and workers, and relocate barricades in order to open the full width of street to traffic during non-working hours, as required based on DOT requirements. Con Edison forces will perform all live gas main connections, dead gas main cut-outs, and/or service work associated with disconnecting and reconnecting from old to new gas main. The Contractor shall then, at no additional cost, relocate such barricades barrels, cones and other warning devices and remove steel plates, as and when directed by the facility operator in consultation with the Resident Engineer to facilitate the installation of the new gas facilities. When work is being performed and the excavations are not covered with steel plates, the Contractor shall provide complete and safe access to the trench as may be required, and shall provide construction barricades and maintain traffic at all times as shown or as directed by the facility operator in consultation with the Resident Engineer. The contractor has the responsibility to maintain and set to grade all Con Edison hardware during backfill and pavement restoration. Upon completion of installation of the new gas facility, the trench excavation shall be backfilled by the contractor in accordance with Contract requirements and all backfill material shall conform to contract specifications for such purpose.

**Pavement and Sidewalk Restoration** - After backfilling is completed, the contractor shall install temporary pavement consisting of six inches (6") thick asphaltic concrete mixture in roadway areas or a two inches (2") thick asphaltic concrete mixture in sidewalk areas in order to maintain existing pedestrian and vehicular traffic. This temporary pavement shall be maintained until permanent replacement as specified in contract. Permanent pavement restoration shall be as required by the appropriate contract specifications and as directed by the Resident Engineer.

#### 4. Method of Measurement:

The quantity to be measured for payment shall be the number of cubic yards (C.Y.) of trench actually excavated, including roadway pavement, base and/or sidewalk concrete removed within the limits of the trench as directed by the Resident Engineer in consultation with the facility operator. The volume occupied by existing pipes or other structures will be deducted from the total volume measured as shown on drawing CON EDISON PROPOSED GAS SPECIALTY CONTRACTOR WORK, ITEM 6.09 (Sheets EP7-1 and EP7-2), or as encountered based on existing field conditions.

5. Price to Cover:

The unit price bid per cubic yard for excavation shall include the cost of all supervision, labor, material, equipment, insurance and incidentals necessary to complete excavation trenches, including backfill, compaction testing and restoration of trenches and tie-ins pits as specified or shown on the contract, plans. The bid price shall also include the cost of coordinating the sewer and water main work to be performed by the contractor with the gas installation work to be performed by others. The price shall also include, associated maintenance of traffic, and traffic plates and openings and closings of plates as may be required in order to provide access to the facility operator during the new gas facility installation, and installing, removing and maintaining tight sheeting that may be required, cut, break and remove various thickness of surface and base pavement, excavate by hand, furnish, place and compact, in compliance with DOT requirements, clean sand backfill following installation of the gas facility. Any required removing, trucking, storing, and disposing of material shall be deemed included in the unit price. The price shall also include the cost of providing temporary pavement restoration. Permanent pavement restoration shall be deemed included in this item, as required and as directed by the Resident Engineer.



**conEdison**

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.  
4 IRVING PLACE  
NEW YORK, NY 10003**

**DISTRIBUTION ENGINEERING  
TOOLS AND STRUCTURES**

**SPECIFICATION EO-1181  
REVISION 6  
May 2010**

**EFFECTIVE DATE  
June 1, 2010**

**GENERAL SPECIFICATION FOR BACKFILLING  
OF TRENCH AND SMALL OPENINGS**

**FILE: CONSTRUCTION STANDARDS MANUAL NO. 3, SECTION 37**

<b>TARGET AUDIENCE</b>	<b>REGIONAL CONSTRUCTION</b>
<b>NESC REFERENCE</b>	<b>NONE</b>

A3-23I

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Specification	Revision	Rev Date	Effective Date	Copyright Information	Page
EO-1181	6	05/01/2010	06/01/2010	2007-2008 Consolidated Edison Co. of New York, Inc.	2/7
Filing Information		Construction Standards		Manual No. 3, Section 37	

Paper copies of procedures and instructions are uncontrolled and therefore may be outdated. Please consult Distribution Engineering Intranet Site [Distribution Engineering](http://distribution) or <http://distribution>, for the current version prior to use.

A3-23J

**1.0 PURPOSE**

This specification details the procedures to be followed in backfilling all Con Edison street openings for electric, gas and steam facilities.

**2.0 APPLICATION**

This specification applies to all Con Edison Customer Service Areas.

**3.0 REFERENCE SPECIFICATION AND DEFINITIONS**

- 3.1 The term "Engineer" used in this specification refers to the Distribution Tools & Structures Engineer or his authorized representative.
- 3.2 The term Construction Representative shall mean the Construction Manager, Contract Construction Manager, or his authorized representative.
- 3.3 The terms "Type 3/8", "Type I" and "Type II" shall be as defined in EO-8085.
- 3.4 The term "small opening" shall refer to street openings which are 6' x 5' or smaller.
- 3.5 The term "suitable backfill" shall refer to in-place material excavated from the trench or opening which satisfies the following requirements:
  - 3.5.1 The excavated material shall be free of all broken asphalt pavement, broken concrete, brick, all organic material, and all debris.
  - 3.5.2 The excavated material shall be substantially sandy soil gritty and granular in texture and have a small amount of rocks compared to the total volume of soil. It shall have no rocks greater than 2 inches in size.
  - 3.5.3 The excavated material shall be substantially free of clay like or clayey soil. Clayey soil shall be determined as soil that is powder like in texture when dry and capable of being molded when wet.

Specification	Revision	Rev Date	Effective Date	Copyright Information	Page
EO-1181	6	05/01/2010	06/01/2010	2007-2008 Consolidated Edison Co. of New York, Inc.	3/7
Filing Information		Construction Standards		Manual No. 3, Section 37	

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A3-23K

- 3.5.4 Frozen backfill material shall either be removed or broken into small particles before being compacted. Excessively wet material shall be mixed with dry material to reduce moisture content before backfilling.
- 3.5.5 Fill materials, known as "Stone Dust", or "Pond Fill", containing crystalline silica shall not be used as backfill material.
- 3.5.6 If there are any questions as to suitability of the excavated material, the Engineer shall be consulted.
- 3.6 The term "mechanical compaction" shall mean the use of equipment, either impact or plate vibratory, which is designed specifically for soil compaction. The term "hand tamping" shall mean compaction of backfill by means of a plate tamper, which will impart sufficient force to compact the backfill material.
- 3.7 The term "wetted backfill" shall mean backfill material containing sufficient moisture so that when molded by hand it will form a firm shape. If the specimen crumbles it lacks sufficient moisture. If water is squeezed from the specimen it contains too much moisture.

**4.0 REQUIREMENTS**

**4.1 Compaction**

- 4.1.1 The term "compacted", for both "mechanical compaction" and "hand tamping", shall mean a minimum level of compaction of 95% of the maximum dry density of the backfill material used as determined by a Standard Proctor Test (ASTM D-698). In lieu of a Standard Proctor Test a "one point" test shall be done by taking a sample of the soil and compacting it using a Standard Proctor mold procedure and determining the maximum in field density that can be obtained and 95% of this value should be used as a comparison to the actual compaction achieved.
- 4.1.2 In lieu of the above, when using "suitable backfill", compaction will be considered adequate if density readings of the compacted fill equal 95% of the readings of the in-place material (i.e. density readings must be taken at the time of excavation to use as reference for compaction). For this type of "before and after" comparison, devices such as the nuclear density tester may be used.

Specification	Revision	Rev Date	Effective Date	Copyright Information	Page
EO-1181	6	05/01/2010	06/01/2010	2007-2008 Consolidated Edison Co. of New York, Inc.	4/7
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## 4.2 Density Testing

- 4.2.1 The sand-cone test, ASTM D1556 or nuclear density tester may be used for all in place density tests. Other methods may be used upon approval of the Engineer.
- 4.2.2 The Construction Representative or Engineer may order as many in-place density tests as he deems necessary to insure proper compaction. If an in-place density test indicates insufficient compaction, the Contractor shall re-compact the area in question until the backfill is compacted to the requirements set forth in paragraph 4.1.1. The Contractor may elect to take additional tests 5 feet on both sides of the test which failed, and average the values of the three readings. If the average value of the three tests meets the compaction requirements, the area in question will be considered sufficiently compacted and no additional compaction will be required. If the average value does not meet the compaction requirements, the Contractor will be required to pay for the two additional in-place density tests and to re-compact the area, which has been determined to be insufficiently compacted. Test after recompaction.

## 4.3 Procedure For Electric Duct Backfill

- 4.3.1 The following backfill procedure shall be used for concrete duct, asbestos cement, and plastic and fibre conduit.
- 4.3.2 Where the ducts are in a rock area, a minimum 4" bed of Type 3/8" backfill shall be placed. It shall be wetted and mechanically compacted to form a firm base for the support of the ducts. Suitable backfill shall be free of stones larger than 2 inches.
- 4.3.3 For concrete conduit, asbestos cement conduit, plastic and fibre conduit encased in concrete, the trench shall be filled with suitable backfill as defined in paragraph 3.5 or Type II material (EO-8085) in 12 inch wetted lifts. Each lift shall be mechanically compacted.
- 4.3.4 For direct buried asbestos cement, plastic and fibre conduit, the trench shall be filled with Type 3/8 material to a level of 12 inches above the ducts. It shall be compacted by hand in a no more than 12 inch wetted lifts. The remaining trench shall be backfilled with suitable backfill or Type II material (EO-8085) in 12 inch wetted lifts mechanically compacted.

Specification	Revision	Rev Date	Effective Date	Copyright Information	Page
EO-1181	6	05/01/2010	06/01/2010	2007-2008 Consolidated Edison Co. of New York, Inc.	5/7
Filing Information		Construction Standards		Manual No. 3, Section 37	

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#### 4.4 Procedure For 138kv Cable Pipe Installation

4.4.1 All installation of 138KV and 345KV cable pipe type feeders shall comply with the requirements set forth in CE-TS-3352.

4.4.2 The requirement for the use of excavated material as "suitable backfill" shall follow the requirements of paragraph 3.5.

#### 4.5 Procedure For Backfilling Gas Trenches & Small Openings

##### 4.5.1 Coated Steel & Plastic Gas Pipe Trenches

- a. A smooth surface shall be excavated in the bottom of the trench and the pipes laid to grade. Where the trench is in a rock area, a minimum of 4 inches of Type 3/8 material shall be placed, wetted and mechanically compacted to form a firm base for the gas pipes.
- b. The trench shall be backfilled with Type 3/8 material to a height of 12 inches above the pipe in a maximum of 12 inch wetted lifts which shall be hand compacted.
- c. The remaining trench shall be backfilled with Type 3/8, Type I, Type II or suitable existing backfill in a maximum of 12 inch wetted lifts, which shall be mechanically compacted.
- d. The density of the compacted backfill shall be tested and accepted or rejected in accordance with paragraph 4.2.2.

##### 4.5.2 Cast Iron, Plastic & Steel Gas Pipe In Small Openings

- a. Backfill material shall be Type 3/8, or suitable existing backfill, which has been segregated to remove all rocks, which may damage the pipe coating.
- b. Openings shall be backfilled to a height of 12 inches above the pipe in a maximum of 12 inch wetted lifts, which shall be hand, compacted. The remainder of the openings shall be backfilled in 12 inch wetted lifts with Type I or Type II or "suitable backfilled" as per paragraph 7 which shall be mechanically compacted.
- c. The density of the compacted backfill shall be tested and

Specification	Revision	Rev Date	Effective Date	Copyright Information	Page
EO-1181	6	05/01/2010	06/01/2010	2007-2008 Consolidated Edison Co. of New York, Inc.	6/7
Filing Information		Construction Standards		Manual No. 3, Section 37	

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accepted or rejected in accordance with paragraph 4.2.2.

**4.6 Backfilling Concrete Coated & Steel Jacketed Steam Main Trenches**

**4.6.1** A smooth surface shall be established in the bottom of the trench and the pipes leveled and laid on a firm base. Where the trench is in a rock area, a minimum of 4 inches of Type I material shall be placed, wetted and mechanically compacted to form a firm base.

**4.6.2** The trench shall be backfilled with Type I, or Type II or suitable backfill material in 12 inch wetted lifts, which shall be mechanically compacted.

**4.6.3** The backfill shall be tested and accepted or rejected in accordance with paragraph 4.2.2.

**5.0 PRECAUTIONS**

If a work site is found to contain existing fill material that contains or comprised of "Stone Dust" or "pond Fill", the contractor shall cover the material with a 3" layer of sand. If this material is found to be stockpiled at a work site, it shall be covered with a tarpaulin or removed from the work site.

Joseph R. Martin (Signature on File)  
Joseph R. Martin  
Manager  
Tools and Structures  
Distribution Engineering

Marco Meza

<b><u>REVISION No. 5</u></b> Revised section 4.4 (added installation spec.). Due to be reviewed 05/2015	<b><u>FILE:</u></b> Construction Standards Manual 3 Section 237 - Subway
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EO-1181	6	05/01/2010	06/01/2010	2007-2008 Consolidated Edison Co. of New York, Inc.	7/7
<b>Filing Information</b>		Construction Standards		Manual No. 3, Section 37	

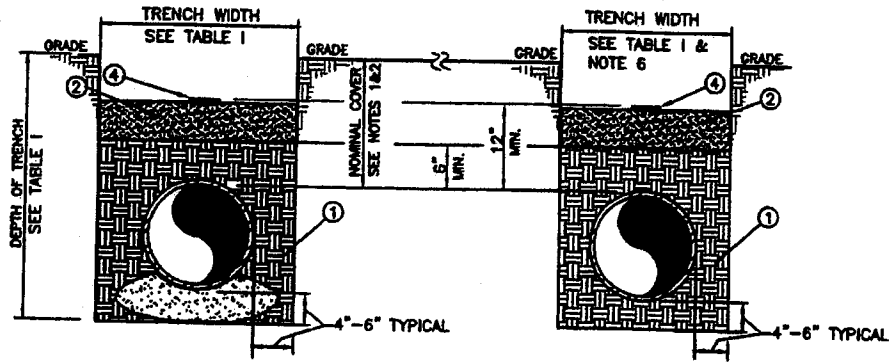
Paper copies of procedures and instructions are uncontrolled and therefore may be outdated. Please consult Distribution Engineering Intranet Site [Distribution Engineering](http://distribution) or <http://distribution> for the current version prior to use.

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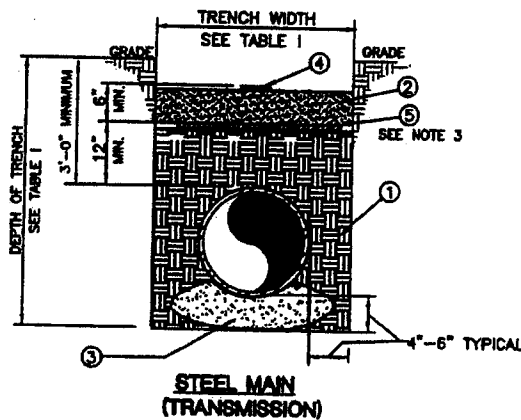
REVISIONS

R. DRUGAN	7/21/98	0
M. BALDOVIN	2/02/06	1
REVISED TRENCH WIDTH FOR 4" THRU 12" MAINS IN TABLE 1 REMOVED REQUIREMENT FOR SANDBAGS FOR STEEL DISTRIBUTION MAIN.		
RAJ.	2/11/06	
M. BALDOVIN	4/04/06	2
ADDED REQUIREMENTS OF SAND BAGS FOR STEEL DISTRIBUTION MAIN.		
RAJ.	4/4/06	
M. BALDOVIN	3/12/08	3
REVISED TRENCH WIDTH OF 16" AND GREATER SIZE MAINS IN TABLE 1.		
P.L.S.	1/28/08	
M. BALDOVIN	04/29/13	4
REVISED TITLE REVISED DRAWING IN ITS ENTIRETY.		
HT	04/24/13	



STEEL MAIN OR SERVICE (DISTRIBUTION)

PLASTIC MAIN OR SERVICE (DISTRIBUTION)



STEEL MAIN (TRANSMISSION)

TABLE 1

SIZE OF MAIN/SERVICE	TRENCH WIDTH	TRENCH DEPTH (MAIN)	TRENCH DEPTH (SERVICE)
1"	0'-10"	3'-6"	2'-6"
1 1/2"	0'-10"	3'-6"	2'-6"
1 1/2"	0'-10"	3'-6"	2'-6"
2"	1'-0"	3'-8"	2'-8"
3"	1'-0"	3'-8"	2'-8"
4"	1'-2"	3'-10"	2'-10"
6"	1'-4"	4'-0"	3'-0"
8"	1'-6"	4'-2"	3'-2"
10"	1'-8"	4'-4"	3'-4"
12"	1'-10"	4'-6"	3'-6"
16"	4'-4"	4'-10"	3'-10"
20"	4'-8"	5'-2"	4'-2"
24"	5'-0"	5'-6"	4'-6"
30"	5'-6"	6'-0"	
36"	6'-0"	6'-6"	

BILL OF MATERIAL

ITEM NO.	DESCRIPTION	SPEC. OR DWG. NO.	CLASS & STOCK NO.
1	3/8" SAND/ CLEAN FILL/ RECYCLED BACKFILL	EO-8065	-
2	SUITABLE BACKFILL	EO-1181	-
3	SANDBAG	ASTM C-33	000-8075
4	"WARNING BURIED GAS LINES BELOW" TAPE	G-3005/ G-8100	024-6680
5	STEEL PROTECTIVE COVER	EO-6799-C	-

NOTES:

- DISTRIBUTION MAINS SHOULD BE INSTALLED WITH A MINIMUM 3'-0" COVER SO AS TO ALLOW A MINIMUM COVER OF 2'-0" ON THE SERVICE PIPING.
- FOR DISTRIBUTION MAINS OR SERVICES, STEEL PROTECTIVE PLATES ARE REQUIRED WHEN THE COVER IS LESS THAN 2'-0". (SEE SPECS. G-8005, G-8100, AND DWG. EO-6799-C).
- FOR TRANSMISSION MAINS, STEEL PROTECTIVE PLATES ARE REQUIRED FOR ALL NEW INSTALLATIONS REGARDLESS OF COVER AND IF FEASIBLE, WHENEVER AN EXISTING TRANSMISSION MAIN IS EXPOSED. (SEE SPECS. G-8051, G-11863, AND DWG. EO-6799-C).
- ENSURE PROPER CLEARANCES ARE MAINTAINED BETWEEN GAS FACILITIES AND OTHER FACILITIES OR STRUCTURES. (SEE CI-820-1 AND DWG. EO-5570-C)
- WHEN SHEETING IS USED, THE "TRENCH WIDTH" DIMENSION IN TABLE 1 SHALL BE MEASURED FROM THE INSIDE OF THE SHEETING.
- WHEN INSTALLING COILED PLASTIC PIPE, THE TRENCH WIDTH MAY BE LESS THAN SHOWN ON TABLE 1.
- FOR STEEL MAINS AND SERVICES, INSTALL SANDBAGS AT 10' INTERVALS.
- ALL REPLACEMENT DIRECT BURIED COPPER TUBING AND PLASTIC TUBING SERVICES IN 1" OR 1 1/2" CTS SIZES SHALL HAVE A PROTECTIVE SLEEVE INSTALLED. (SEE G-8100)
- SEE G-8200 FOR MINIMUM SIZES OF NEW DIRECT BURIED PLASTIC, STEEL, AND COPPER SERVICES OF VARIOUS PRESSURES.

REFERENCE SPECS & DWGS:

GAS MAIN INSTALLATION	G-8005
GAS SERVICE INSTALLATION	G-8100
GAS SERVICE SIZING	G-8200
STEEL PROTECTION PLATES	EO-6799-C; G-8051; G-11863
PROPER CLEARANCES	CI-820-1; EO-5570-C
SHEETING	EO-10954-B; EO-16965-B
BACKFILLING	EO-1181; EO-8065

TRENCH EXCAVATION FOR GAS MAINS & SERVICES UP TO 350 PSIG

CONSOLIDATED EDISON COMPANY OF N.Y., INC.  
GAS OPERATIONS DEPT.

DATE 7/21/06  
LAST REV. 04/29/13

DWG. NO. 309495 REV. 4

THIS DWG. SUPERSEDES - - - - - EO-7922

END OF ADDNDUM NO. 3  
This Addendum Consists of Fifty (50) pages

**ATTACH TO CONTRACT DOCUMENTS**

**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

**PROJECT ID: HMMWTCA7E**

**RECONSTRUCTION OF WORTH STREET FROM HUDSON STREET TO PARK ROW  
INCLUDING SEWER, WATER MAIN, STREET LIGHTING, AND TRAFFIC SIGNAL AND PRIVATE  
UTILITIES WORK**

**Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN**

**ADDENDUM NO. 4**

**DATED: November 14, 2014**

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**This Addendum is issued for the purpose of amending the requirements of the contract documents and is hereby made part of said contract documents to the same extent as if it was originally included therein.**

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The Standard Sewer And Water Main Specifications of the Department of Environmental Protection (dated July 1, 2014), Sewer Design Standards of the Department of Environmental Protection (dated September 2007) Revised January 2009), Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), Specifications For Trunk Main Work of the Department of Environmental Protection (dated July 2014) and the Standard Highway Specifications (Volumes I and II) of the Department of Transportation (dated November 1, 2010) of The City of New York, shall be included as part of the contract documents. These said specifications and standard drawings are hereby revised under the following section headings:

- A. NOTICE TO BIDDERS
- B. AMENDMENTS TO THE STANDARD HIGHWAY SPECIFICATIONS
- C. AMENDMENTS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS
- D. AMENDMENTS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

**A. NOTICE TO BIDDERS**

- (1) (A) The Contractor is advised that copies of the Standard Sewer And Water Main Specifications (dated July 1, 2014), Sewer Design Standards (dated (September 2007) Revised January 2009), Specifications For Trunk Main Work (dated July 2014) and Water Main Standard Drawings (latest revisions) are available to all prospective bidders at no cost upon presentation of receipt of purchase of Bid Package at the following location:

Department of Design and Construction  
Division of Infrastructure  
Design Services, Specifications, 3<sup>rd</sup> Floor  
30-30 Thomson Avenue  
Long Island City, NY 11101

(B) The Contractor is advised that copies of the Standard Highway Specifications (Volume I and II) (dated November 1, 2010), Standard Highway Details of Construction (latest revisions), Division of Street Lighting Specifications (latest revisions), Division of Street Lighting Standard Drawings (latest revisions), Standard Specifications for Traffic Signals (latest revisions), and Standard Drawings for Traffic Signals (latest revisions) are available to all prospective bidders for a fee at the following location:

Department of Transportation  
55 Water Street, Ground Floor  
New York City, NY 10041

- (2) The Contractor is notified that a Notice To Proceed (NTP) date will be issued for work to commence within twenty-one (21) to thirty (30) days of Contract Registration.
- (3) The Contractor shall furnish, install, maintain and subsequently remove temporary Protective Tree Barriers. Protective Tree Barriers shall be Type B, unless otherwise directed by the Engineer, and shall be constructed and installed as shown on the Protective Tree Barrier sketch in Department Of Transportation, Standard Highway Details Of Construction, Drawing No. H-1046A, as directed by the Engineer, and in accordance with Department of Parks and Recreation requirements.
- (4) All utility locations and invert elevations are not guaranteed, nor is there any guarantee that all existing utilities, whether functional or abandoned within the project area are shown.
- (5) All existing house connections shall be maintained and supported during construction. The Contractor shall replace any existing house connection damaged as a result of the Contractor's construction operations as ordered by the Engineer at no cost to the City.
- (6) The Contractor is advised that any City owned light poles, traffic signals, street name signs, traffic signs and encumbrances including, but not limited to, underground conduit displaced as the result of the installation of the new sewers, water mains, catch basins, catch basin connections and appurtenances shall be replaced in kind and as directed by the Engineer. The cost of such work shall be deemed included in the prices bid for all items of work under this contract.
- (7) The Contractor is notified that Victaulic Style 77 Coupling is no longer acceptable for use in any steel water main work. All reference to Victaulic Style 77 Coupling within the Standard Sewer And Water Main Specifications of the Department of Environmental Protection (dated July 1, 2014), the Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), the Specifications For Trunk Main Work (dated July 2014), and the contract drawings, shall be replaced with Bolted Split-Sleeve Restrained Coupling.
- (8) The Contractor is notified that the fuel cost per gallon used in the formula under **Sub-Article 26.2.8** of the Standard Construction Contract for **Extra Work** will be derived from the fuel price index for the United States East Coast published weekly by the United States Energy Information Administration

("USEIA"), and available on its website at <http://www.eia.gov/petroleum/gasdiesel/> . The USEIA published cost per gallon for the applicable fuel on the East Coast for the week in which the first day of each calendar quarter during the contract term occurs (i.e., January 1<sup>st</sup>, April 1<sup>st</sup>, July 1<sup>st</sup> and September 1<sup>st</sup>) will be used in the reimbursement formula for all **Extra Work** invoiced that was performed during that calendar quarter. Should the USEIA stop publishing this fuel price index, the fuel cost per gallon will be determined by reference to a substitute index to be agreed upon by the Contractor and the City.

- (9) The Contractor is responsible for any damage to the existing street and traffic signal equipment, including underground conduits and the safety of both pedestrian and vehicular traffic for the duration of the contract.

Should any conduits, cables or foundations need repair due to the Contractor's negligent operations during construction, all work shall be performed according to NYCDOT Bureau of Traffic's Standard Drawings and Specifications at the sole expense of the Contractor.

It is the Contractor's responsibility to secure an approved electrical contractor to perform all traffic signal work (if any). For list of approved electrical contractors, contact Mr. Michael R. LeFosse of New York City Department of Transportation at (718) 786-2236.

- (10) The Contractor is notified that as part of this contract a "Cathodic Protection (CP) System Survey and Engineering Study of Soil and Stray Currents and Cathodic Protection System Design" has been prepared by the firm of CorrTech, Inc.. The Contractor's attention is directed to the Cathodic Protection Design drawings consisting of seven (7) sheets that are included in the contract drawings; to the Cathodic Protection (CP) System Survey and Engineering Study of Soil and Stray Currents and Cathodic Protection System Design report that consists of nineteen (19) pages that is attached to the end of this addendum; and to the Quantity and Cost Estimating report consisting of one (1) page that is attached to the end of this addendum.



**B. AMENDMENTS TO THE STANDARD HIGHWAY SPECIFICATIONS**

(NO TEXT)



**C. AMENDMENTS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS**

- (1) **Refer** to **Subsection 10.15 - Notice To Utility Companies, Etc., To Remove Structures Occupying Place Of Sewers, Water Mains Or Appurtenances**, Page I-11:

**Add** the following to **Subsection 10.15**:

- (1) CONSOLIDATED EDISON COMPANY OF NEW YORK (CON EDISON)

There are CON EDISON facilities in the area of construction. The Contractor shall notify CON EDISON at least seventy-two (72) hours prior to the start of construction by contacting Ms. Theresa Kong at (212) 460-4834 or Mr. Noel Leon at (718) 275-2852.

- (2) VERIZON

There are VERIZON facilities in the area of construction. The Contractor shall notify VERIZON at least seventy-two (72) hours prior to the start of construction by contacting Mr. Michael Fitzpatrick at (718) 977-8142.

- (3) TIME WARNER CABLE OF NEW YORK CITY

There are TIME WARNER CABLE facilities in the area of construction. The Contractor shall notify TIME WARNER CABLE at least seventy-two (72) hours prior to the start of construction by contacting Mr. Mark Larm at (917) 335-9181.

- (4) NATIONAL GRID

There are NATIONAL GRID facilities in the area of construction. The Contractor shall notify NATIONAL GRID at least seventy-two (72) hours prior to the start of construction by contacting Mr. Neville Jacobs Jr. at (718) 963-5612.

- (2) **Refer** to **Subsection 10.21 - Contractor To Notify City Departments**, Page I-13:

**Add** the following to **Subsection 10.21**:

- (1) N.Y.C. D.E.P., BUREAU OF WATER AND SEWERS OPERATIONS

The Contractor shall notify Mr. James Garin, P.E., Director, Engineering at the Department of Environmental Protection, 59-17 Junction Blvd., 3rd floor low rise, Corona N.Y. 11368, at least thirty (30) days prior to the start of construction.

- (2) NEW YORK CITY FIRE DEPARTMENT

The Contractor shall notify the Bureau of Fire Communications at least thirty (30) days prior to the start of construction by contacting Mr. Cleanthis Meimaroglou at (718) 999-1719.

- (3) N.Y.C. DEPARTMENT OF TRANSPORTATION

The Contractor shall notify Mr. Steve Galgano, P.E. Chief of Signal/Street Lighting Operations, 34-02 Queens Blvd., Long Island City, N.Y. 11101 at (718) 786-3550, at least seventy-two (72) hours prior to the start of construction.

- (4) N.Y.C. DEPARTMENT OF PARKS AND RECREATION

The Contractor shall notify the Parks Department at least seventy-two (72) hours prior to the start of construction by contacting Mr. James Cruickshank at (718) 965-7739.

- (5) N.Y.C. TRANSIT AUTHORITY

The Contractor is advised that bus routes as well as bus stops, within the scope of this project may be affected during construction operations. The Contractor shall notify the Transit Authority at least two (2) weeks prior to the start of construction, in order to make the necessary arrangements.

Arrangements shall be made through:

Ms. Sarah Wyss  
Director Of Short Range, Bus Service Planning (SRB)  
New York City Transit  
2 Broadway, 17<sup>th</sup> Floor  
New York, N.Y. 10004  
Telephone No. (646) 252-5517  
sarah.wyss@nyct.com

- (3) **Refer** to **Subsection 10.30 - Contractor To Provide For Traffic**, Page I-15:  
**Add** the following to **Subsection 10.30**:

(1) Traffic Stipulations:

The Contractor shall refer to Traffic Stipulations identified in the maintenance of traffic requirements under Highway Contract No. HMMWTCA7E.

- (4) **Refer** to **Subsection 71.41.4 - Specific Pavement Restoration Provisions**, Page VII-67:  
**Add** the following to **Subsection 71.41.4**:

(E) Specific Pavement Restoration Provisions:

- (1) Highway and roadway reconstruction shall be accomplished and paid for in accordance with Highway Construction Plans, Details and Specifications for Highway Project ID. HMMWTCA7E.

**D. AMENDMENTS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK**

- 1) **Refer** to Part 1 – Furnishing And Delivering Steel Pipes And Appurtenances 30 Inches In Diameter And Larger, Paragraph 13. Special Fittings:, Page 5;  
**Add** the following to Paragraph 13:

The steel reducer shall have a length of seven (7) feet for every twelve (12) inches reduction in diameter.

**END OF ADDENDUM NO. 4**

**This Addendum consists of seven (7) pages plus twenty (20) pages of attachments.**



**NO TEXT ON THIS PAGE**





**NYC DDC HWMWTC7E Worth St  
CP System Survey and Engineering  
Study of Soils and Stray Currents  
Cathodic Protection System Design**

**Prepared For:**

**NYC Department of Design and Construction  
30-30 Thomson Ave  
Long Island City, NY 11101**

**Prepared By:**

**CorrTech, Inc.  
25 South Street  
Hopkinton, MA 01748  
CorrTech, Inc. Job No. 7576  
NYC DDC Task Order 010A**

**March 2014**

## STATEMENT OF LIMITATION

The conclusions presented in this document are based on the services described and not on tasks or procedures beyond the scope of the described procedures or the time and budgetary constraints imposed by the contract limitations.

CorrTech, Inc. has performed this assessment in a professional manner using that degree of skill and care exercised for similar projects under similar conditions by reputable and competent consultants, and in accordance with the procedures established within CorrTech's quality assurance, quality control protocol.

CorrTech, Inc. shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld or not fully disclosed at the time the evaluation were performed.



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Report Reviewed by:  
Scott Paul, P.E.  
NACE Corrosion Specialist No. 4163  
March 2014

A handwritten signature in black ink, appearing to read "James Davis".

---

Report Written by:  
James Davis  
Civil Engineer  
March 2014

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### APPENDIX I

Soil Resistivity and Stray Current Test Results

### APPENDIX II

Cathodic Protection Design Worksheet, 3 Segments



## INTRODUCTION

On January 20th, 2014, CorrTech, Inc. entered into agreement with the NYC Department of Design and Construction with the expectation of providing cathodic protection design, construction support, field testing, final system testing and as-built documentation. The HMMWTCA7E project is located in Manhattan, New York on Worth Street, between Hudson Street and Park Row. 3,800 linear feet of 36-inch diameter piping and 400 linear feet of 48-inch piping are to be installed. These segments of pipe, isolated at either end, will be protected by a cathodic protection system designed by CorrTech. Work is being completed under CorrTech, Inc. Job No. 7576 and NYC DDC Task Order 010A issued under contract GEDRC001, registration number 20121401831.

Field testing was performed on February 26th, 2014 in order to obtain soil resistivity data and to perform stray current monitoring in the approximate areas in which the new steel water main is being installed. During this visit, testing was completed on Worth Street, between Hudson Street and Park Row. Data collected will be used to design the sacrificial cathodic protection system. In addition to the field testing, a cursory review of area utilities was completed.

CorrTech, Inc. provides corrosion engineering expertise in accordance with specifications section 5.04A. Furnishing, Installing and Testing Corrosion Control and/or Cathodic Protection System was done in accordance with New York City Department of Environmental Protection (NYCDEP) "Specifications for Trunk Main Work".<sup>1</sup>

## CONCLUSION

Based on the field testing protocol and test results obtained during the system evaluation and energization, the following conclusions are presented:

1. The average soil resistivity measured along the construction route was found to be approximately 48,000  $\Omega$ -cm. Readings obtained ranged from 25,000  $\Omega$ -cm to 70,000  $\Omega$ -cm. The soil resistivity study indicates that the area soils are classified as progressively less corrosive to metallic structures. Steel piping installed in this area will require corrosion control measures that will include a bonded external dielectric coating system and sacrificial anode cathodic protection that will provide adequate corrosion control for in excess of 50 years.
2. Stray current effects measured along the construction route are considered insignificant. The magnitude of variations observed, clearly does not indicate the existence of dynamic stray DC voltage effects.

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<sup>1</sup> This publication includes "Special Provisions for Trunk Main Work"; and "Specification for Furnishing, Delivering and Laying Steel Pipe and Appurtenances".

## RECOMMENDATIONS

While the soils in the area are considered mildly corrosive, the minimum life expectancy of 50 years must be considered. The evaluation suggests that newly installed steel pipe should be installed with an external coating system, electrical isolation and sacrificial anode type cathodic protection system. The following are requirements:

1. Insulating flanges must be installed at all butterfly valve chambers and at any/all ductile iron or cast iron main connections. Flange isolation assemblies are required where the new steel pipe connects to existing piping as well.
2. The new steel piping must have a high quality dielectric coating, (such as the Polyken YGIII coating system), for any and all steel pipe surfaces that are in contact with the surrounding soil environment. The dielectric coating system should be applied to all piping associated with the air cock hydrants and blow-off assemblies.
3. Sacrificial magnesium anodes, permanent reference electrodes, pipe test wires, steel counter electrodes and flush-to-grade test stations at the locations indicated on the design drawings must be installed. All test stations must be installed on the inside of nearby curbs in order to prevent the enclosures from being subject to vehicular traffic and to make them easier to locate for future testing.
4. FRP shields must be installed around the pipe at any/all points of contact with reinforced concrete piles or similar structures. Electrical isolation between the new steel piping and other structures is of critical importance.
5. Final testing is to be witnessed by DDC/DEP personnel. Testing must verify that the installed cathodic protection system meets the criteria set forth by NACE International Recommended Practices SP0169, which requires control of external corrosion on underground or submerged metallic piping systems at all locations.

## DISCUSSION

The coated steel water main piping associated with Project HWMWTCA7E consists of 36-inch and 48 inch welded steel water main. Testing was completed on Worth Street, between Hudson Street and Park Row.

The purpose of the pre-constructing testing and subsequent evaluation is to quantify the levels of stray traction DC currents and to evaluate the area soil resistivity along the proposed construction route. After testing, no significant stray current effects were located. Stray current testing was performed at two (2) locations in and around the area where the new pipe will be installed.

A reference cell-to-reference cell potential profile obtained along Worth Street indicates that potential variations are considered insignificant as well. The potential measurements obtained indicated variations of 0.010 volts or less. The proposed area of construction for the new steel

water main being installed as part of the HWMWTCA7E project will not be subjected to adverse effects from stray traction DC currents.

Soil resistivity measurements were obtained at six (6) locations using a Collins Rod and Whetstone Soil Bridge. Depths obtained ranged from 3-feet to 4-feet. The data obtained is shown in Appendix I of this report. Soil resistivity ranged from a low of 25K  $\Omega$ -cm to a high of 70K  $\Omega$ -cm. The mean soil resistivity is approximately 48K  $\Omega$ -cm. This is a reasonable representation of the average soil resistivity in this area.

The measurement of soil resistivity has been used for years as an indicator of the corrosivity of soil. Soil resistivity is the reciprocal of conductivity; the lower the resistivity, the easier current flows through the soil. Of the measurable soil characteristics, resistivity is generally accepted as the primary indicator of soil corrosivity. Resistivity is a property of the bulk volume of soil and electrolytes.

Although no universal standard has been accepted (by an organization such as the American Society for Testing and Materials or the National Association of Corrosion Engineers), it is generally agreed that the classification shown below, or other similar classifications, reflect soil corrosivity.

<u>Resistivity (Ohm-Cm)</u>	<u>Classification</u>
< 1,000	Extremely Corrosive
1,000 to 3,000	Highly Corrosive
3,000 to 5,000	Corrosive
5,000 to 10,000	Moderately Corrosive
10,000 to 25,000	Mildly Corrosive
> 25,000	Progressively Less Corrosive

The above table provides qualitative insight to the expected corrosion exposure of a metallic structure in a soil of known resistivity. Accordingly, deterioration can generally be expected to be rapid and relatively severe in soils below 1,000 ohm-cm. This does not mean, however, that severe corrosion will not occur in soils of higher resistivity. In fact, depending on chemical conditions, severe corrosion can occur in soils above 25,000 ohm-cm. The table only indicates that the latter occurrence is generally not observed.

The review of the plans for the new steel water main indicates that there are multiple ties to existing structures. The installation of insulating flanges is required for any/all tie-ins to the existing water supply network, as well as any butterfly valve connections and at any/all ductile iron or cast iron distribution tie-in points. The installation of electrical isolation flange assemblies produces a more concise, manageable cathodic protection system.

The cathodic protection design created by CorrTech, Inc. assumes that the piping will be electrically isolated and provided with a high quality dielectric coating system, (such as the Polyken YGIII coating system) and installed on all steel piping in contact with the soil environment. The piping associated with air cock hydrants and blow-offs should be layered with

this coating system as well as electrically isolated from the steel trunk water main. There will be a total of three (3) distinct segments associated with the HWMWTCA7E installation relative to cathodic protection. Please refer to Appendix II for the associated Ground Bed Design Worksheet.

Segment No.	Location	Pipe Diameters (in)	Pipe Length (ft)	Gnd beds	Anodes	Ref. Cells	Rebar
SEGMENT 1	Worth Street to between Broadway and Church St	48" STEEL	617	1	50	4	4
SEGMENT 2	Worth St. from Church St. to Park Row	36" STEEL	2623	3	170	4	4
SEGMENT 3	Running North on Broadway from Worth St.	36" STEEL	182	1	40	1	1
	<b>TOTAL</b>	<b>48-INCH DIA</b>	<b>617</b>				
	<b>TOTAL</b>	<b>36-INCH DIA</b>	<b>2805</b>				
			<b>TOTAL</b>	<b>5</b>	<b>260</b>	<b>9</b>	<b>9</b>

The following NYC DEP cathodic protection design criteria has been applied to facilitate the final design calculations:

- Percent of bare pipe 2.00%.
- Required current density 1.25 mA/Ft<sup>2</sup>.
- Pipe coating quality 25,000 ohm-cm
- 50-year design life for the cathodic protection anodes
- Anode consumption rate of 17-pounds per ampere-year
- 50% anode consumption utilization factor

The magnesium anodes will be divided into groups and these groups will be distributed along the piping segments. Installing the anodes in individual groups enables better current distribution in each segment and will provide multiple ground beds as backup in the event of damage to one grounded.

each segment and will provide multiple ground beds as backup in the event of damage to one groundbed.

The cathodic protection design has been prepared in accordance with NACE SP0169. NACE Standard Practice SP0169 (formerly RP0169), "Control of External Corrosion on Underground or Submerged Metallic Piping Systems". This standard practice presents procedures and practices for achieving effective control of external corrosion on buried or submerged metallic piping systems.

These recommendations are also applicable to many other buried or submerged metallic structures. They are intended for use by corrosion control personnel concerned with the corrosion of buried or submerged piping systems, including oil, gas, water, and similar structures. This standard describes the use of electrically insulating coatings, electrical isolation, and cathodic protection as external corrosion control methods. The standard contains specific provisions for the application of cathodic protection to existing bare, existing coated and to new piping systems. Also included are procedures for control of interference currents on pipelines.

Sacrificial anode cathodic protection provides protection with no external power source or rectifier. Sacrificial anodes are designed to corrode, thereby protecting the steel structure being installed. Energy for the sacrificial anode system is provided by the difference in the electrochemical level between the anode and the structure being protected. Typically, magnesium anodes are utilized to protect steel structures. Referring to the galvanic series chart under the section on galvanic corrosion, it is indicated that the magnesium anode will corrode preferentially when connected to steel as part of a cathodic protection system. This is due to the fact that it sits at a higher electrochemical level.

A sacrificial anode installation is also a DC circuit with positive current supplied by the anodes and a return negative current supplied from the structure. The driving voltage of the sacrificial anode circuits is approximately 1.0 volt, the difference between magnesium and steel.

Ohm's Law ( $E=IR$ ) is valid for DC circuits, where E is the driving voltage, or rectifier output, of the circuit, I is the resulting current magnitude and R is the resistance of the circuit. Proper system design seeks to minimize the resistance of the circuit through the use of an anode ground bed design. Sacrificial anode systems do not provide as much energy output as the impressed current design and therefore do not function properly in some applications where cathodic protection is required. Sacrificial systems require that the structure is first coated with a tightly adhered coating system and is also electrically isolated from all other metallic structures and system components. It is important to understand that pipe coating alone is not sufficient to provide complete corrosion control. Coatings must be supplemented with cathodic protection.<sup>2</sup>

NACE requirements specify that the cathodic protection of buried steel structures must be evidenced by two criteria. Firstly, adequate steel polarization is needed to ensure that the

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<sup>2</sup> However, as defined in Sections 4 and 5 of NACE RP0169, cathodic protection can be provided to uncoated structures under certain conditions.

electrochemical processes have been established in order to arrest corrosion of the steel surface. Secondly, the cathodic protection design should be constructed and implemented in order to allow for field-testing protocol. Protection levels with respect to polarization criteria can then be verified. All testing is performed in order to demonstrate that adequate cathodic polarization exists on the protected structure. Polarization criteria must take into account any significant drop in the field measurements conducted. This is important both to satisfy the regulations as well as to ensure the preservation of pipe integrity. The primary focus of testing protocol and system design is to ensure that corrosion of any exposed steel has been mitigated.

Sacrificial anode design utilizes a number of electrical parameters as input to the CorrTech, Inc. design calculation worksheet. The calculation worksheets for each piping segment is included in this report as Appendix II.

The following NYC DEP cathodic protection design criteria was applied to facilitate the final design calculations:

- Percent of bare pipe 2.00%.
- Required current density 1.25 mA/Ft<sup>2</sup>.
- Pipe coating quality 25,000 ohm-cm
- 50-year design life for the cathodic protection anodes
- Anode consumption rate of 17-pounds per ampere-year
- 50% anode consumption utilization factor

In addition to the soil resistivity data, pipe geometry and anode dimensions and weight, the above design criteria are inputs to the design. The anode-to-remote earth resistance calculation is based on Dwight's Equation for a single horizontal anode.

$$R = \left( \frac{0.00521\rho}{L} \right) \left( \ln \left( \frac{4L^2 + 4L\sqrt{s^2 + L^2}}{dS} \right) + \frac{S}{L} - \frac{\sqrt{S^2 + L^2}}{L} - 1 \right)$$

Where

- R = resistance in ohms
- L = anode length in feet
- S = twice the depth of anode in feet
- d = anode diameter in feet
- ρ = resistivity in ohm-cm
- ln is the natural logarithm function

This calculation provides the resistance for one (1) anode set in the measured average soil resistivity. The resistance to ground of the pipe is also calculated in the worksheet. Both the theoretical current requirement based on 1.25 mA/Ft<sup>2</sup> applied to the 2.00% of bare steel pipe and the circuit resistance of the pipe and anodes are calculated in the worksheet. The number of

anodes to be installed is a variable input in the worksheet that determines total anode circuit resistance based on parallel resistance theory. The check in the design calculation worksheet indicates that the comparison of theoretical current compared to the field-tested circuit resistance, (as determined by the number of anodes to be installed), is between 0 and 25% and is in agreement.

The final total anode current output value is used to calculate the life of the anode system based on the magnesium anode consumption rate and 50% utilization. The life expectancy of anodes on these cathodically protected piping segments is in excess of 100 years.

## **Appendix I**

### **Soil Resistivity and Stray Current Test Results**



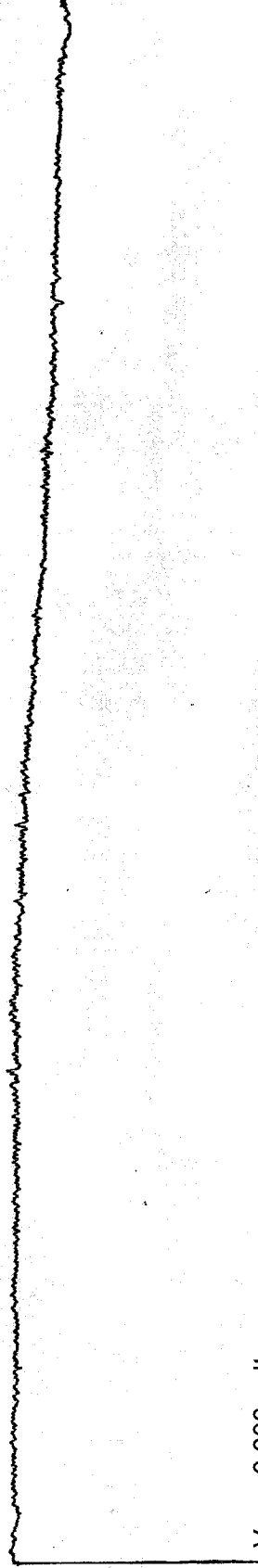
STRAY CURRENT CHART 1  
TEST DATE: 2/26/2014

NY DDC  
HMMWTC7E- Worth Street  
TASK ORDER 010  
CORRTECH JOB NO. 7576

LOCATION: Kimlau Square  
Manhattan, New York, New York

TEST: Kimlau Square between Worth St. and  
East Boardway. Two (2) portable reference electrodes spaced  
100 ft apart from each other and monitored for 10 minutes.

Vg = -0.192 volts



Vg = -0.000 volts

START TIME: 11:00am

END TIME: 11:10am

X PLOT: 10 mV/in  
Y PLOT: 100 mV/in  
SWEEP 50 sec/inch

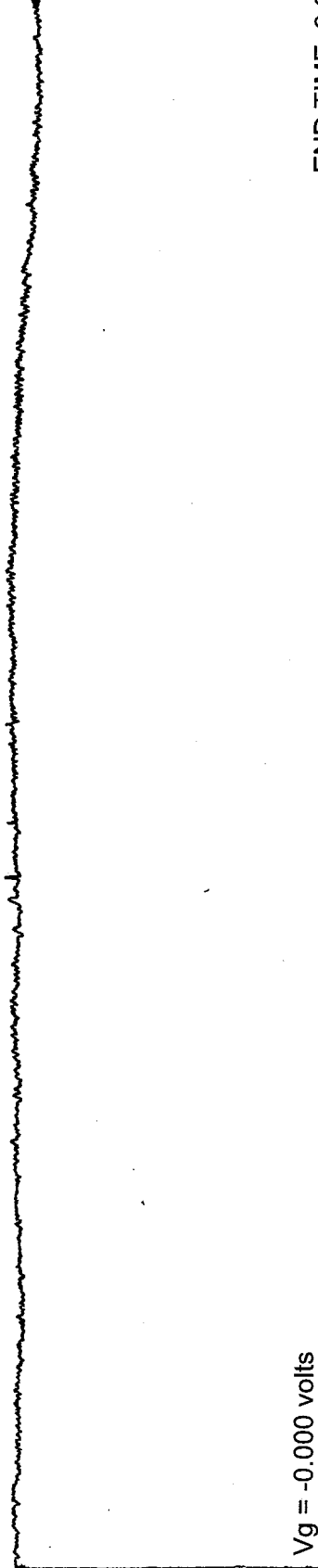
NY DDC  
HWMWTC7E- Worth Street  
TASK ORDER 010  
CORRTECH JOB NO. 7576

STRAY CURRENT CHART 2  
TEST DATE: 2/26/2014

LOCATION: Thomas Baine Park  
Manhattan, New York, New York

Thomas Baine Park between Lafayette St. and  
Centre St. Two (2) portable reference electrodes spaced 100 ft  
apart from each other and monitored for 10 minutes.

Vg = -0.192 volts



Vg = -0.000 volts

START TIME: 9:13am

X PLOT: 10 mV/in

Y PLOT: 100 mV/in

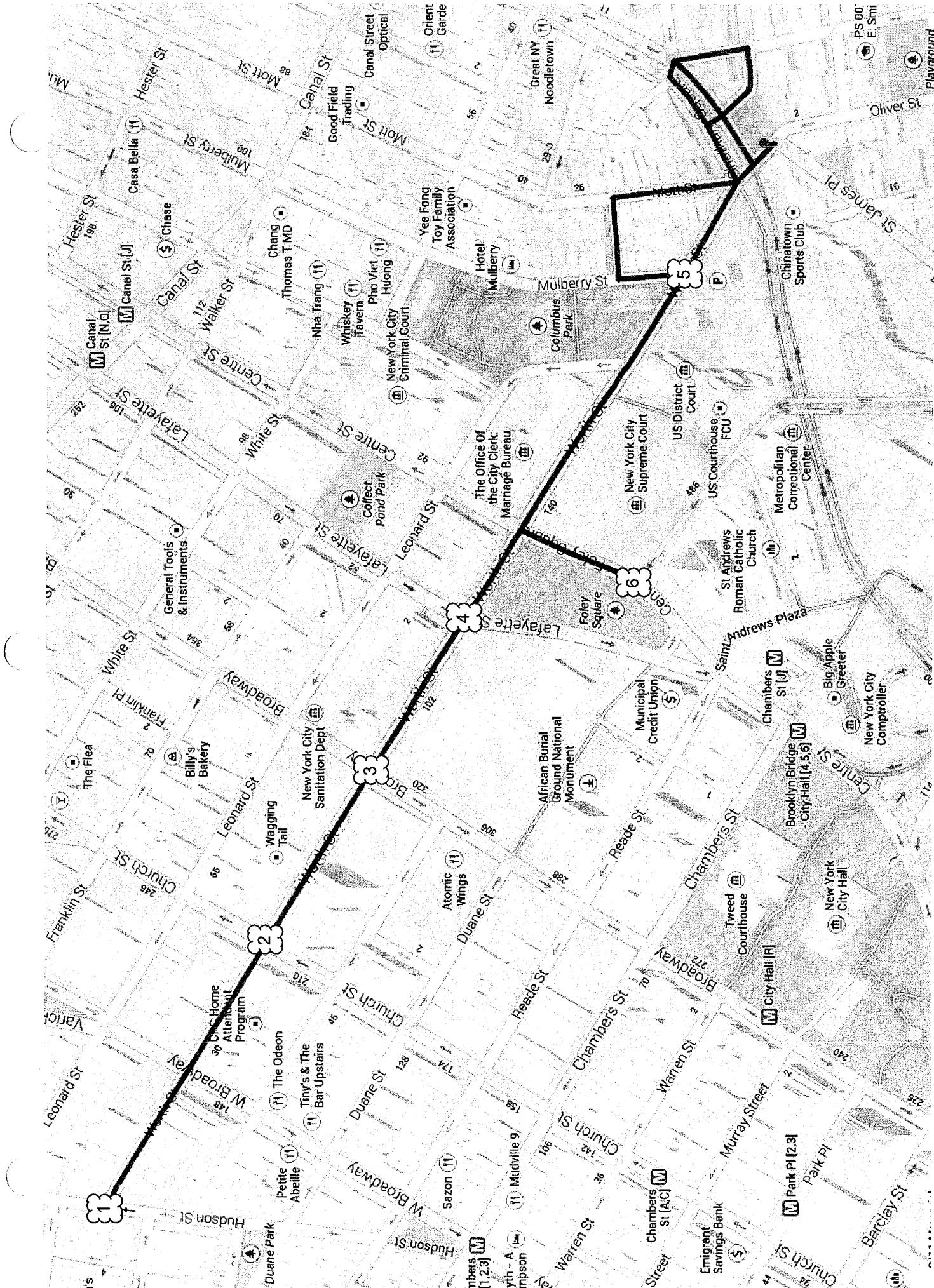
SWEEP 50 sec/inch

END TIME: 9:23am

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Client: NY DDC - Task Order 010 Job Number: 7576  
Project: HMMWTCA7E- Worth Street Date: 2/26/2014

Location	Resistivity (ohm-cm <sup>2</sup> )	Description	Soil Type
1	45,000	Intersection of Hudson Street and Worth Street, in Tree-bed	Soil
2	60,000	Intersection of Worth Street and Church Street, in Tree-bed	Soil
3	50,000	Intersection of Worth Street and Broadway in small park	Grass
4	25,000	Intersection of Worth Street and Lafayette Street in Thomas Baine park	Grass
5	70,000	Intersection of Worth Street and Mulberry Street, in Tree-bed	Soil
6	40,000	On Center Street between Worth and Pearl Street in Foley Square	Grass
<u>AVG.</u>	<u>48,333</u>	<u>(ohm-cm<sup>2</sup>)</u>	



## **Appendix II**

### **Cathodic Protection Design Worksheet, 3 Segments**

CorrTech Inc., Groundbed Design Worksheet  
 NYC DDC Water Trunk Main Cathodic Protection  
 CorrTech: Task order No. 010, Job No. 7576

Client: NYC DDC Project: HWMWTCA7E  
 Date: 3/11/14  
 Description: 617 ft of 48-in, steel pipe  
 Segment: 1

Structure Calculations		ENTER	SURFACE AREA
Length of pipe	ft	617	7,750 ft2
Diameter	ft	4	
Length of Ppipe	ft	0	0 ft2
Diameter	ft	0	
Length of Ppipe	ft	0	0 ft2
Diameter	ft	0	
			7,750 ft2

Circuit Calculations				
Soil Resistivity (ohm-cm)		48,333		
Coating Quality (% bare)		1.00%		
Pipe Surface requiring protection		77.50	FT2	
Pipe electrically isolated (yes/no)		yes		
Coating quality OHM-FT2		25000		
Pipe to Earth Resistance		3.23	OHM	
Theoretical Current Required (ma/ft2)		1.25		
Theoretical Current Requirements		0.0969	AMPS	0.092994

**Anode Parameters**

Anode Type	Magnesium anode, prepackaged
Anode Weight (lbs)	17
Anode Diameter (feet)	0.31
Anode Length (feet)	2.08
2 time anode depth (feet)	20

**Individual anode resistance**  
 20.11 square of S2+L2 factor  
 120.64 resistivity x .0052 factor  
 1.47 log value  
**281.29 Horizontal anode resistance**  
**358.55 Vertical anode resistance**

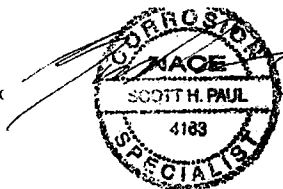
**Circuit Resistance Current Requirements**

Anode Resistance to Earth	plug in Resistance value	281.29	OHMS
Driving Potential (v)		0.85	VOLTS
Individual anode output		0.003	AMPS
Number of anodes to be installed		50	
Total circuit resistance		8.85	OHMS
Current output of system		0.0960	AMPS
Consumption Rate (lb/A-yr)		17.00	

**Check**    **Between 0% and 25%**  
 0.87%    **Yes**

**Anode life based on anodes to be installed**    **260.35 YEARS**    considers 50% anode efficiency

Design conforms to the following standards:  
 National Association of Corrosion Engineers (NACE)  
 Standard Recommended Practice SP 0169 latest revision



CorrTech Inc., Groundbed Design Worksheet  
 NYC DDC Water Trunk Main Cathodic Protection  
 CorrTech: Task order No. 010, Job No. 7576

Client: NYC DDC Project: HMMWTCA7E  
 Date: 1/10/14  
 Description: 2,623 of 36-in and 182 of 30-in, steel pipe  
 Segment: 2

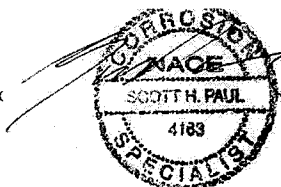
Structure Calculations		ENTER	SURFACE AREA
Length of pipe	ft	2,623	24,709 ft2
Diameter	ft	3	
Length of Ppipe	ft	182	1,429 ft2
Diameter	ft	2.5	
Length of Ppipe	ft	0	0 ft2
Diameter	ft	0	
			<hr/> 26,137 ft2

Circuit Calculations			
Soil Resistivity (ohm-cm)		48,333	
Coating Quality (% bare)		1.00%	
Pipe Surface requiring protection		261.37	FT2
Pipe electrically isolated (yes/no)		yes	
Coating quality OHM-FT2		25000	
Pipe to Earth Resistance		0.96	OHM
Theoretical Current Required (ma/ft2)		1.25	
Theoretical Current Requirements		0.3267	AMPS 0.313648

Anode Parameters		Individual anode resistance	
Anode Type	Magnesium anode, prepackaged	20.11	square of S2+L2 factor
Anode Weight (lbs)	17	120.64	resistivity x .0052 factor
Anode Diameter (feet)	0.31	1.47	log value
Anode Length (feet)	2.08	<b>281.29</b>	<b>Horizontal anode resistance</b>
2 time anode depth (feet)	20	<b>358.55</b>	<b>Vertical anode resistance</b>

Circuit Resistance Current Requirements			
Anode Resistance to Earth	plug in Resistance value	<b>281.29</b>	OHMS
Driving Potential (v)		0.85	VOLTS
Individual anode output		0.003	AMPS
Number of anodes to be installed		170	
Total circuit resistance		2.61	OHMS
Current output of system		0.3255	AMPS
Consumption Rate (lb/A-yr)		17.00	
<b>Anode life based on anodes to be installed</b>		<b>261.11</b>	<b>YEARS</b>
			considers 50% anode efficiency

Design conforms to the following standards:  
 National Association of Corrosion Engineers (NACE)  
 Standard Recommended Practice SP 0169 latest revision



CorrTech Inc., Groundbed Design Worksheet  
 NYC DDC Water Trunk Main Cathodic Protection  
 CorrTech: Task order No. 010, Job No. 7576

Client: NYC DDC Project: HWMWTCA7E  
 Date: 1/10/14  
 Description: 24 of 36-in , steel pipe  
 Segment: 3

Structure Calculations		ENTER	SURFACE AREA
Length of pipe	ft	24	226 ft2
Diameter	ft	3	
Length of Ppipe	ft	0	0 ft2
Diameter	ft	0.0	
Length of Ppipe	ft	0	0 ft2
Diameter	ft	0	
			226 ft2

Circuit Calculations			
Soil Resistivity (ohm-cm)	48,333		
Coating Quality (% bare)	1.00%		
Pipe Surface requiring protection	2.26	FT2	
Pipe electrically isoated (yes/no)	yes		
Coating quality OHM-FT2	25000		
Pipe to Earth Resistance	110.58	OHM	
Theoretical Current Required (ma/ft2)	1.25		
Theoretical Current Requirements	0.0028	AMPS	0.002713

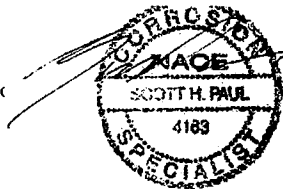
Anode Parameters		Individual anode resistance
Anode Type	Magnesium anode, prepackaged	20.11 square of S2+L2 factor
Anode Weight (lbs)	17	120.64 resistivity x .0052 factor
Anode Diameter (feet)	0.31	1.47 log value
Anode Length (feet)	2.08	<b>281.29 Horizontal anode resistance</b>
2 time anode depth (feet)	20	<b>358.55 Vertical anode resistance</b>

Circuit Resistance Current Requirements			
Anode Resistance to Earth	plug in Resistance value	<b>281.29</b>	OHMS
Driving Potential (v)		0.85	VOLTS
Individual anode output		0.003	AMPS
Number of anodes to be installed		2	
Total circuit resistance		251.23	OHMS
Current output of system		0.0034	AMPS
Consumption Rate (lb/A-yr)		17.00	

Check Between 0% and 25%  
 -19.72% Yes

Anode life based on anodes to be installed 295.56 YEARS considers 50% anode efficiency

Design conforms to the following standards:  
 National Association of Corrosion Engineers (NACE)  
 Standard Recommended Practice SP 0169 latest revision





**CorrTech Inc.**

**Client**

**Project**

**Contract**

**Prepared**

**Quantity and Cost Estimating**

Task Order 010

NY DDC

TRUNK MAIN FOR RECONSTRUCTION OF WORTH STREET FROM HUDSON STREET TO PARK ROW, Manhattan

HWMWTCAT7E

3/27/14

Item No	Description	Quantity	Measure	Unit Price Materials	Sub Total	Unit Price Installation	Sub Total	Total
1	17-pound high potential magnesium anodes	222	each	\$112.00	\$24,864.00	\$120.00	\$26,640.00	\$51,504.00
2	Stuart Steel Type S Splice Kit	111	each	\$23.00	\$2,553.00	\$50.00	\$5,550.00	\$8,103.00
3	AWG 8 HMWPE header cable	4,440	feet	\$0.52	\$2,308.80	\$1.00	\$4,440.00	\$6,748.80
4	AWG 10 THWN, Red, White	2,400	feet	\$0.38	\$912.00	\$1.00	\$2,400.00	\$3,312.00
5	AWG 10 THWN, Red, Blue, Green,	1,200	feet	\$0.38	\$456.00	\$1.00	\$1,200.00	\$1,656.00
6	Thermite welds, CA-15	50	each	\$2.80	\$140.00	\$50.00	\$2,500.00	\$2,640.00
7	Copper-copper sulfate reference cells w/50-ft HMWPE 12 yello	9	each	\$422.00	\$3,798.00	\$50.00	\$450.00	\$4,248.00
8	Counter electrodes w/50-ft AWG 12 THWN Purple	9	each	\$40.49	\$364.41	\$50.00	\$450.00	\$814.41
9	Burndy KS-17 Copper Split bolts (for anode splicing and test st	111	each	\$3.50	\$388.50	\$25.00	\$2,775.00	\$3,163.50
10	3M Supper 88- Black Electrical Tape (used with splice kit)	20	each	\$5.00	\$100.00	\$0.00	\$0.00	\$100.00
11	3M 130 C Rubber Tape (used with splice kit)	20	each	\$5.00	\$100.00	\$0.00	\$0.00	\$100.00
12	Cans 3M scotchkote electrical coating FD (used with splice kit)	6	each	\$50.00	\$300.00	\$0.00	\$0.00	\$300.00
13	Royston Handi-Caps (cover thermite weld)	50	each	\$4.25	\$212.50	\$0.00	\$0.00	\$212.50
14	Test station housing (supplied by NYC DEP)	12	each	\$250.00	\$3,000.00	\$150.00	\$1,800.00	\$4,800.00
15	Acrylic Tags for Labeling Test Stations	12	sets	\$25.00	\$300.00	\$10.00	\$120.00	\$420.00

TOTAL cathodic protection materials and installation

\$39,797.21

\$48,325.00

\$88,122.21

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE

NOVEMBER 10, 2014

**ADDENDUM NO. 5**

**PROJECT ID: HMMWTCA7E**

**RECONSTRUCTION OF WORTH STREET  
FROM HUDSON STREET TO PARK ROW  
INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK**

**Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK**

**SPECIFICATIONS FOR  
HANDLING, TRANSPORTATION AND DISPOSAL  
OF NONHAZARDOUS AND POTENTIALLY HAZARDOUS  
CONTAMINATED MATERIALS**

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This Addendum is issued for the purpose of amending the requirements of the Contract Documents and hereby made part of said Contract Documents to the same extent as if it was originally included herein.

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- Attachments**
1. New York City Department of Environmental Protection Limitations for Effluent to Storm-Sanitary or Combined Sewers Parameters
  2. Applicable Regulations
  3. Definitions
  4. Phase II Subsurface Corridor Investigation Report

## ITEM 8.01 C1 HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOILS

### 8.01 C1.1 WORK TO INCLUDE

**General:** This work shall consist of the handling, transportation and disposal of non-hazardous contaminated soils. The materials covered by this specification are soils that are contaminated with petroleum or chemical products but cannot be classified as hazardous waste. For the purpose of this specification, soil shall be defined as any material excavated below the pavement and base for pavement.

Non-hazardous contaminated soils are defined as soils exhibiting one or more of the following characteristics:

- ◆ Elevated Photo-Ionization Detector (PID) readings, subsequently confirmed by lab analysis
- ◆ Visual evidence of contamination
- ◆ Petroleum and/or chemical odors
- ◆ Soils that have been documented as contaminated in previous environmental reports.

Non-hazardous contaminated soils must be stockpiled at an off-site approved location or secured on-site by the Contractor, meeting all required Federal, State and Local stipulations. Sampling and laboratory analysis must be conducted to determine if the soils are hazardous, unless the alternative procedure as defined under subsection 8.01 C1.1 A.5 has been agreed upon by treatment facilities. Contaminated soils determined to be non-hazardous shall be handled in accordance with the specifications herein for Item 8.01 C1. Contaminated soils determined to be hazardous shall be handled in accordance with the specifications for Item 8.01 H – Handling, Transporting and Disposal of Hazardous Soils.

The Contractor shall retain the services of an independent Environmental Consultant, as specified under Item 8.01 S – Health and Safety, to oversee the work required under this Item.

Non-hazardous soils shall be delivered to the disposal or treatment facility within thirty (30) calendar days after excavation.

The Contractor shall conduct sampling and analysis of the impacted soils as specified under Item 8.01 C2 – Sampling and Testing of Contaminated/Potentially Hazardous Soils for Disposal Parameters. The laboratory results shall be forwarded to DDC Program Administration, Engineering Support Services (ESS) for review to determine if the soils will be handled and disposed of as contaminated regulated soils or hazardous waste. No other soils shall be sampled or tested without the DDC's approval or direction.

The Contractor shall ensure that all operations associated with the handling, sampling, loading, transportation, and disposal of non-hazardous contaminated soils are in compliance with all applicable Federal, State, and City statutes and regulations.

The Contractor shall document the excavation, handling, transportation and disposal of non-hazardous contaminated soils. The Contractor shall supply all equipment, material and labor required to conduct the specified work of this Item.

A. **Material Handling Plan:** Within forty-five (45) calendar days after award of Contract, the Contractor shall submit to the Program Administration, ESS for review, a Material Handling Plan (MHP). The MHP must be approved by the Program Administration, ESS, prior to the Contractor's commencement of work. The MHP shall, at a minimum, consist of:

1. The Contractor's procedures for identifying non-hazardous contaminated soils during excavation, including the specific model and manufacturer of intended organic vapor

- monitoring equipment and calibration procedures to be used. It should also include the training and experience of the personnel who will operate the equipment.
2. The Contractor's procedures for safely handling non-hazardous contaminated soils. The procedures must include personnel safety and health as well as environmental protection considerations.
  3. Name, address, New York State Department of Health's (DOH) Environmental Laboratories Accreditation Program (ELAP) status and telephone number of the proposed laboratory for analysis of representative soil samples. The ELAP for the intended analysis must approve the laboratory.
  4. Identification of the Contractor's proposed waste transporter(s). This information shall include:
    - a. Name and Waste Transporter Permit Number
    - b. Address
    - c. Name of responsible contact for the hauler
    - d. Telephone number for the contact
    - e. Any and all necessary permit authorizations for each type of waste transported
    - f. Previous experience in performing the type of work specified herein
  5. All staging/stockpiling areas (if stockpiling areas are intended and available), or alternate procedures that will be used. Alternate procedures may include, but are not limited to, agreements from the intended disposal or treatment facilities to accept boring data and/or analytical data previously obtained during the site characterization so that materials may be directly loaded into vehicles for shipment to the disposal facility.
  6. A backup facility should the staging/stockpile areas become unavailable, insufficient in area or not be present by some other unforeseen difficulty.
  7. Identification of the Contractor's two proposed Treatment Storage or Disposal (TSD) facilities for non-hazardous contaminated soils (primary and back-up) for final disposal of the soils. The primary TSD shall be an approved soil recycling/treatment facility. The backup facility may be a recycling/treatment facility or a New York State Department of Environmental Conservation (DEC) approved lined landfill or other facility approved by DEC to accept this material. The information required for each facility shall include:
    - a. Facility name and the State identification number
      - (1) Facility location
      - (2) Name of responsible contact for the facility
      - (3) Telephone number for contact
      - (4) Signed letter of agreement to accept waste as specified in this contract
      - (5) Unit of measure utilized at facility for costing purposes
    - b. A listing of all permits, licenses, letters of approval, and other authorizations to operate, which are currently held and valid for the proposed facility.
    - c. A listing of all permits, licenses, letters of approval, and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued.

- d. The Contractor shall specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor shall identify the capacity available in the units and the capacity reserved for the subject waste.
  - e. The Contractor shall provide the date of the proposed facility's last compliance inspection.
  - f. A list of all active (unresolved) compliance orders (or agreements), enforcement notices, or notices of violations issued to the proposed facility shall be provided. The source and nature of the cause of violation shall be stated, if known.
8. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

#### **8.01 C1.2 MATERIALS**

- A. Containers shall be as required in the United State Department of Transportation (DOT) regulations.
- B. Polyethylene to be placed under (20 mil. thickness minimum) and over (10 mil. thickness minimum) soil piles.
- C. The Contractor shall assure that the waste hauler's appropriate choice of vehicles and operating practices shall prevent spillage or leakage of contaminated material from occurring en route.
- D. The Contractor shall provide, install and maintain any temporary loading facilities on site as required until completion of material handling activities. The location and design of any facilities shall be included in the MHP and be approved by the Program Administration, ESS.

#### **8.01 C1.3 CONSTRUCTION DETAILS**

##### **A. Material Handling**

1. Immediately after excavation of non-hazardous contaminated soil the Contractor shall:
  - a. Load material directly onto trucks/tankers/roll offs for disposal off site; or
  - b. If interim stockpiling is required, place on a minimum of 20 mil. or equivalent plastic ground cloth and cover by minimum of 10 mil. polyethylene sheeting or equivalent to protect against leaching or runoff of contaminants into groundwater or stormwater. Weight or secure the sheeting by appropriate means and seal seams as approved by the DDC to prevent tearing or removal by weather. Grade surrounding surface to provide for positive drainage away from pile. Stockpile shall not exceed 100 cubic yards.
2. Institute appropriate procedures and security measures to ensure the protection of site personnel and the public from contaminated materials as described in the approved MHP and Item 8.01 S - Health and Safety.
3. Any soil encountered that appears to contain unknown contaminants (based on visual, odor, or other observation), or that vary substantially from the material originally identified must be segregated in stockpiles and the independent Environmental Consultant promptly notified. Construct stockpiles to the same requirements as stated in subsection A.1.b above.

4. Provide any dewatering that is necessary to complete the work. Contaminated water shall be disposed of in accordance with Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.
5. Provide and operate field organic vapor test equipment, a PID or a flame ionization detector (FID), to detect general organic vapor levels at intervals of approximately fifty (50) cubic yards of soil excavated, when visual or odor observations indicate the material may substantially differ from the soil previously excavated and/or as directed by the independent Environmental Consultant.

B. Off-Site Transportation to Disposal or Treatment Facility

1. General

- a. The Contractor shall furnish all labor, equipment, supplies and incidental costs required to transport contaminated material from the work area to the off-site disposal or treatment facility, and any other items and services required for transporting contaminated material for disposal at an off-site facility.
- b. The Contractor shall submit the name and location of the facility where an off-site scale is located. The Contractor shall also submit a plan to the DDC for review outlining procedures on controlling trucks leaving the work site and en-route to the off-site scale. The Contractor shall be responsible for tracking all material/vehicles from the site to the off-site scale.
- c. The Contractor shall provide to the DDC certified tare and gross weight slips for each load received at the accepted facility which shall be attached to each returned manifest.
- d. The Contractor shall coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule.
- e. The Contractor shall inspect all vehicles leaving the project site to ensure that contaminated soils adhering to the wheels or undercarriage are removed prior to the vehicle leaving the site.
- f. The Contractor shall obtain letters of commitment from the waste haulers and the treatment, disposal or recovery facility to haul and accept shipments. The letter shall indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed necessary.
- g. **The Program Administration, ESS shall review and approve waste profiles before transportation to the TSD facility.**

2. Hauling

- a. The Contractor shall coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities shall also be measured and recorded upon arrival at the disposal or treatment facility. If any deviation between the two records occurs, the matter is to be reported immediately to the DDC and to be resolved by the Contractor to the satisfaction of the DDC.
- b. The Contractor shall be held responsible, at its own cost for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site.

- c. The Contractor shall ensure that trucks are protected against contamination by properly covering and lining them with compatible material (such as polyethylene) or by decontaminating them prior to and between acceptances of loads.
  - d. The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions.
  - e. The Contractor shall only use the transporter(s) identified in the MHP for the performance of work. Any use of substitute or additional transporters must have previous written approval from the Program Administration, ESS at no additional cost to the City.
  - f. The Contractor shall develop, document, and implement a policy for accident prevention.
  - g. The Contractor shall not combine contaminated materials from other projects with material from this project.
  - h. No material shall be transported until approved by the DDC.
3. Off-Site Disposal
- a. The Contractor shall use only the facility(ies) identified in the MPH for the performance of the work. Substitutions or additions shall not be permitted without prior written approval from the Program Administration, ESS, and if approved shall be at no extra cost to the City.
  - b. The Contractor shall be responsible for acceptance of the materials at an approved facility, for ensuring that the facility is properly permitted to accept the stated materials, and that the facility provides the stated treatment and/or disposal services.
  - c. The DDC reserves the right to contact and visit the disposal or treatment facility and regulatory agencies to verify the agreement to accept the stated materials and to verify any other information provided.
  - d. In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The alternate facility(ies) must be approved in writing by the DDC in the same manner and with the same requirements as for the original facility(ies). This shall be done at no extra cost or delay to the City.
  - e. The Contractor shall obtain manifest forms, and complete the shipment manifest records required by the appropriate regulatory agencies for verifying the material and quantity of each load in unit of volume and weight. Copies of each manifest shall be submitted to the DDC within four (4) business days following shipment, and within three (3) business days after notification of receipt of the facility. Any manifest discrepancies shall be reported immediately to the DDC and be resolved by the Contractor to the satisfaction of the DDC.
4. Equipment and Vehicle Decontamination
- a. The Contractor shall design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting from the exclusion zone. The cost for this work will be paid under Item 8.01 S - Health and Safety.



- b. Water generated during the decontamination process shall be disposed of in accordance with Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

**8.01 C1.4 METHOD OF MEASUREMENT**

Quantities for non-hazardous contaminated soils shall be measured in tons. The tonnage will be determined by off-site truck scales, as per Subsection 8.01 C1.3.B1, that are capable of generating load tickets.

**8.01 C1.5 PRICE TO COVER**

- A. The unit bid price bid per ton for Item 8.01 C1 shall include the cost of furnishing all labor, materials, equipment, plan, and insurance for excavation, handling, transportation, disposal, documentation, fees, permits, loading, stockpiling, hauling, and any other incidentals necessary to complete all the work as specified herein for handling, transporting, and disposal of non-hazardous contaminated soil.
- B. Final disposal of hazardous soil shall be paid for under Item 8.01 H – Handling, Transporting and Disposal of Hazardous Soils. Disposal of decontamination water shall be paid for under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.
- C. Backfill will be paid for under its respective item as specified in the contract document.
- D. The independent Environmental Consultant shall be paid under Item 8.01 S – Health and Safety.

*Payment will be made under:*

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 C1	Handling, Transporting, and Disposal of Non-Hazardous Contaminated Soil	Tons

**ITEM 8.01 C2 SAMPLING AND TESTING OF CONTAMINATED/ POTENTIALLY  
HAZARDOUS SOIL FOR DISPOSAL PARAMETERS**

**8.01 C2.1 WORK TO INCLUDE**

A. Description

The work shall consist of collecting and analyzing representative soil samples for parameters typically requested by the disposal facilities.

B. Sampling and Laboratory Analysis

1. At least thirty (30) days prior to the commencement of work, the Contractor's independent Environmental Consultant must submit a Soil Sampling Plan/Field Sampling Plan (SSP/FSP) to the Program Administration, Engineering Support Services (ESS) for review and approval. The plan shall include the name, address, DOH's ELAP status, and telephone numbers of the proposed laboratory. The plan shall also include training and experience of the personnel who will collect the samples.
2. The Contractor shall sample and analyze representative samples of the contaminated/potentially hazardous soils. For stockpiled soils, the Contractor shall collect and analyze one (1) composite sample per 500 cubic yards or fraction thereof. Each composite sample shall consist of a minimum of five (5) grab samples collected from greater than two (2) feet below the soil surface. For drummed soil, the Contractor shall collect one (1) composite sample per (ten) 10 drums or fraction thereof. Each composite sample shall consist of a grab sample from each of the ten (10) drums or fraction thereof. Each composite sample shall be analyzed for Resource Conservation and Recovery Act (RCRA) hazardous waste characteristics (Ignitability, Reactivity, Corrosivity), Full Toxicity Characteristic Leaching Procedure (TCLP) (including RCRA metals, volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), pesticides, herbicides), Total Petroleum Hydrocarbons (TPH) and Polychlorinated Biphenyls (PCBs). All samples collected should be analyzed on a five (5) calendar days turn around time and analytical results must be submitted to Program Administration, ESS upon receipt of the analytical results.
3. All sampling shall be conducted by a person trained in sampling protocols using standard accepted practices for obtaining representative samples.
4. The Contractor must also contact the disposal facility where the waste will be sent for permanent disposal, and arrange to collect any additional samples required by the facility. The cost associated with additional sampling and testing shall be included in the bid price of this Item.
5. The quality of the data from the sampling program is the Contractor's responsibility. The Contractor must furnish all qualified personnel, equipment and instruments necessary to carry out the sampling. Unless directed otherwise, all sampling procedures must follow the DEC sampling guidelines and protocols.
6. All sample containers shall be marked and identified with legible sample labels which shall indicate the project name, sample location and/or container, the sample number, the date and time of sampling, preservatives utilized and other information that may be useful in determining the character of the sample. Chain-of-custody shall be tracked from laboratory issuance of sample containers through laboratory receipt of the samples.

7. The Contractor shall maintain a bound sample logbook. The Contractor shall provide DDC access to it at all times and shall turn it over to the DDC in good condition at the completion of the work. The following information, as a minimum shall be recorded to the log:
  1. Sample identification number
  2. Sample location
  3. Field observation
  4. Sample type
  5. Analyses
  6. Date/time of collection
  7. Collector's name
  8. Sample procedures and equipment utilized
  9. Date sent to laboratory and name of laboratory
8. The City reserves the right to direct the Contractor to conduct alternative sampling in lieu of the parameters described in subsection B2, if the situation warrants. The substitute sampling parameters shall be of equal or lesser monetary value than those described in subsection B2, as determined by industry laboratory pricing standards.
9. Only dedicated sampling equipment may be used to collect these samples. All equipment involved in field sampling must be decontaminated before being brought to the sampling location, and must be properly disposed after use.
10. Soils exceeding any of the hazardous characteristic criteria meet the legal definition of hazardous soils (rather than non-hazardous contaminated soils) and shall be transported or disposed of under Item 8.01 H – Handling, Transporting and Disposal of Hazardous Soils. All analyses must be done by a laboratory that has received approval from the ELAP for the methods to be used. The Contractor must specify the laboratory in the MHP.

**8.01 C2.2 METHOD OF MEASUREMENT**

Quantities for samples shall be measured as the number of sets of samples that are tested. A set shall be defined as one (1) composite sample analyzed for the full range of parameters as specified in subsection B2.

**8.01 C2.3 PRICE TO COVER**

The unit price bid per set for Item 8.01 C2 shall include the cost of furnishing all labor, materials, equipment, plan, and insurance necessary for sampling, handling, transporting, testing, documentation, fees, permits and any other incidentals necessary to complete the work as specified herein for sampling and testing of contaminated/potentially hazardous soil.

*Payment will be made under:*

ITEM NUMBER	ITEM	PAYMENT UNIT
8.01 C2	Sampling and Testing of Contaminated/ Potentially Hazardous Soil for Disposal Parameters	Set

## ITEM 8.01 H HANDLING, TRANSPORTING, AND DISPOSAL OF HAZARDOUS SOILS

### 8.01 H.1 WORK TO INCLUDE

General: This work shall consist of the handling, transportation and disposal of soils or materials that are listed as hazardous wastes or exhibit any of the characteristics of a hazardous waste, namely ignitability, corrosivity, reactivity, and toxicity, as defined in 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261. For the purpose of this specification, soils shall be defined as any materials excavated below the pavement and base for pavement.

Contaminated soils determined to be hazardous under Item 8.01 C2 shall be handled, transported, and disposed of under Item 8.01 H in accordance with the specifications herein.

The independent Environmental Consultant retained by the Contractor, as specified under Item 8.01 S – Health and Safety, shall conduct sampling and analysis of above soils to determine which soils are hazardous.

All work under Item 8.01 H shall be performed under the direct supervision of the Contractor's Environmental Consultant, as approved by the Program Administration, Engineering Support Services (ESS).

The Contractor shall ensure that all operations associated with the handling, sampling, loading, transportation, and disposal of hazardous materials are in compliance with the applicable Federal, State, and Local statutes and regulations.

The Contractor shall document the excavation, handling, sampling, and testing, transportation and disposal of hazardous soils. The City shall be listed in the disposal documents as the waste generator.

The Contractor shall supply all equipment, material and labor required to conduct the specified work of this section.

The Contractor shall ensure that all operations associated with the handling, sampling, loading, transportation and disposal of hazardous soils are conducted in a manner to protect site personnel, the public and the environment, in accordance with all applicable Federal, State, and Local laws and regulations.

The Contractor shall decontaminate all equipment prior to its removal from the exclusion zone and/or following contact with hazardous materials, as detailed in Item 8.01 S - Health and Safety. Water generated during the decontamination process shall be disposed of under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

- A. Material Handling Plan: Within forty-five (45) calendar days after award of Contract, the Contractor shall submit to the Program Administration, ESS for review, a Material Handling Plan (MHP). The MHP must be approved by the Program Administration, ESS, prior to the Contractor's commencement of work. The MHP shall, at a minimum, consist of:
1. The Contractor's procedures for identifying contaminated/potentially hazardous soils during excavation, including instrumentation and calibration procedures to be used.
  2. The Contractor's procedures for safely handling hazardous soils or soils which have not yet been tested but are believed to be potentially hazardous.
  3. Identification of the Contractor's proposed waste transporter(s). This information shall include:
    - a. Name and waste transporter permit number
    - b. Address

- c. Name of responsible contact for the hauler
  - d. Telephone number for the contact
  - e. Any and all necessary permit authorizations for each type of waste transported
  - f. Previous experience in performing the type of work specified herein
4. All staging/stockpiling areas (if stockpiling areas are intended and available), or alternate procedures that will be used. Alternate procedures could include, but are not limited to, agreements from the intended disposal or treatment facilities to accept boring data and/or analytical data previously obtained during the site characterization so that materials may be directly loaded into vehicles for shipment to the disposal facility or the use of off-site stockpiling locations approved by the DEC.
  5. A backup facility, should the staging/stockpile areas become unavailable, insufficient in area or not be present by some other unforeseen difficulty.
  6. Identification of the Contractor's two proposed United State Environmental Protection Agency (EPA) or DEC approved RCRA TSD facilities for hazardous soils.
  7. The Contractor shall submit the following information prior to any transportation of soils regarding the temporary and final off-site TSD or facilities where it is proposing to take hazardous soils. The expense of furnishing all information will be included in the Contractor's bid price:
    - a. General Information
      - (1) Facility name and the EPA identification number
      - (2) Facility location
      - (3) Name of responsible contact for the facility
      - (4) Telephone number for contact
      - (5) Signed letter of agreement to accept waste as specified in this contract
      - (6) Signed letter of agreement with a TSD for disposal of waste that may not be land-disposed
      - (7) Unit of measure utilized at each facility for costing purposes
    - b. A listing of all permits, licenses, letters of approval, and other authorizations to operate, which are currently held and valid for the proposed facility as they pertain to receipt and management of wastes derived from this Contract.
    - c. A listing of all permits, licenses, letters of approval, and other authorizations to operate which have been applied for by the proposed facility.
    - d. The Contractor shall specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste. The Contractor shall identify the capacity available in the units and the capacity reserved for the subject waste.
    - e. The Contractor shall provide the date of the proposed facility(ies) last compliance inspection under RCRA.
    - f. A list of all active (unresolved) compliance orders, agreements, enforcement notices or notices of violations issued to the proposed facility shall be approved. The source and nature of the cause of violation shall be stated, if known.
  8. Description of all sampling and analyses that will be needed to obtain disposal facility approval.

## **8.01 H.2 MATERIALS**

- A. Containers shall be watertight as required in the DOT regulations and must meet all applicable regulations including but not limited to those in Attachment 2.
- B. Polyethylene (20 mil. thickness minimum) to be placed under and (10 mil. thickness minimum) over soil piles. If soils are placed in drums, polyethylene must be placed over the drums.

## **8.01 H1.3 CONSTRUCTION DETAILS**

### **A. Material Handling**

- 1. The Contractor shall institute procedures to protect site personnel and the public from the non-hazardous and hazardous materials as described in Section 8.01 S - Health and Safety.
- 2. The Contractor shall handle hazardous soil as approved in the MHP.
- 3. Stockpiled materials at the temporary TSD facility shall be handled according to the facility requirements but at a minimum: shall be drummed or placed on and covered with polyethylene to protect against erosion and leaching into surrounding soils, the stockpile area shall be graded for positive drainage away from the pile, and shall be labeled while being held for sampling prior to permanent disposal.
- 4. Provide any dewatering that is necessary to complete the work. Water shall be disposed of in accordance with Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

### **B. Off-Site Transportation and Disposal**

- 1. The Contractor shall furnish all labor, equipment and supplies required to transport hazardous materials from the work area to the off-site TSD facility(ies) and to acquire any other items and services required for transporting hazardous materials for storage and/or disposal at an approved off-site facility.
- 2. **Weight Measurement**
  - a. The Contractor shall submit the name and location of the facility where an off-site scale is located. The Contractor shall also submit a plan to the DDC for review outlining procedures on controlling trucks leaving the work site and on-route to the off-site scale. The Contractor shall be responsible for tracking all materials/vehicles from the site to the off-site scale.
  - b. The Contractor shall provide to the DDC certified tare and gross weight slips for each load received at the accepted facility which shall be attached to each returned manifest.
- 3. **General**
  - a. **Manifests:** The Contractor shall organize and maintain the material shipment records/manifests required by law.
  - b. The Contractor shall coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule. The schedule shall be compatible with the availability of equipment and personnel for material handling at the job site.

- c. The Contractor shall inspect all vehicles leaving the project site to ensure that hazardous soils adhering to the wheels or under carriage are removed prior to the vehicle leaving the site.
  - d. The Contractor shall obtain letters of commitment from the waste haulers and the TSD facility to haul and accept shipments. The letter shall indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed as necessary.
4. Hauling
- a. The Contractor shall not deliver waste to any facility other than the TSD facility(ies) listed on the shipping manifest.
  - b. The Contractor shall coordinate manifesting, placarding, of shipments, and vehicle decontamination. All quantities shall also be measured and recorded upon arrival at the TSD facility. If any deviation between the two records occurs, the matter is to be reported immediately to the DDC and to be resolved by the Contractor to the satisfaction of the DDC.
  - c. The Contractor shall be held responsible, at its own expense, for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site.
  - d. The Contractor shall ensure that trucks are protected against contamination by properly covering and lining them with compatible material (such as polyethylene) or by decontaminating them prior to any use other than hauling hazardous materials.
  - e. The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance, and weight restrictions.
  - f. The Contractor shall only use the transporter(s) identified in the MHP for the performance of work. Only a transporter with a current Part 364 Waste Transporter Permit from the DEC may transport this material. Any use of substitute or additional transporters must have previous written approval from the DDC at no additional cost to the City.
  - g. The Contractor shall develop, document, and implement a policy for accident prevention.
  - h. The Contractor shall not combine hazardous materials from other projects with material from this project.
  - i. **The Contractor shall obtain for the City an EPA hazardous waste generator identification number and a representative of Program Administration, ESS will review and sign the manifest as the generator.**
  - j. No materials shall be transported until approved by the DDC.
5. Off-Site Disposal
- a. The Contractor shall be responsible for acceptance of the materials at an approved TSD facility, for ensuring that the facility is properly permitted to accept the stated materials, and that the facility provides the stated storage and/or disposal services.
  - b. In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to

locate an alternate approved and permitted facility(ies) for accepting materials. The Contractor is responsible for making the necessary arrangements to utilize the facility(ies), and the alternate facility(ies) must be approved in writing by the DDC in the same manner and with the same requirements as for the original facility(ies). This shall be done with no extra cost or delay to the City.

- c. The Contractor shall submit all results and weights to the DDC.
- d. **The Contractor is responsible to pay all fees associated with the generation and disposal of all excavated hazardous waste. These fees include, but are not limited to, the New York State Department of Finance and Taxation (DFT) quarterly fees for hazardous waste and the New York State DEC annual hazardous waste regulatory fee program. The Contractor shall submit a copy of proof of payment to the DDC and Program Administration, ESS.**

6. Equipment and Vehicle Decontamination

The Contractor shall design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting from the exclusion zone. The cost for this work shall be paid under Item 8.01 S - Health and Safety. Disposal of decontamination liquids is described under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.

7. Record Keeping

The Contractor shall obtain manifest forms, and complete the shipment manifest records required by the appropriate regulatory agencies for verifying the material and quantity of each load in unit of volume and weight. Copies of each manifest shall be submitted to the DDC within four (4) business days following shipment, and within three (3) business days after notification of receipt of the facility. Any manifest discrepancies shall be reported immediately to the DDC and be resolved by the Contractor to the satisfaction of the DDC.

**8.01 H.4 METHOD MEASUREMENT**

Quantities for hazardous soil shall be measured in tons satisfactorily delivered to the treatment, storage or disposal facility. The tonnage will be determined by off-site truck scales, as per subsection 8.01 H1.3.B.2, that are capable of generating load tickets.

**8.01 H.5 PRICE TO COVER**

- A. The unit price bid per ton for Item 8.01 H shall include the cost of furnishing all labor, materials, equipment, plan, and insurance for excavation, handling, transportation, disposal, documentation, permits, fees, taxes, stockpiling, hauling, and any other incidentals necessary to complete the work as specified herein for handling, transporting and disposal of hazardous soils.
- B. Final disposal of non-hazardous materials shall be paid for under Item 8.01 C1 – Handling, Transporting and Disposal of Non-Hazardous Soils. Disposal of decontamination water shall be paid under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.
- C. The independent Environmental Consultant shall be paid under Item 8.01 S – Health and Safety.
- D. Backfill will be paid for under its respective item.



*Payment will be made under:*

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 H	Handling, Transporting, and Disposal of Hazardous Soils	Tons

## **ITEM 8.01 S HEALTH AND SAFETY**

### **8.01 S.1 WORK TO INCLUDE**

#### Health and Safety Requirements

##### **A. Scope of Work**

It is the Contractor's responsibility to stage and conduct his work in a safe manner. The Contractor shall implement a Health and Safety Plan (HASP) for contaminated/hazardous soil intrusive activities as set forth in Occupational Safety and Health Administration (OSHA) Standards 1910.120 and 1926.650-652. The Contractor shall ensure that all workers have at a minimum hazard awareness training. The Contractor shall segregate contaminated work area in secured exclusion zones. These zones shall limit access to Contractor personnel specifically trained to enter the work area. The exclusion zone shall be set up to secure the area from the public and untrained personnel. The project health and safety program shall apply to all construction personnel including persons entering the work area. In addition, the Contractor shall protect the public from on-site hazards, including subsurface contaminants associated with on-site activities. The HASP shall be signed off by a Certified Industrial Hygienist and reviewed by Program Administration, Engineering Support Services (ESS).

Work shall include, but not be limited to:

1. Implementation of a baseline medical program.
2. Providing safety equipment and protective clothing for site personnel, including maintenance of equipment on a daily basis; replacement of disposable equipment as required; decontamination of clothing, equipment and personnel; and providing all other health and safety measures.
3. Providing, installing, operating and maintaining on-site emergency medical first aid equipment as specified in this section for which payment is not provided under other pay items in this Contract.
4. Providing, installing, operating, maintaining and decommissioning all equipment and personnel decontamination facilities specified within this section, including, but not limited to, the decontamination pad, decontamination water supply, decontamination water collection equipment and all other items and services required for the implementation of the health and safety requirements for which pay items are not provided elsewhere in this Contract.
5. Provide the minimum health and safety requirements for excavation activities within the limits of this Contract.
6. Implement and enforce a HASP: The HASP as presented in these specifications is dynamic with provisions for change to reflect new information, new practices or procedures, changing site environmental conditions or other situations which may affect site workers and the public. The HASP will also address measures for community protection, accident prevention, personnel protection, emergency response/contingency planning, air monitoring, odor control and hazardous chemicals expected on site. Providing a Confined Space Entry Program as defined in the Occupational Safety and Health Act, Confined Space Entry Standard, 29 CFR 1910.146.

##### **B. Environmental Consulting Services**

The Contractor shall retain an independent Environmental Consultant to obtain all permits and perform all field screening, air monitoring, community air monitoring, soil sampling, and health and safety services. The independent Environmental Consultant shall at a minimum provide documentation to the Program Administration, ESS demonstrating the minimum requirements as set forth below:

1. The independent Environmental Consultant project supervisor on site and other designated key personnel shall have a minimum of three (3) years experience in the environmental field dealing with issues associated with contaminated soils. Such experience shall include oversight on environmental, specifically volatile organic compound and dust monitoring services as a routine part of its daily operations.
2. The independent Environmental Consultant must be experienced in work of this nature, size, and complexity and must have previous experience in working with the DEC.
3. The independent Environmental Consultant shall furnish a project listing identifying the location, nature of services provided, owner, owner's contact, contact's telephone number, project duration and value for at least five (5) projects within the last three (3) years.
4. If conditions within the exclusion zone are deemed hazardous, then the Contractor and its independent Environmental Consultant shall ensure that all personnel working within identified exclusion zones and/or involved (direct contact) with the handling, storage or transport of hazardous and contaminated materials shall have completed a minimum of forty (40) hours of Health and Safety Training on Hazardous Waste Sites in accordance with 29 CFR 1910.120(e). The training program shall be conducted by a qualified safety instructor. If conditions in the exclusion zone are deemed to be non-hazardous, the independent Environmental Consultant shall provide site specific training.
5. The Contractor shall ensure that on-site management and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations shall receive the training specified in above and at least eight (8) additional hours of specialized training on managing such operations at the time of job assignment.

C. Submittals

1. The Contractor shall submit, within forty-five (45) calendar days after the contract award, a written HASP as specified herein, to Program Administration, ESS for review and comment. The Contractor shall make all necessary revisions required by Program Administration, ESS and resubmit the HASP to the Program Administration, ESS for acceptance. Start-up work for the project will not be permitted until written acceptance has been issued by the Program Administration, ESS.
2. Daily safety logs shall be maintained by the Contractor and shall be submitted to the DDC either on request or on completion of the work. Training logs shall be maintained by the Contractor and submitted to the DDC either on request or on completion of the work. Daily logs on air monitoring during excavation activities shall be prepared and maintained by the Contractor and submitted to the DDC either on request or upon completion of the work.
3. A closeout report shall be submitted by the Contractor to the DDC upon completion of the work within the defined exclusion zones. This report shall summarize the daily safety and monitoring logs and provides an overview of the Contractor's performance regarding environmental and safety issues. The report shall carefully document all areas where contamination has been found including pictures, addresses of locations, and potential sources.

4. Medical Surveillance Examinations: The Contractor shall submit to the DDC the name, office address and telephone number of the medical consultant utilized. Evidence of baseline medical examinations together with the evidence of the ability to wear National Institute for Occupational Safety and Health (NIOSH) approved respirators (as specified in American National Standards Institute (ANSI) Z88.6) shall be provided to the DDC for all construction personnel who are to enter the exclusion zones.
5. Accident Reports: All accidents, spills, or other health and safety incidents shall be reported to the DDC.

D. Health and Safety Plan

The HASP shall comply with OSHA regulations 29 CFR 1910.120/1926.65. This document shall at a minimum contain the following:

1. Description of work to be performed
2. Site description
3. Key personnel
4. Worker training procedures
5. Work practices and segregation of work area
6. Hazardous substance evaluation
7. Hazard assessment
8. Personal and community air monitoring procedures and action levels
9. Personal protective equipment
10. Decontamination procedures
11. Safety rules
12. Emergency procedures
13. Spill control, dust control, vapor/odor suppression procedures
14. Identification of the nearest hospital and route
15. Confined space procedures
16. Excavation safety procedures

**8.01 S.2 MEASUREMENT**

Health and Safety Requirements

- A. 25% of the lump sum price will be paid when the following items are implemented or mobilized:
  - Medical surveillance program
  - Health and safety training
  - Health and safety plan
  - Environmental and personnel monitoring
  - Instrumentation
  - Spill control
  - Dust control
  - Personnel and equipment decontamination facilities
  - Personnel protective clothing
  - Communications
  - Mobilization
- B. 50% will be paid in proportional monthly amounts over the period of work.
- C. 25% will be paid when the operation is demobilized and removed from the project site.

### 8.01 S.3 PRICE TO COVER

#### Health and Safety Requirements

The lump sum price bid for the health and safety requirements shall include all labor, materials, equipment, and insurance necessary to complete the work in accordance with these specifications. The price bid shall include, but not be limited to, the following:

- A. Providing training, safety personnel, air monitoring and medical examinations as specified.
- B. Providing safety equipment and protective clothing for site personnel, including maintenance of equipment on a daily basis; replacement of disposable equipment as required; decontamination of clothing, equipment and personnel; and all other health and safety activities or costs not paid for under other pay items in this Contract.
- C. Providing, installing, operating and maintaining on-site emergency medical and first aid equipment. This includes all furnishings, equipment, supplies and maintenance of all medical equipment, and all other health and safety items and services for which payment is not provided under other pay items in this Contract.
- D. Providing, installing, operating, maintaining, and decommissioning all personnel and equipment decontamination facilities, including decontamination pad, decontamination water supply, and all other items and services required for the implementation of the health and safety requirements for which pay items are not provided elsewhere in this Contract. Vehicle decontamination pads shall be included in the price of this item. Disposal of decontamination fluid shall be paid for under Item 8.01 W1 – Removal, Treatment and Discharge/Disposal of Contaminated Water.
- E. Spill Control
  - 1. Payment shall account for furnishing, installing, and maintaining all spill control equipment and facilities. Payment will include equipment and personnel to perform emergency measures required to contain any spillage and to remove spilled materials and soils or liquids that become contaminated due to spillage during work within the exclusion zones and handling of excavated soils and liquids from these areas. This collected spill material will be properly disposed of.
  - 2. Payment under this item shall not include testing, handling, transportation or disposal of petroleum-contaminated/potentially hazardous soils excavated during construction. The price for this work will be paid for under Items 8.01 C1 – Handling, Transporting and Disposal of Non-Hazardous Contaminated Soils, 8.01 C2 – Sampling and Testing of Contaminated/Potentially Hazardous Soil for Disposal Parameters or 8.01 H – Handling, Transporting and Disposal of Hazardous Soils, as appropriate.
- F. Dust Control

Payment shall account for furnishing, installing, and maintaining dust control equipment and facilities to be used whenever applicable dust levels are exceeded. Payment will include all necessary labor, equipment, clean water, foam, and all other materials required by the Dust Control Plan. The DOH Community Air Monitoring Plan (CAMP) may be used as guidance.
- G. Vapor/Odor Suppression

Payment shall account for furnishing, installing and maintaining vapor/odor control equipment and facilities to be used whenever organic vapor monitoring or the presence of odors indicates that vapor suppression is required to protect workers or the public. Payment will include all

necessary labor, equipment, clean water, foam and all other materials required by the Vapor/Odor Suppression Plan.

H. Mobilization/Demobilization

1. Mobilization

Payment shall include but not be limited to:

- a. All work required to furnish, install and maintain all signs, fencing, support zone facilities, parking areas and all temporary utilities;
- b. All work required to furnish, install, and maintain an office space with phone and utilities for health and safety personnel;
- c. All work required for complete preparation of lay down area for roll-off containers, including sampling, and any required fencing;
- d. All direct invoiced cost from bonding companies and government agencies for permits and costs of insurance; and
- e. All other items and services required for mobilization and site preparation.

2. Demobilization

Payment shall include but not be limited to: All work required to sample the area; remove from the site all equipment, temporary utilities and supporting facilities; performance of necessary decontamination and repairs; disposal of disposable equipment and protective gear and other items and services required for complete demobilization.

*Payment will be made under:*

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 S	Health and Safety	Lump Sum

## **ITEM 8.01 W1 REMOVAL, TREATMENT AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER**

### **8.01 W1.1 WORK TO INCLUDE**

General: This work shall consist of the proper removal and disposal of all contaminated groundwater and decontamination water generated during construction operations. The Contractor shall be solely responsible for the proper disposal or discharge of all contaminated water generated at the job site. The Contractor will have the option of treating water on-site for discharge to the combined sanitary/storm sewer system or removing contaminated water for off-site disposal. The Contractor shall be responsible to choose a method compatible to the construction work and shall be compensated on a per day basis regardless of method employed. The Contractor will be compensated for only those days where the system is in full operation.

The Contractor shall retain a dewatering/water treatment Specialist (hereinafter the "Specialist") and laboratory as specified under Item 8.01 W2 – Sampling and Testing of Contaminated Water, to conduct any testing that may be required for disposal of impacted water.

The dewatering/water treatment Specialist is responsible to obtain all permits; perform all water sampling, testing; and provide ancillary services related to dewatering and water treatment. The Specialist shall at a minimum provide documentation to the Program Administration, Engineering Support Services (ESS) demonstrating the minimum requirements as set forth below:

1. The Specialist shall demonstrate that it has, at a minimum, three (3) years experience in the design of dewatering plans. The Specialist should demonstrate expertise dealing with issues associated with contaminated water. During that three (3) year period, the Specialist shall demonstrate that it provided dewatering and water treatment systems as a routine part of its daily operations.
2. The Specialist must be experienced in work of this nature, size, and complexity and must have previous experience in working with the DEC.
3. The Specialist shall furnish a project listing identifying the location, nature of services provided, owner, owner's contact, contact's telephone number, project duration and value for at least five (5) projects within the last three (3) years of a similar nature, size, and complexity to this one.
4. If conditions within the exclusion zone are deemed hazardous, then the Contractor and its independent Environmental Consultant shall ensure that all personnel working within identified exclusion zones and/or involved (direct contact) with the handling, storage or transport of hazardous and contaminated material shall have completed a minimum of forty (40) hours of Health and Safety Training on Hazardous Waste Sites in accordance with 29 CFR 1910.120(e). The training program shall be conducted by a qualified safety instructor. If conditions in the exclusion zone are deemed to be non-hazardous, the Specialist shall be responsible to provide site-specific training to its employees and other affected personnel.
5. The Contractor shall ensure that on-site management and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations shall receive the training specified in above and at least eight (8) additional hours of specialized training on managing such operations at the time of job assignment.

The Contractor shall document all operations associated with the handling, sampling and disposal of contaminated water, and ensure that they are in compliance with applicable Federal, State and Local statutes and regulations.

The Contractor shall supply all labor, equipment, transport, plant, material, treatment, and other incidentals required to conduct the specified work of this section.

If water will be disposed of into the combined sanitary/storm sewer system, the Contractor shall ensure the Specialist treats the water to comply with the New York City Department of Environmental Protection (DEP) Sanitary/Combined and Storm Sewer Effluent Limit concentrations prior to discharge. The Contractor is responsible for providing settling or filtering tanks and any other apparatus required by DEP. Alternatively, the Contractor can provide a plan for transport and disposal at an off-site waste disposal facility.

Within forty-five (45) calendar days after award of Contract, the Contractor shall submit to the Program Administration, ESS for review, a Water Handling Plan (WHP). The WHP must be approved by the Program Administration, ESS, prior to the Contractor's commencement of work. The minimum requirements for the WHP are specified herein Item 8.01W 1.2, for each type of disposal (disposal into the combined sanitary/storm sewer or off-site disposal). The Contractor shall maintain a complete, up to date copy of the WHP on the job site at all times.

#### **8.01 W1.2 CONSTRUCTION DETAILS**

For each disposal method the Contractor proposes to utilize (disposal to combined sanitary/storm sewer or off-site disposal), the WHP shall include the information required in paragraphs A and B below, as appropriate.

##### **A. On-site treatment and discharge into New York City combined sanitary/storm sewers.**

1. Regulations: The Contractor shall comply with all applicable regulations. This includes but may not be limited to:
  - Title 15-New DEP Sewer Use Regulations.
2. Permits: The Contractor is solely responsible to obtain all necessary and appropriate Federal, State and Local permits and approvals. The Contractor will be responsible for performing all and any system pilot tests required for permit approval. This includes but may not be limited to:
  - a. Industrial waste approval for the New York City sewer system.
  - b. Groundwater discharge permit for the New York City sewer system (DEP Division of Sewer Regulation and Control), if discharge to sewer exceeds 10,000 gallons per day.
  - c. The Contractor shall comply with DEC State Pollutant Discharge Elimination System (SPDES) Permit Number GP-0-10-001, General Permit for Stormwater Discharges.
  - d. Long Island well point permit for Brooklyn and Queens sites, if well points are used for dewatering.
  - e. Wastewater quality control application, DEP.
3. The WHP for this portion of the work shall include at a minimum:



- a. Identification and design of Contractor's proposed treatment to assure that the water meets the DEP sewer use guidelines prior to discharge to the sewer, including identification of all materials, procedures, settling or filtering tanks, filters and other appurtenances proposed for treatment and disposal of contaminated water.
- b. The name, address and telephone number of the contact for the Contractor's proposed chemical laboratory, as well as the laboratory's certifications under Federal, State or non-governmental bodies.
- c. The name, address and telephone number of the contact for the Contractor's proposed independent Environmental Consultant.
- d. Copies of all submitted permit applications and approved permits the Contractor have received.

4. Materials

The Contractor shall supply all settling or filtering tanks, pumps, filters, treatment devices and other appurtenances for treatment, temporary storage and disposal of contaminated water. All equipment shall be suitable for the work described herein.

5. Execution

- a. The Contractor is solely responsible for disposal of all water, in accordance with all Federal, State and Local regulations.
- b. The Contractor is solely responsible for any treatment required to assure that water discharged into the sewer is in compliance with all permits and Federal, State and Local statutes and regulations.
- c. The Contractor is solely responsible for the quality of the water disposed of into the sewers.
- d. The Contractor is responsible for sampling and testing of water for the DEP Sanitary/Combined and Storm sewer Effluent Limit concentrations. The quality of the data is the Contractor's responsibility. Any sampling and testing shall be conducted and paid in accordance with Item 8.01 W2 – Sampling and Testing of Contaminated Water.
- e. The Contractor shall be responsible to maintain the discharge rate to the sewer such that all permit requirements are met, the capacity of the sewer is not exceeded and no surcharging occurs downstream due to the Contractor's actions. Dewatering by means of well points or deep wells will not be allowed in the Boroughs of Brooklyn or Queens where the rate of pumping exceeds forty-five (45) gallons per minute unless the appropriate permit has been secured from the DEC.
- f. Disposal of Treatment Media
  - (1) The Contractor shall be responsible for disposal or recycling of treatment media in accordance with all Federal, State and Local regulations.
  - (2) The Contractor shall provide the DDC with all relevant documentation concerning the disposal of treatment media, including manifests, bills of

loading, certificates of recycling or destruction and other applicable documentation.

- (3) **Disposal of treatment media shall not be considered as a separate pay item; instead it shall be considered as incidental work thereto and included in the unit price bid.**

B. Off-Site Disposal

1. Regulations: The Contractor shall conform to all applicable Federal, State and Local regulations pertaining to the transportation, storage and disposal of any hazardous and/or non-hazardous materials as listed in Attachment 2.
2. The following shall be submitted to the DDC prior to initiating any off-site disposal:
  - a.
    - (1) Name and waste transporter permit number
    - (2) Address
    - (3) Name of responsible contact for the hauler
    - (4) Any and all necessary permit authorizations for each type of waste transported
    - (5) Previous experience in performing the type of work specified herein
  - b. General information for each proposed treatment/disposal facility and at least one backup treatment/disposal facility
    - (1) Facility name and EPA identification number
    - (2) Facility location
    - (3) Name of responsible contact for the facility
    - (4) Telephone number for contact
    - (5) Unit of measure utilized at facility for costing purposes
  - c. A listing of all permits, licenses, letters of approval and other authorizations to operate, which are currently held and valid for the proposed facility as they pertain to receipt and management of the wastes derived from this Contract.
  - d. A listing of all permits, licenses, letters of approval and other authorizations to operate which have been applied for by the proposed facility but not yet granted or issued. Provide dates of application(s) submitted. Planned submittals shall also be noted.
  - e. The Contractor shall specify and describe the disposal/containment unit(s) that the proposed facility will use to manage the waste and provide dates of construction and beginning of use, if applicable. Drawings may be provided. The Contractor shall identify the capacity available in the units and the capacity reserved for the subject waste.
  - f. The Contractor shall provide the date of the proposed facility's last compliance inspection.

- g. A list of all active (unresolved) compliance orders, agreements, enforcement notices or notices of violations issued to the proposed facility shall be submitted. The source and nature of the cause of violation shall be stated, if known. If groundwater contamination is noted, details of the facility's groundwater monitoring program shall be provided.
- h. Description of all sampling and field/laboratory analyses that will be needed to obtain disposal facility approval.

3. Materials

All vessels for temporary storage and transport to an off-site disposal facility shall be as required in DOT regulations.

4. Execution

a. General

- (1) The Contractor shall organize and maintain the material shipment records/manifests required by Federal, State and Local law. The Contractor shall include all bills of lading, certificates of destruction, recycling or treatment and other applicable documents.
- (2) The Contractor shall coordinate the schedule for truck arrival and material deliveries at the job site to meet the approved project schedule. The schedule shall be compatible with the availability of equipment and personnel for material handling at the job site.
- (3) The Contractor shall inspect all vehicles leaving the project site to ensure that contaminated liquids are not spilling and are contained for transport.
- (4) The Contractor shall obtain letters of commitment from the waste haulers and the treatment, disposal or recovery facility to haul and accept shipment. The letter shall indicate agreement to handle and accept the specified estimated quantities and types of material during the time period specified in the project schedule and any time extension as deemed as necessary.
- (5) The Contractor shall verify the volume of each shipment of water from the site.
- (6) The Contractor is responsible for sampling and testing of water for off-site disposal. The quality of the data is the Contractor's responsibility. Any sampling and testing shall be conducted and paid in accordance with Item 8.01 W2 – Sampling and Testing of Contaminated Water.
- (7) The Contractor shall be responsible for any additional analyses required by the TSD facility, and for the acceptance of the water at an approved TSD facility.

b. Hauling

- (1) The Contractor shall not deliver waste to any facility other than the TSD facility(ies) listed on the shipping manifest.

- (2) The Contractor shall coordinate manifesting, placarding of shipments, and vehicle decontamination. All quantities shall also be measured and recorded upon arrival at the TSD facility(ies). If any deviation between the two records occurs, the matter is to be reported immediately to the DDC and shall be resolved by the Contractor to the satisfaction of the DDC.
- (3) The Contractor shall be held responsible for any and all actions necessary to remedy situations involving material spilled in transit or mud and dust tracked off-site. This cleanup shall be accomplished at the Contractor's expense.
- (4) The Contractor shall be responsible for inspecting the access routes for road conditions, overhead clearance and weight restrictions.
- (5) The Contractor shall only use the transporter(s) identified in the WHP for the performance of work. Only a transporter with a current Part 364 Waste Transporter Permit from DEC may transport this material. Any use of substitute or additional transporters must have previous written approval from the DDC at no additional cost to the City.
- (6) The Contractor shall develop, document, and implement a policy for accident prevention.
- (7) The Contractor shall not combine waste materials from other projects with material from this project.
- (8) The Contractor shall obtain for the City a hazardous waste generator identification number and will sign the manifest as the generator, if necessary.
- (9) No material shall be transported until approved by the DDC.

c. Disposal Facilities

- (1) The Contractor shall use only the TSD facility(ies) identified in the WHP for the performance of the work. Substitutions or additions shall not be permitted without prior written approval from the Program Administration, ESS, and, if approved, shall be at no extra cost to the City.
- (2) The Contractor shall be responsible for acceptance of the material at an approved TSD facility, for ensuring that the facility is properly permitted to accept the stated material, and that the facility provides the stated storage and/or disposal services.
- (3) The DDC reserves the right to contact and visit the disposal facility and regulatory agencies to verify the agreement to accept the stated material and to verify any other information provided. This does not in any way relieve the Contractor of his responsibilities under this Contract.
- (4) In the event that the identified and approved facility ceases to accept the stated materials or the facility ceases operations, it is the Contractor's responsibility to locate an alternate approved and permitted facility(ies) for accepting materials. The Contractor is responsible for making the necessary arrangements to utilize the facility(ies), and the alternate facility(ies) must be

approved in writing by the DDC in the same manner and with the same requirements as for the original facility(ies). This shall be done with no extra cost or delay to the City.

d. Equipment and Vehicle Decontamination

- (1) The Contractor shall design and construct a portable decontamination station to be used to decontaminate equipment and vehicles exiting the exclusion zone. The cost for this work shall be paid under Item 8.01 S – Health and Safety.

**8.01 W1.3 METHOD OF MEASUREMENT**

The quantity for on-site treatment and discharge or off-site disposal shall be on a per day basis.

**8.01 W1.4 PRICE TO COVER**

- A. The per day price bid for Item 8.01 W1 shall include the cost of furnishing all labor, materials, equipment, plan, and insurance for handling, transportation, disposal, documentation, permits, hauling, mobilization and demobilization, and any other incidentals thereto to complete the work.
- B. The Contractor will not be paid for water that is within the DEP Sewer Discharge Limits.

*Payment will be made under:*

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 W1	Removal, Treatment and Disposal/Discharge of Contaminated Water	Day

## ITEM 8.01 W2 SAMPLING AND TESTING OF CONTAMINATED WATER

### 8.01 W2.1 WORK TO INCLUDE

#### A. Description

The work shall consist of sampling and testing of potentially contaminated groundwater, surface runoff within the excavated area and all contaminated water generated during the decontamination process.

#### B. Sampling and Testing

1. The Contractor is responsible, at a minimum, for sampling and testing of contaminated water for the DEP Sanitary/Combined and Storm Sewer Effluent Limit concentrations as listed in Attachment 1. The quality of the data is the Contractor's responsibility. Any additional testing required by the Federal, State and/or disposal facilities shall be included in the bid price of this Item.
2. All sampling and testing shall be conducted by a person trained in sampling protocols using accepted standard practices and/or the DEC sampling guidelines and protocols.
3. All sample containers shall be marked with legible sample labels which shall indicate the project name, sample location and/or container, the sample number, the date and time of sampling, preservatives utilized, how the sample was chilled to 4 degrees Celsius, and other information that may be useful in determining the character of the sample.
4. Chain-of-custody shall be tracked from laboratory issuance of sample containers through receipt of the samples.
5. The Contractor shall maintain a bound sample log book. The Contractor shall provide the DDC access to it at all times and shall turn it over to the DDC in good condition at the completion of the work. The following information, as a minimum, shall be recorded to the log:
  - a. Sample identification number
  - b. Sample location
  - c. Field observation
  - d. Sample type
  - e. Analyses
  - f. Date/time of collection
  - g. Collector's name
  - h. Sample procedures and equipment used
  - i. Date sent to laboratory/name of laboratory
6. Only dedicated sampling equipment may be used to collect these samples. All equipment involved in field sampling must be decontaminated before being brought to the site, and must be properly disposed of after use.

7. Samples shall be submitted to the Contractor's laboratory within the holding times for the parameters analyzed.
8. All analyses must be done by a laboratory that has received approval from the DOH's ELAP for the methods to be done. The Contractor must specify the laboratory in the WHP.
9. Analytical results for water discharged to the sewer and for off-site disposal must be submitted to the DDC no later than five (5) days after sample collection.
10. The City reserves the right to direct the Contractor to conduct alternative sampling in lieu of the parameters described above, if the situation warrants. The substitute sampling parameters shall be of equal or lesser monetary value than those described above, as determined by industry laboratory pricing standards.

**8.01 W2.2 METHOD OF MEASUREMENT**

Quantities for samples shall be measured as the number of sets of samples that are tested for the DEP Sanitary/Combined and Storm Sewer Effluent Limit concentrations. A set shall be defined as one (1) representative sample analyzed for the full range of DEP parameters as specified in attachment 1.

**8.01 W2.3 PRICE TO COVER**

The unit price bid per set for Item 8.01 W2 shall include the cost of furnishing all labor, materials, equipment, plan, and insurance for handling, transport, sampling, testing, documentation, permits, other incidentals necessary to complete the work of sampling and testing of contaminated water. Any additional costs incurred by the Contractor for sampling and testing of contaminated water shall be included in the bid price of this Item.

*Payment will be made under:*

<u>ITEM NUMBER</u>	<u>ITEM</u>	<u>PAYMENT UNIT</u>
8.01 W2	Sampling and Testing of Contaminated Water	Set

# **ATTACHMENT 1**

## **New York City Department of Environmental Protection Limitations for Discharge To Storm, Sanitary/Combined Sewer**



**NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WASTEWATER TREATMENT**

**Limitations for Effluent to Storm, Sanitary or Combined Sewers**

Parameter <sup>1</sup>	Daily Limit	Units	Sample Type	Monthly Limit
Non-polar material <sup>2</sup>	50	mg/l	Instantaneous	---
pH	5-11	SU's	Instantaneous	---
Temperature	< 150	Degree F	Instantaneous	---
Flash Point	> 140	Degree F	Instantaneous	---
Cadmium	2 0.69	mg/l mg/l	Instantaneous Composite	---
Chromium (VI)	5	mg/l	Instantaneous	---
Copper	5	mg/l	Instantaneous	---
Lead	2	mg/l	Instantaneous	---
Mercury	0.05	mg/l	Instantaneous	---
Nickel	3	mg/l	Instantaneous	---
Zinc	5	mg/l	Instantaneous	---
Benzene	134	ppb	Instantaneous	57
Carbontetrachloride	---	---	Composite	---
Chloroform	---	---	Composite	---
1,4 Dichlorobenzene	---	---	Composite	---
Ethylbenzene	380	ppb	Instantaneous	142
MTBE (Methyl-Tert-Butyl-Ether)	50	ppb	Instantaneous	---
Naphthalene	47	ppb	Composite	19
Phenol	---	---	Composite	---
Tetrachloroethylene (Perc)	20	ppb	Instantaneous	---
Toluene	74	ppb	Instantaneous	28
1,2,4 Trichlorobenzene	---	---	Composite	---
1,1,1 Trichloroethane	---	---	Composite	---
Xylenes (Total)	74	ppb	Instantaneous	28
PCB's (Total) <sup>3</sup>	1	ppb	Composite	---
Total Suspended Solids (TSS)	350 <sup>4</sup>	mg/l	Instantaneous	---
CBOD <sup>5</sup>	---	---	Composite	---
Chloride <sup>5</sup>	---	---	Instantaneous	---
Total Nitrogen <sup>5</sup>	---	---	Composite	---
Total Solids <sup>5</sup>	---	---	Instantaneous	---
Other				

1 All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 C.F.R. pt. 136. If 40 C.F.R. pt. 136 does not cover the pollutant in question, the handling, preservation, and analysis must be performed in

accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater." All analyses shall be performed using a detection level less than the lowest applicable regulatory discharge limit. If a parameter does not have a limit, then the detection level is defined as the least of the Practical Quantitation Limits identified in NYSDEC's Analytical Detectability and Quantitation Guidelines for Selected Environmental Parameters, December 1988

- 2 Analysis for *non-polar materials* must be done by EPA method 1664 Rev. A. Non-Polar Material shall mean that portion of the oil and grease that is not eliminated from a solution containing N-Hexane, or any other extraction solvent the EPA shall prescribe, by silica gel absorption.
- 3 Analysis for PCB=s is required if *both* conditions listed below are met:
  - 1) if proposed discharge  $\geq 10,000$  gpd;
  - 2) if duration of a discharge  $> 10$  days.Analysis for PCB=s must be done by EPA method 608 with MDL= $<65$  ppt. PCB's (total) is the sum of PCB-1242 (Arochlor 1242), PCB-1254 (Arochlor 1254), PCB-1221 (Arochlor 1221), PCB-1232 (Arochlor 1232), PCB-1248 (Arochlor 1248), PCB-1260 (Arochlor 1260) and PCB-1016 (Arochlor 1016).
- 4 For discharge  $\geq 10,000$  gpd, the TSS limit is 350 mg/l. For discharge  $< 10,000$ gpd, the limit is determined on a case by case basis.
- 5 Analysis for Carbonaceous Biochemical Oxygen Demand (CBOD), Chloride, Total Solids and Total Nitrogen are required if proposed discharge  $\geq 10,000$  gpd.

**ATTACHMENT 2**  
**Applicable Regulations**

Applicable regulations include, but are not limited to:

1. 49 CFR 100 to 179 - DOT Hazardous Materials Transport and Manifest System Requirements
2. New York State Department of Environmental Conservation (DEC), Spills Technology and Remediation Series (STARS) Memo #1
3. 6 NYCRR 360-1 DEC Solid Waste Management Facilities
4. 6 NYCRR 364- Waste Transporter permits
5. Local restrictions on transportation of waste/debris
6. 40 CFR 260 to 272 - Hazardous Waste Management (RCRA)
7. 6 NYCRR 371 - Identification and Listing of Hazardous Wastes
8. 6 NYCRR 372 - Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities
9. 6 NYCRR 373-1 - Hazardous Waste Treatment, Storage and Disposal Facility Permitting Requirements
10. 6 NYCRR 376 - Land Disposal Restrictions
11. Posted weight limitations on roads or bridges
12. Transportation Skills Programs, Inc. 1985 - Hazardous Materials and Waste Shipping Papers and Manifests
13. Other local restrictions on transportation of waste/debris
14. Occupational Safety and Health Administration (OSHA), Standards and Regulations, 29 CFR 1910 (General Industry)
15. OSHA 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response
16. OSHA Safety and Health Standards 29 CFR 1926 (Construction Industry)
17. OSHA 29 CFR 1910.146 Confined Space Entry Standard
18. Standard Operating Safety Guidelines, EPA Office of Emergency and Remedial Response Publication, 9285.1-03
19. NIOSH / OSHA / USCG / EPA Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (1986)
20. U.S. Department of Health and Human Services (DHHS) "NIOSH Sampling and Analytical Methods," DHHS (NIOSH) Publication 84-100
21. ANSI, Practice for Respiratory Protection, Z88.2 (1980)
22. ANSI, Emergency Eyewash and Shower Equipment, Z41.1 (1983)
23. ANSI, Protective Footwear, Z358.1 (1981)
24. ANSI, Physical Qualifications for Respirator Use, Z88.6 (1984)
25. ANSI, Practice for Occupational and Educational Eye and Face Protection, Z87.1 (1968)
26. Water Pollution Control Federation "Manual of Practice No. 1, Safety in Wastewater Works"

27. NFPA No. 327 "Standard Procedures for Cleaning and Safeguarding Small Tanks and Containers"
28. Occupational Safety and Health Act Confined Space Entry Standard 29 CFR 1910.146.87
29. Department of Transportation 49 CFR 100 through 179
30. Department of Transportation 49 CFR 387 (46 FR 30974, 47073)
31. Environmental Protection Agency 40 CFR 136 (41 FR 52779)
32. Environmental Protection Agency 40 CFR 262 and 761
33. Resource Conservation and Recovery Act (RCRA)
34. Any transporter of hazardous or non-hazardous materials shall be licensed in the State of New York and all other states traversed in accordance with all applicable regulations.

# **ATTACHMENT 3**

## **Definitions**

**Contaminated Groundwater and Decontamination Fluids:** Groundwater within the excavation trench or decontamination water that contains regulated compounds above the NYCDEP Discharge to Sanitary/Combined Sewer Effluent limits.

**Disposal or Treatment Facility:** A facility licensed to accept either non-hazardous regulated waste or hazardous waste for either treatment or disposal.

**Exclusion Zone:** Work area that will be limited to access by Contractor personnel specifically trained to enter the work area only. The exclusion zone will be set up to secure the area from the public and untrained personnel. The project health and safety program will apply to all construction personnel including persons entering the work area.

**Hazard Assessment:** An assessment of any physical hazards that may be encountered on a work site.

**Hazardous Soils:** Soils that exhibit any of the characteristics of a hazardous waste, namely ignitability, corrosivity, reactivity, and toxicity, as defined in 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261.

**Hazardous Substance Evaluation:** An evaluation of the possible or known presence of any hazardous substances that may be encountered on a job site. This evaluation is included in the Health and Safety Plan and will include the identification and description of any hazardous substances expected to be encountered. Material Safety Data Sheets (MSDS) will be included for each substance.

**Health and Safety Plan:** A plan employed at a work site that describes all the measures that will be taken to assure that all work is conducted in a safe manner, and that the health of the workers and the public will be insured.

**Material Handling Plan:** A plan outlining the methods that will be employed to handle, transport and dispose of contaminated materials.

**Non-Hazardous Contaminated Soils:** Soils which exhibit a distinct chemical or petroleum odor, or exhibit elevated photoionization detector readings but are not classified as hazardous waste under 6 NYCRR Part 371, Section 371.3 and 40 CFR Section 261.

**New York State Health Department's Environmental Laboratory Approval Program:** A program by which the state of New York approves and accredits environmental testing laboratories.

**PCBs:** Polychlorinated biphenyls are a group of toxic compounds commonly used as a coolant in transformers and other electrical components.

**Photoionization Detector:** A hand held instrument used to measure volatile organic compounds in air. The instrument ionizes the organic molecules through the use of an ultraviolet lamp.

**RCRA Hazardous Waste Characteristics:** Characteristics of a material which may indicate the material is hazardous. These include: ignitability corrosivity, reactivity, and toxicity.

**Total Petroleum Hydrocarbons:** An analytical procedure used to determine the total amount of petroleum compounds in a material.

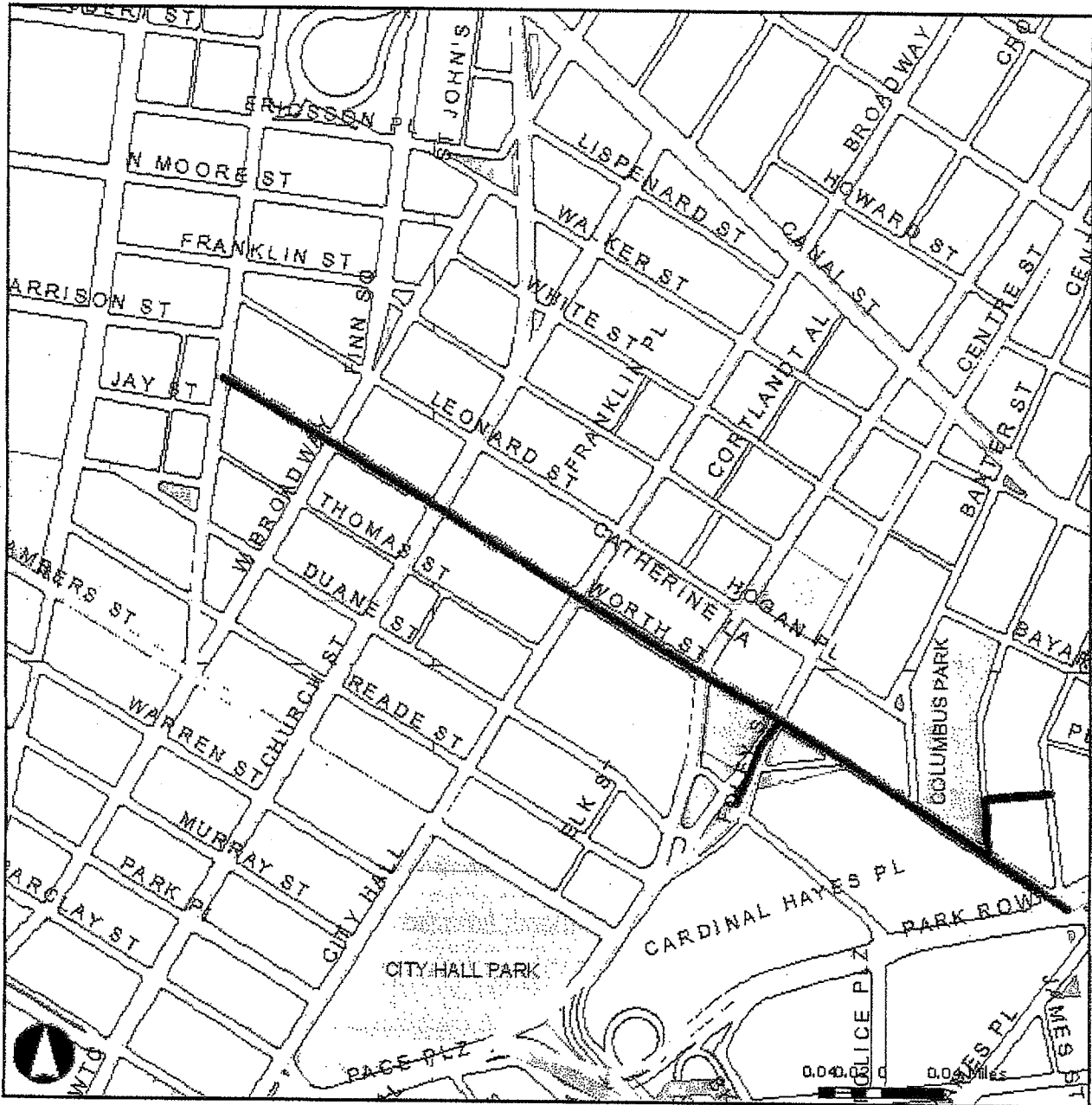
## **ATTACHMENT 4**

### **Phase II Subsurface Corridor Investigation Report**



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# Project HMMWTCA7E



IFRPROJECTS - Lines (Spatial View)

Limited Subsurface Corridor Investigation Report

For

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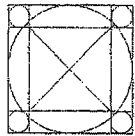
Reconstruction of Worth Street  
Between Hudson Street and Park Row  
Borough of Manhattan

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DDC PROJECT NO. (HWMP124)  
EHSS Project ID No. (PW311H001)  
WORK ORDER LETTER NO. (518-EMT1-764)  
CONTRACT REGISTRATION NO. (20010020252)

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2003 AUG 26 P 8:26  
DDC-TECH-SUPPORT  
L1033 DMF

Prepared for:



City of New York Department of Design and Construction  
Bureau of Environmental, Health & Safety Services  
30-30 Thomson Avenue  
Long Island City, NY 11101

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DDC-TECH-SUPPORT  
L1033 DMF

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August 2003

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## EXECUTIVE SUMMARY

At the request of the City of New York Department of Design and Construction (DDC), EMTEQUE Corporation (EMTEQUE) performed a Limited Subsurface Investigation on a corridor along Worth Street, between Hudson Street and Park Row. The segment is approximately  $\frac{3}{4}$  mile in length and is located in the China Town section of Manhattan. The investigation is planned prior to construction of a sewer line, to determine if the area's environmental conditions have impacted the subsurface soil and groundwater. EMTEQUE performed the investigation, which consisted of:

- Reviewing the Corridor Assessment Report and performing a site visit for scoping the Subsurface Investigation and preparation of a Work Plan;
- The advancement of 13 soil borings in the overburden, using the push drive Geoprobe drilling method, to a maximum depth of 20 feet below ground surface (bgs), the collection of both a grab and a boring-composite soil sample from each boring, preparation of a segment-composite soil sample by compositing the soil from the borings within the segment; and
- Field screening and selection of samples for laboratory analysis based on contaminant indicators. Laboratory analysis of the grab soil samples for volatile organic compounds (VOCs) and boring-composite samples for semi-volatile organic compounds (SVOCs) and Priority Pollutant Metals (PP Metals); analysis of the segment-composite soil sample for full list Toxicity Characteristic Leaching Procedure (TCLP), polychlorinated biphenyls (PCBs), Total Petroleum Hydrocarbons including diesel and gasoline range organics (TPH-dro/gro), and Ignitability, Reactivity and Corrosivity.
- The presentation of a written report with schematic drawings depicting the boring locations, significant site features and, if applicable, the contamination occurrence and distribution.

In order to evaluate the subsurface soil quality, laboratory analytical results were compared with NYSDEC regulatory standards identified in:

- 
- Spill Technology and Remediation Series (STARS) Memo #1, TCLP Alternative Guidance Values;
  - NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046), Recommended Soil Cleanup Objectives; and
  - Characteristics of Hazardous Waste published in the Resource Conservation and Recovery Act (RCRA) and NYSDEC Part 371.

The following is a summary of the soil laboratory analytical results:

- One (1) VOC and several SVOCs were identified in soil at concentrations in excess of the State's reuse guidance (STARS) or the State's cleanup objectives (TAGM) in all six (6) of the sites investigated. Please refer to Tables 2 and 3 and Figures 2.1 to 2.6 for the respective VOC and SVOC concentrations and the locations of the sites.
- PP Metals in excess of typical regional background concentrations and the State's cleanup objectives (TAGM) were identified in five (5) of the six (6) sites investigated. Very high concentrations of mercury were detected in the samples collected adjacent to three of the properties. These properties were Columbus Park at 175 Worth Street, the State Supreme Court at 60 Centre Street and the State Office Building at 141 Worth Street. Please refer to Table 4 and Figures 2.1 to 2.6 for the PP metal concentrations and the locations of the sites.
- The TCLP analysis of the composite soil sample collected for comparison to hazardous waste criteria did not detect VOCs, SVOCs, pesticides/herbicides or significant concentrations of metals. Similarly, no PCBs, or ignitability, reactivity or corrosivity were found in the segment-composite soil sample. Please refer to Tables 5 and 6 for the hazardous waste criteria concentrations.

Therefore, based on the results on analytical testing EMTEQUE recommends:

- The Contract documents should identify provisions and a contingency for managing, handling transporting and disposing of non-hazardous contaminated soil and hazardous soil, respectively. The Contractor should be required to submit a Material Handling Plan, to

identify the specific protocol and procedures that will be implored to manage the waste in accordance with applicable regulations.

- Due to the presence of elevated metals concentrations, during excavation activities, dust control procedures should be in place to minimize the creation and dispersion of fugitive airborne dust. The Contractor shall implement strict dust control measures to protect the workers and the downwind community from potential airborne contaminants released as a direct result of constructions activities.
- Soils excavated adjacent to 175 Worth Street, 60 Centre Street and 141 Worth Street should be tested for TCLP metals prior to disposal.
- Before beginning any excavation activity, the contractor shall submit a site-specific health and safety plan (HASP) that will meet the requirements set forth by the Occupational, Safety and Health Administration (OSHA), the New York State Department of Health (NYSDOH) and any other applicable regulations. The HASP should identify the possible locations and risks associated with the potential contaminants that may be encountered, and the administrative and engineering controls that will be utilized to mitigate concerns (i.e. dust control procedures for metals and SVOCs, and vapor control/suppression procedures for VOCs).

## 1.0 INTRODUCTION

### 1.1 Background Information

At the request of the City of New York Department of Design and Construction (DDC), EMTEQUE Corporation (EMTEQUE) performed a Limited Subsurface Investigation on a corridor along Worth Street, between Hudson Street and Park Row. The segment is approximately  $\frac{3}{4}$  mile in length and is located in the China Town section of Manhattan. The investigation is planned prior to construction of a sewer line, to determine if the area's environmental conditions have impacted the subsurface soil and groundwater.

### 1.2 Scope of Work

At the request of the DDC, the limited site investigation was scoped during a site visit on June 17, 2003 and performed on June 30, July 01, and July 03, 2003, by Fuad Adib and David Pelletier, Project Manager and Geologist utilizing EMTEQUE's drill rig. The investigation consisted of:

- Reviewing the Corridor Assessment Report and performing a site visit for scoping the Subsurface Investigation and preparation of a Work Plan;
- The advancement of 13 soil borings in the overburden, using the push drive Geoprobe drilling method, to a maximum depth of 20 feet below ground surface (bgs), the collection of both a grab and a boring-composite soil sample from each boring, preparation of a segment-composite soil sample by compositing the soil from the borings within the segment; and
- Field screening and selection of samples for laboratory analysis based on contaminant indicators. Laboratory analysis of the grab soil samples for volatile organic compounds (VOCs) and boring-composite samples for semi-volatile organic compounds (SVOCs) and Priority Pollutant Metals (PP Metals); analysis of the segment-composite soil sample for full list Toxicity Characteristic Leaching Procedure (TCLP), polychlorinated biphenyls (PCBs), Total Petroleum Hydrocarbons including diesel and gasoline range organics (TPH-dro/gro), and Ignitability, Reactivity and Corrosivity.



- The presentation of a written report with schematic drawings depicting the boring locations, significant site features and, if applicable, the contamination occurrence and distribution.

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## 2.0 CORRIDOR INFORMATION

### 2.1 Corridor Location, Description and Use

The corridor is located along Worth Street, between Hudson Street and Park Row in the China Town section on the southern end of Manhattan. The corridor is approximately  $\frac{3}{4}$  mile in length and ranges between 40 and 90 feet in width. The corridor consists of a street right-of-way developed with roadway and sidewalks.

### 2.2 Description of Surrounding Facilities and Environs

The corridor is in a primarily commercial neighborhood, comprising properties occupied by Federal, State and City agencies, Commercial units, and apartment buildings. The area surrounding the corridor is a mix of commercial and residential properties, with several low and high-rise apartment complexes, and government offices.

### 2.3 Site and Regional Topographic Setting

EMTEQUE reviewed the United States Geologic Survey (U.S.G.S.), New York, NY, 7.5-minute Topographic Quadrangle map. The map depicts the Corridor to range between 15 and 30 feet in elevation above mean sea level, based on the National Geodetic Vertical Datum of 1929. The corridor topography is relatively flat. The surrounding area to the west of Broadway slopes to the west towards the Hudson River, while the area to the east of Broadway slopes to the east towards the East River (Figure 1).

### 2.4 Site and Regional Geology

Based on the *Geology and Engineering Geology of the New York Metropolitan Area, Field Trip Guidebook T361, July 20 – 25, 1989*, edited by Charles A. Baskerville for the 28<sup>th</sup> International Geologic Congress, the sites are located in the New England Plate and the soil in the area consists of Pleistocene age ground moraine (sand, silt, clay, pebbles and boulders) of Ordovician Cambrian Hartland formation. In the corridor area, the unconsolidated soil consists of approximately 30 feet of fill material overlying native soil. The depth to bedrock in the area is

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approximately 70 feet below ground surface (bgs). The investigation activities revealed the site geology to generally consist of fill, composed of silty and gravelly sands with various amounts of construction debris, such as masonry and concrete chunks.

## **2.5 Site and Regional Hydrogeology**

Based on the regional hydrogeologic setting and the proximity to the Hudson River and East River, groundwater depth was anticipated to be in the range of 20 to 30 feet bgs along the corridor and groundwater flow direction is anticipated to be split away from the ridgeline along Broadway. Groundwater was not encountered in any of the borings.

## **2.6 Summary of Previous Environmental Investigations**

EMTEQUE was provided with a Corridor Assessment Report (CAR) by URS, which conducted a limited Phase I Environmental Assessment to identify environmental conditions within the corridor. The CAR describes the corridor lying in an area of mixed commercial and residential properties. The CAR identified several sites that presented a high potential for environmental impact and recommended additional investigation (i.e. Phase II Subsurface Investigation) of these sites.

Upon further investigation of the sites by EMTEQUE and in coordination with DDC-EHSS, the number of sites with a high potential for environmental impact were reduced to 11 sites. EMTEQUE provided a Work Plan for conducting a Phase II Corridor Subsurface Investigation prior to the start of the fieldwork, which identified the sites that were to be investigated and the scope of the investigation.

### 3.0 CORRIDOR EVALUATION

#### 3.1 Soil Quality Investigation

Proposed construction activities at this site included soil excavation, which in-turn, requires that soils at the site be characterized to identify material handling requirements (i.e. use of protective equipment) and for material reuse, handling and/or waste disposal requirements. EMTEQUE provided oversight for the advancement of 13 soil borings at the designated areas in the vicinity of the planned reconstruction. Multiple attempts for advancing borings adjacent to five (5) of the identified properties encountered refusal and were abandoned. The samples collected adjacent to 60 Center Street and 175 Worth Street were labeled as 60WorthSB-1 and 60WorthSB-2, and 195WorthSB-1, respectively. Although correct locations of the borings are referenced throughout this report, the change of labels in the laboratory documents was not possible. A summary of the field investigation, including the location of the sites and the details of the soil borings, is provided in Table 1 at the end of this report.

The borings were advanced utilizing a hydraulically driven direct push technology with a Geoprobe Macro Core subsurface sampling apparatus, using a 4-foot sampler for continuous sampling of the subsurface soil. The location of the borings is provided in Figures 2.1 to 2.6.

Continuous soil samples were collected from each of the borings at four (4) foot intervals. Upon sampler retrieval, the soils were examined for visual evidence (i.e. staining, discoloration) and any olfactory indications (i.e. odors) of contamination. In addition, a photo-ionization detector (PID) was used to qualitatively screen the soil for VOCs. The PID screening procedure consisted of collecting the soil in a plastic zip-lock bag and inserting the PID into the bag following a 15-minute stabilization period. Soil, which exhibited the highest PID readings or other indicators of contamination were selected for laboratory analysis of VOCs. For the boring-composite samples, the soil from the whole column was mixed in a sealed plastic bag before sample selection to identify representative conditions. In addition, to provide an overview of the condition of the

sites within the corridor, a segment-composite sample was produced by mixing soil samples from column-composite samples within the corridor. Soil classification information is documented on the boring logs included as Appendix A. All boring equipment was cleaned by being rinsed in tap water, then scrubbed with an Alconox wash and rinsed with tap water between each sample interval. In addition, a clear plastic liner was used inside the sampler for neat recovery of the soil cores.

The soil samples that were selected for laboratory analysis, were transferred from the zip-lock bags into laboratory prepared sample jars and properly labeled. The samples were stored with ice in a cooler to preserve the samples at 4° Celsius prior to and during shipment. A chain-of-custody was prepared, prior to sample shipment. Following the completion of each boring, the boreholes were back-filled with drill cuttings, and then sealed with cement grout.

The sample designations and intervals for the samples that were submitted to the laboratory are also included in Table 1.

### 3.1.1 Laboratory Analytical Results for Soil Samples

The soil samples were submitted to York Analytical Labs, a NYS Department of Health (DOH) approved laboratory [ELAP No.10854] for analysis. At the request of the DDC, field derived Quality Assurance/Quality Control samples (i.e. field blank, trip blank, split-sample) were not collected nor analyzed for this project.

The grab soil samples were analyzed for volatile organic compounds (VOCs) by Method 8260B and the boring-composite samples for semi-volatile organic compounds (SVOCs) by EPA Method 8270 B/N, and priority pollutant metals (PP Metals) by EPA 6000/7000 series. The segment-composite sample was analyzed for polychlorinated biphenyls (PCBs) by Method 8082, Priority Pollutant Metals (PP Metals) by Method 6000/7000, full list Toxicity Characteristic Leaching Procedure (TCLP), Total Petroleum Hydrocarbons including diesel and gasoline range organics (TPH-dro/gro) by Method 8015, and Ignitability, Reactivity and Corrosivity by Method

SW-846. The analytical results of the soil samples were compared to the criteria published by the New York State Department of Environmental Conservation (NYSDEC) for soils. NYSDEC has established statewide criteria for re-use of petroleum-contaminated soil, which is published in the NYSDEC STARS Memo #1 (1992). The STARS Memo provides guidance for specific petroleum-related VOCs and SVOCs, odors and other nuisance factors, and provides Toxicity Characteristic Leaching Procedure (TCLP) Alternative Guidance Values for waste characterization purposes. The NYSDEC Technical and Administrative Guidance Memorandum (TAGM) dated 1994 provides the Recommended Soil Cleanup Objectives (RSCO). TAGM provides guidance for remedial actions at NYSDEC Inactive Hazardous Waste and Spill sites, based on health-related concerns and available clean-up technologies. The TCLP results have been compared with EPA regulatory level for Characteristics of Hazardous Waste published in Resource Conservation and Recovery Act (RCRA) Title 40- Part 261 (40 CFR 261) revised as of July 1, 1999.

#### ***3.1.1.1 Volatile Organic Compounds (VOCs) in Soil***

Only one (1) VOC, naphthalene, was identified in one of the soil samples at concentrations in excess of the State's reuse guidance (STARS) or the State's cleanup objectives (TAGM) in one (1) of the six (6) sites investigated. The results of the VOC analysis are summarized in Table 2.

#### ***3.1.1.2 Semi-volatile Organic Compounds (SVOCs) in Soil***

Several SVOCs were identified at concentrations in excess of the State's reuse guidance (STARS) or the State's cleanup objectives (TAGM) in all six (6) of the sites investigated. One (1) of these sites, AT&T Building located at 33 Worth Street, had also revealed VOC concentrations in excess of the STARS or TAGM regulations. Such exceedences can usually be attributed to the quality of the fill material that has been used for backfilling around the buildings. The results of the SVOC analysis are summarized in Table 3.

#### ***3.1.1.3 Priority Pollutant Metals (PP Metals) in Soil***

The STARS Memo does not set any standards for PP Metals in soil. TAGM presents both an Eastern United States, and when available, a New York State specific background concentration

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for metals in soil and a recommended soil clean-up objective. Several PP Metals were detected in the boring-composite soil samples collected from five (5) of the six (6) sites investigated that were above the TAGM RSCO and the TAGM Eastern United States Soil (EUS) typical background concentration range. Such exceedences can usually be attributed to the industrial activities at the sites or the quality of the fill material that has been used for backfilling around the buildings. Table 4 summarizes the results of the PP metals detected in the boring-composite samples.

#### *3.1.1.4 Toxicity Characteristic Leaching Procedure (TCLP)*

No detectable amounts of VOCs, SVOCs or pesticides/herbicides were found in the TCLP analysis of the segment-composite soil sample at concentrations that exceeded the laboratory's minimum detectable limits (MDL). The TCLP analysis identified two metals at concentrations, well below the RCRA regulatory limits. Consequently, based on the TCLP results, the soils do not classify as hazardous for toxicity. Table 5 summarizes the results of the TCLP analysis on the composite sample.

#### *3.1.1.5 Additional Analytical Parameters for Soil*

The site-composite soil sample was also analyzed for PCBs, TPH (dro/gro), Ignitability, Reactivity and Corrosivity. No PCBs or Reactivity were detected in the sample. The sample did not ignite and the soils' pH value was within the acceptable range for non-hazardous material. The content of TPH in the segment-composite sample was generally below the Acceptance Guidelines by the disposal facilities for maximum level for disposal by thermal desorption. Table 6 presents a summary of the additional analyses.

#### 4.0 CONCLUSIONS

Based on the results of the field investigation and a review of the analytical results compared to the NYS DEC STARS Memo #1 (STARS), NYS DEC TAGM criteria, and EPA RCRA regulatory level for Characterization of the Hazardous Waste, the following conclusions are presented:

- One (1) VOC and several SVOCs were identified in soil at concentrations in excess of the State's reuse guidance (STARS) or the State's cleanup objectives (TAGM) in all six (6) of the sites investigated. Please refer to Tables 2 and 3 and Figures 2.1 to 2.6 for the respective VOC and SVOC concentrations and the locations of the sites.
- PP Metals in excess of typical regional background concentrations and the State's cleanup objectives (TAGM) were identified in five (5) of the six (6) sites investigated. Very high concentrations of mercury were detected in the samples collected adjacent to three of the properties. These properties were Columbus Park at 175 Worth Street, the State Supreme Court at 60 Centre Street and the State Office Building at 141 Worth Street. Please refer to Table 4 and Figures 2.1 to 2.6 for the PP metal concentrations and the locations of the sites.
- The TCLP analysis of the composite soil sample collected for comparison to hazardous waste criteria did not detect VOCs, SVOCs, pesticides/herbicides or significant concentrations of metals. Similarly, no PCBs, or ignitability, reactivity or corrosivity were found in the segment-composite soil sample. Please refer to Tables 5 and 6 for the hazardous waste criteria concentrations.

Therefore, based on the results on analytical testing EMTEQUE recommends:

- The Contract documents should identify provisions and a contingency for managing, handling transporting and disposing of non-hazardous contaminated soil and hazardous soil, respectively. The Contractor should be required to submit a Material Handling Plan, to identify the specific protocol and procedures that will be implored to manage the waste in accordance with applicable regulations.



## 5.0 STATEMENT OF LIMITATIONS

The data presented and the opinions expressed in this report are qualified as stated in the attachment to this section of the report.

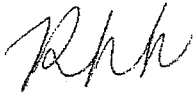
Prepared by:



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Fuad Adib, Ph.D., P.E.  
Project Manager

Reviewed by:



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Ramon M. Henriquez  
Vice President

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## STATEMENT OF LIMITATIONS

The data presented and the opinions expressed in this report are qualified as follows:

1. The sole purpose of the investigation and of this report is to assess the physical characteristics of the Site with respect to the presence or absence in the environment of oil or hazardous materials and substances as defined in the applicable state and federal environmental laws and regulations and to gather information regarding current and past environmental conditions at the Site.
2. EMTEQUE derived the data in this report primarily from visual inspections, examination of records in the public domain, interviews with individuals with information about the Site, and a limited number of subsurface explorations made on the dates indicated. The passage of time, manifestation of latent conditions or occurrence of future events may require further exploration at the Site, analysis of the data, and reevaluation of the findings, observations, and conclusions expressed in the report.
3. In preparing this report, EMTEQUE has relied upon and presumed accurate certain information (or the absence thereof) about the Site and adjacent properties provided by governmental officials and agencies, the Client, and others identified herein. Except as otherwise stated in the report, EMTEQUE has not attempted to verify the accuracy or completeness of any such information.
4. The data reported and the findings, observations, and conclusions expressed in the report are limited by the Scope of Services, including the extent of subsurface exploration and other tests. The Scope of Services was defined by the requests of the Client, the time and budgetary constraints imposed by the Client, and the availability of access to the Site.
5. Because of the limitations stated above, the findings, observations, and conclusions expressed by EMTEQUE in this report are not, and should not be considered, an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state or local law or regulation. No warranty or guarantee, whether express or implied, is made with respect to the data reported or findings, observations, and conclusions expressed in this report. Further, such data, findings, observations, and conclusions are based solely upon site conditions in existence at the time of investigation.
6. This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the Agreement and the provisions thereof.

## TABLES

Table 1. Summary of Field Investigation

DATE	LOCATION (adjacent to)	BORING		SOIL SAMPLE DEPTH (ft) & TYPE <sup>1,2</sup>			FIELD OBSERVATIONS	
		ID	Depth (ft)	Grab	Boring Composite	Segment	PID (ppm)	Visual and Olfactory
June 30, 03	AT & T building 33 Worth Street	33WorthSB-1	10 refusal	9-10	Whole Column		0	Construction debris
		33WorthSB-2	16	7-12	Whole Column		0	
July 01, 2003	Columbus Park 175 Worth Street	175WorthSB-1	16	15-16	Whole Column	1	0	Coal ash
		200WorthSB-1	20	19-20	Whole Column		0	
	Chatham Towers 200 Worth Street	60WorthSB-1	16	15-16	Whole Column		0	
		60WorthSB-2	16	15-16	Whole Column		0	
	State Supreme Court 60 Centre Street	141WorthSB-1	20	19-20	Whole Column		0	
		141WorthSB-2	20	19-20	Whole Column		0	
	State Office Building 141 Worth Street	141WorthSB-3	20	19-20	Whole Column		0	
		111WorthSB-1	20	19-20	Whole Column		0	
	July 03, 2003	Tribeca Rentals building 111 Worth Street	111WorthSB-2	16	15-16		Whole Column	0
			111WorthSB-3	16	15-16		Whole Column	0
111WorthSB-4			16	11-12	Whole Column	0		
							0	

1 Grab samples were subjected to VOC analysis. The whole-column-composite samples were subjected to SVOC and PP Metals analyses.

2 A Segment-composite sample was produced by compositing the boring-composite samples and was subjected to TCLP, TPH, PCBs and IRC analyses.

Table 2. Summary of VOCs Detected in Soil

Volatile Organic Parameters	STARS Memo #1 TCLP Alternative Guidance Value	TAGM 4046 Recommended Soil Clean-up Objective	Boring Location and Number (Sidewalk adjacent to)	
			33WorthSB-1	175WorthSB-1
Naphthalene	200	13,000	2100	15
Total	--	10,000	2100	15

All concentrations reported in parts per billion (ppb or ug/Kg)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

**BOLD** - Concentration Exceeds NYSDEC STARS Memo #1 TCLP Alternative Guidance Value

-- No standard or guidance value provided in the guidelines

Table 3. Summary of SVOCs Detected in Soil\*

Semi-Volatile Organic Parameters	STARS Memo #1	TCLP Alternative Guidance Value	TAGM 4046 Recommended Soil Clean-up Objective	Boring Location and Number (Sidewalk adjacent to)								
				33 Worth Street	175 Worth Street	200 Worth Street	60 Centre Street	141 Worth Street	141 Worth Street	111 Worth Street	111 Worth Street	
Benzo(a)anthracene	0.04	224	224	370	1900	340	500	ND	640	ND	370	580
Benzo(a)pyrene	0.04	61	61	ND	1100	ND	340	ND	590	ND	ND	460
Benzo(b)fluoranthene	0.04	61	61	ND	1200	ND	ND	ND	490	ND	ND	350
Benzo(k)fluoranthene	0.04	610	610	410	1400	ND	480	ND	570	ND	ND	510
Bis(2-ethylhexyl)phthalate	--	50,000	50,000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	.04	400	400	380	1600	ND	390	ND	650	ND	340	550
Fluoranthene	1,000	50,000	50,000	830	2900	510	780	340	1300	410	700	990
Phenanthrene	1,000	50,000	50,000	540	2800	ND	660	ND	670	ND	600	1100
Pyrene	1,000	50,000	50,000	760	2800	460	750	380	1300	380	690	910
Total SVOCs	---	500,000	500,000	7030	15700	1310	3900	720	6210	790	2700	5450

\* Composite soil samples for SVOC analysis were prepared by mixing the soil from the whole column

All concentrations reported in parts per billion (ppb or ug/Kg)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

**BOLD** - Concentration Exceeds NYSDEC STARS Memo #1 TCLP Alternative Guidance Value

-- No standard or guidance value provided in the guidelines

Underline - Concentration exceeds NYS DEC TAGM recommended soil cleanup objective

Table 4. Summary of PP Metals Detected in Soil

Metal Parameter	Eastern USA Soil Background		Recommended Soil Clean-up Objective		Boring Location and Number (Sidewalk adjacent to)												
	33 Worth Street	175 Worth Street	200 Worth Street	60 Centre Street	141 Worth Street			111 Worth Street									
Antimony	33WorthSB-1 33WorthSB-2	175WorthSB-1	200WorthSB-1	60WorthSB-1 60WorthSB-2	141WorthSB-1 141WorthSB-2 141WorthSB-3	111WorthSB-1 111WorthSB-2 111WorthSB-3 111WorthSB-4	ND	6.38	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	33WorthSB-1 33WorthSB-2	175WorthSB-1	200WorthSB-1	60WorthSB-1 60WorthSB-2	141WorthSB-1 141WorthSB-2 141WorthSB-3	111WorthSB-1 111WorthSB-2 111WorthSB-3 111WorthSB-4	2.24	6.10	ND	7.54	2.28	3.57	6.92	1.89	3.09	2.20	2.20
Cadmium	33WorthSB-1 33WorthSB-2	175WorthSB-1	200WorthSB-1	60WorthSB-1 60WorthSB-2	141WorthSB-1 141WorthSB-2 141WorthSB-3	111WorthSB-1 111WorthSB-2 111WorthSB-3 111WorthSB-4	ND	0.41	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	33WorthSB-1 33WorthSB-2	175WorthSB-1	200WorthSB-1	60WorthSB-1 60WorthSB-2	141WorthSB-1 141WorthSB-2 141WorthSB-3	111WorthSB-1 111WorthSB-2 111WorthSB-3 111WorthSB-4	7.84	13.7	4.78	11.8	12.5	14.2	14.6	13.2	13.4	10.8	10.8
Copper	33WorthSB-1 33WorthSB-2	175WorthSB-1	200WorthSB-1	60WorthSB-1 60WorthSB-2	141WorthSB-1 141WorthSB-2 141WorthSB-3	111WorthSB-1 111WorthSB-2 111WorthSB-3 111WorthSB-4	15.5	62.9	10.6	48.0	33.8	33.3	44.3	13.8	50.2	19.4	19.4
Lead	33WorthSB-1 33WorthSB-2	175WorthSB-1	200WorthSB-1	60WorthSB-1 60WorthSB-2	141WorthSB-1 141WorthSB-2 141WorthSB-3	111WorthSB-1 111WorthSB-2 111WorthSB-3 111WorthSB-4	39.1	343	3.79	235	129	443	331	71.1	170	180	180
Nickel	33WorthSB-1 33WorthSB-2	175WorthSB-1	200WorthSB-1	60WorthSB-1 60WorthSB-2	141WorthSB-1 141WorthSB-2 141WorthSB-3	111WorthSB-1 111WorthSB-2 111WorthSB-3 111WorthSB-4	7.82	17.4	16.4	18.0	26.6	21.7	31.7	11.6	21.6	12.5	12.5
Selenium	33WorthSB-1 33WorthSB-2	175WorthSB-1	200WorthSB-1	60WorthSB-1 60WorthSB-2	141WorthSB-1 141WorthSB-2 141WorthSB-3	111WorthSB-1 111WorthSB-2 111WorthSB-3 111WorthSB-4	ND	ND	ND	1.14	ND	ND	2.13	1.59	1.58	1.31	1.31
Zinc	33WorthSB-1 33WorthSB-2	175WorthSB-1	200WorthSB-1	60WorthSB-1 60WorthSB-2	141WorthSB-1 141WorthSB-2 141WorthSB-3	111WorthSB-1 111WorthSB-2 111WorthSB-3 111WorthSB-4	28.8	364	13.4	119	38.5	49.9	93.3	41.3	99.7	83.1	83.1
Mercury	33WorthSB-1 33WorthSB-2	175WorthSB-1	200WorthSB-1	60WorthSB-1 60WorthSB-2	141WorthSB-1 141WorthSB-2 141WorthSB-3	111WorthSB-1 111WorthSB-2 111WorthSB-3 111WorthSB-4	0.66	1.24	0.40	1.56	0.64	0.69	1.14	0.63	0.84	0.72	0.72

\* Composite soil samples for PPM analysis were prepared by mixing the soil from the whole column

Concentrations are parts per million (ppm or mg/Kg)

N/A = Not available

SB = Site Background Concentration

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

**BOLD** - Concentration exceeds NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046), Recommended Soil Cleanup Objectives (RSCO).

Table 5. Summary of Detected TCLP Waste Characterization Toxicity Parameters in the Segment-Composite Soil Samples

Parameter	Hazardous Waste Regulatory Level*	Segment-Composite Soil Sample**
SVOCs		ND
RCRA Metals	Arsenic	ND
	Barium	100.0
	Cadmium	1.0
	Chromium	5.0
	Lead	5.0
Pesticides/Herbicides		ND
VOCs		ND

Concentrations are parts per million (ppm or mg/L)

ND = Compound not detected above method detection limit (see attached lab report for mdl's)

\* Characteristics of Hazardous Waste published in Resource Conservation and Recovery Act (RCRA)

\*\* Segment-Composite soil sample was prepared by mixing soils from borings within the segment.

**Bold** = Concentration exceeds Characteristics of Hazardous Waste published in Resource Conservation and Recovery Act (RCRA) Regulatory Level



Table 6. Summary of Additional Parameters Detected in the Segment-Composite Soil Sample

Parameter	Regulatory Guidelines	Composite Soil Sample
PCBs	10 <sup>1</sup>	ND
TPH	5000 total <sup>2</sup>	219
		ND
Ignitability	>140 °F <sup>2</sup>	Does not ignite
Reactivity	500 <sup>2</sup>	ND
		250 <sup>2</sup>
Corrosivity - pH	2-12.5	9.61

Concentrations are parts per million (ppm or mg/Kg)

ND = Compound not detected above method detection limit (see attached lab report for mdf's)

1- A PCBs soil cleanup objective concentration equal to 10 ppm for subsurface soil is recommended in the NYSDEC Technical and Administrative Guidance Memorandum (TAGM #4046)

2- Considered as Acceptance Guidelines by the disposal facilities for maximum level for disposal via thermal desorption.

## **FIGURES**

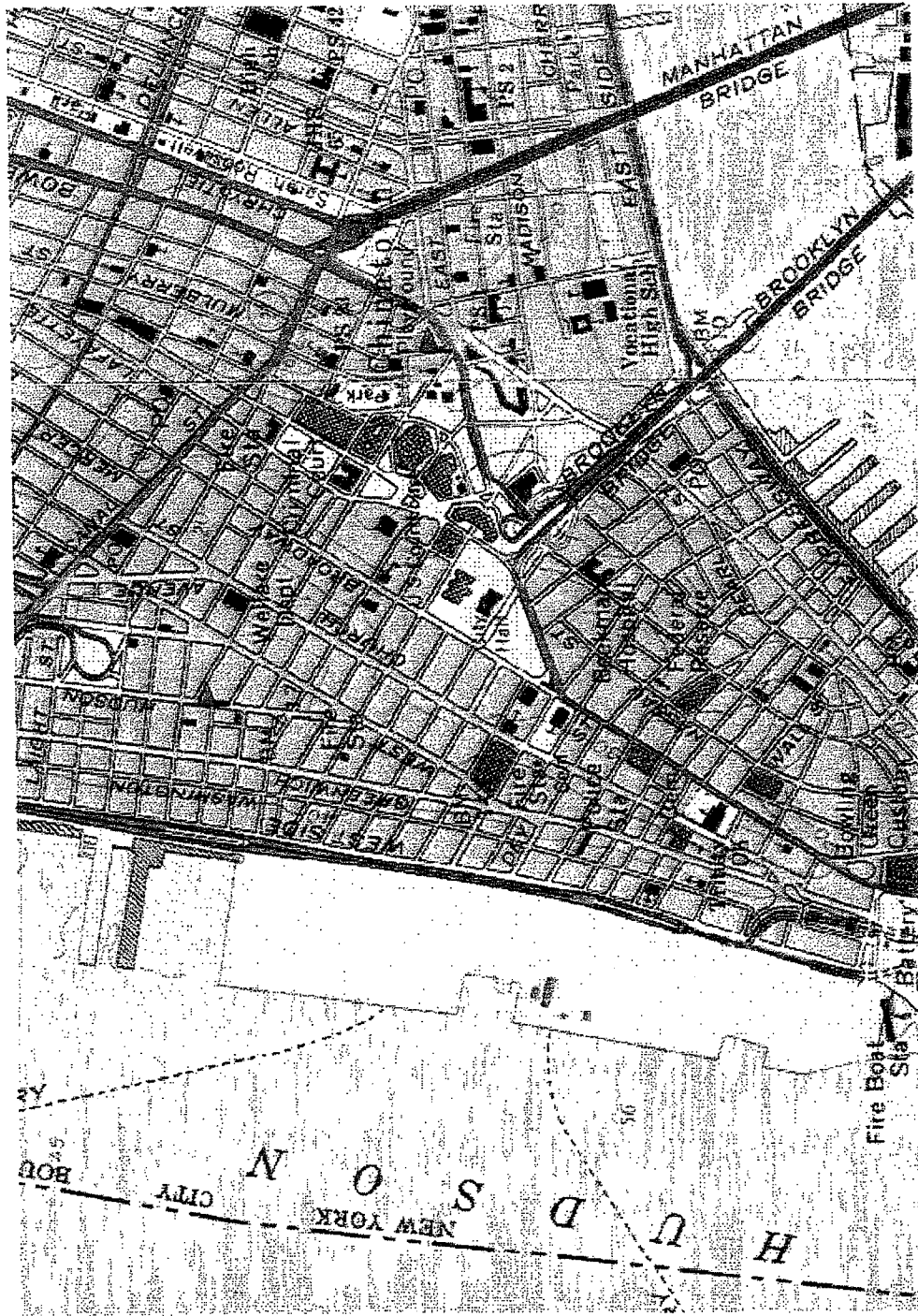


Figure 1. Corridor Location Map



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E-MAIL: [emteque@worldnet.att.net](mailto:emteque@worldnet.att.net)

DATE: 7/31/03

SCALE: 1:50



CITY OF NEW YORK  
DEPARTMENT OF DESIGN  
AND CONSTRUCTION

PROJECT LOCATION

WORTH STREET BETWEEN  
HUDSON STREET AND  
PARK ROW  
MANHATTAN, NY

ISSUED DATE

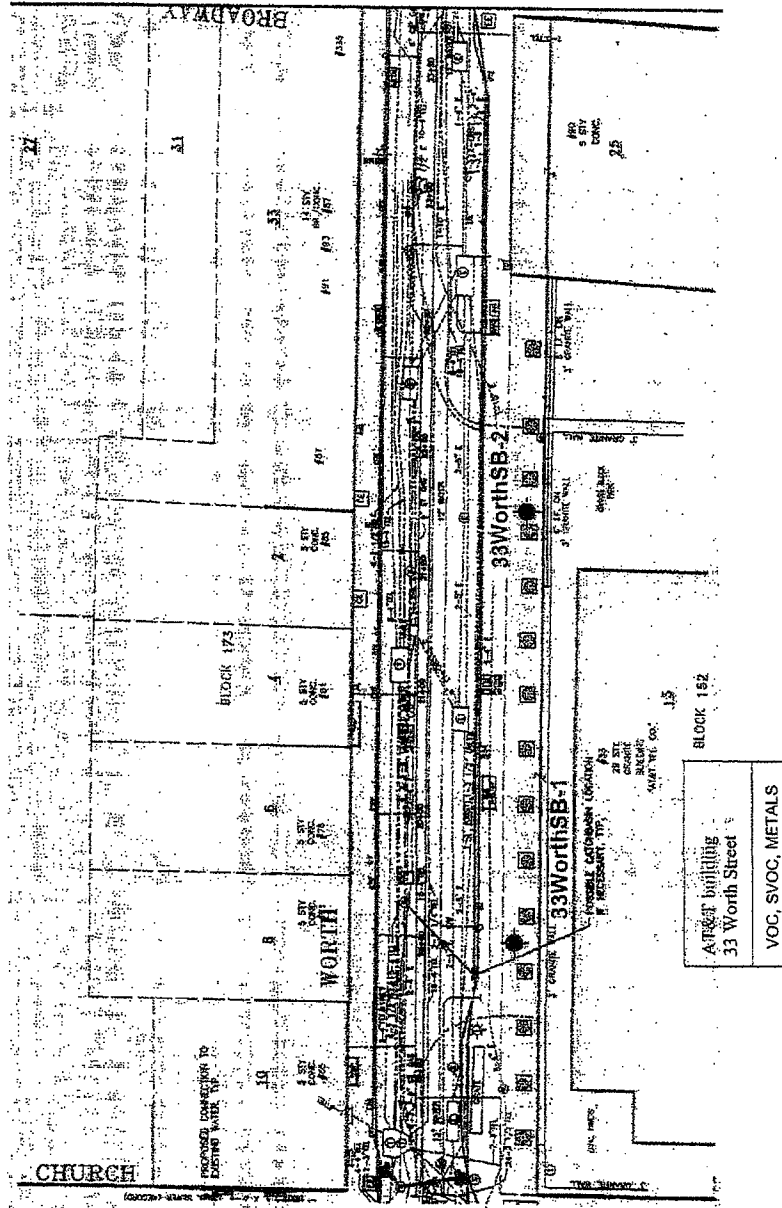
BORING  
LOCATION MAP

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PROJECT NO.  
HWMP124

DRAWN BY: TIG  
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ISSUED NO. 1  
OF 6  
Figure 2.1



SOIL BORING





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REV	DATE	BY	CHKD	DESCR



CITY OF NEW YORK  
DEPARTMENT OF DESIGN  
AND CONSTRUCTION

PROJECT LOCATION  
WORTH STREET BETWEEN  
HUDSON STREET AND  
PARK ROW  
MANHATTAN, NY

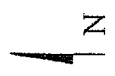
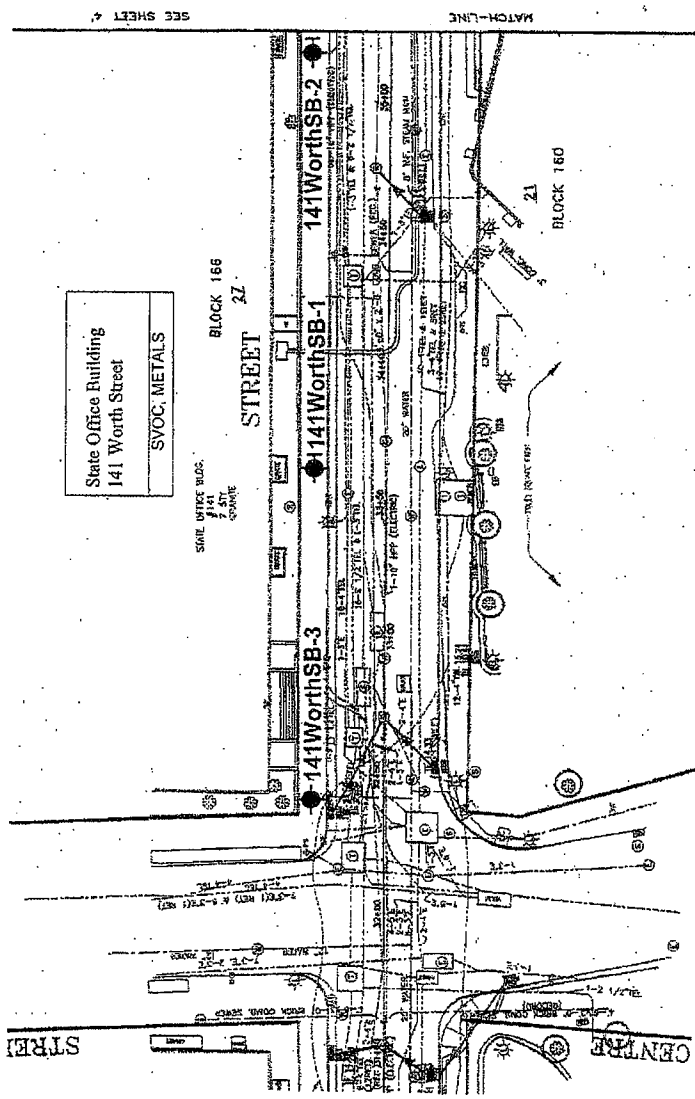
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BORING  
LOCATION MAP

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PROJECT NO.  
HWWP124

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SH-3  
OF  
6



◆ SOIL BORING



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REV.	DATE	DESCRIPTION



CITY OF NEW YORK  
DEPARTMENT OF DESIGN  
AND CONSTRUCTION

PROJECT LOCATION

WORTH STREET BETWEEN  
HUDSON STREET AND  
PARK ROW  
MANHATTAN, NY

DRAWING TITLE

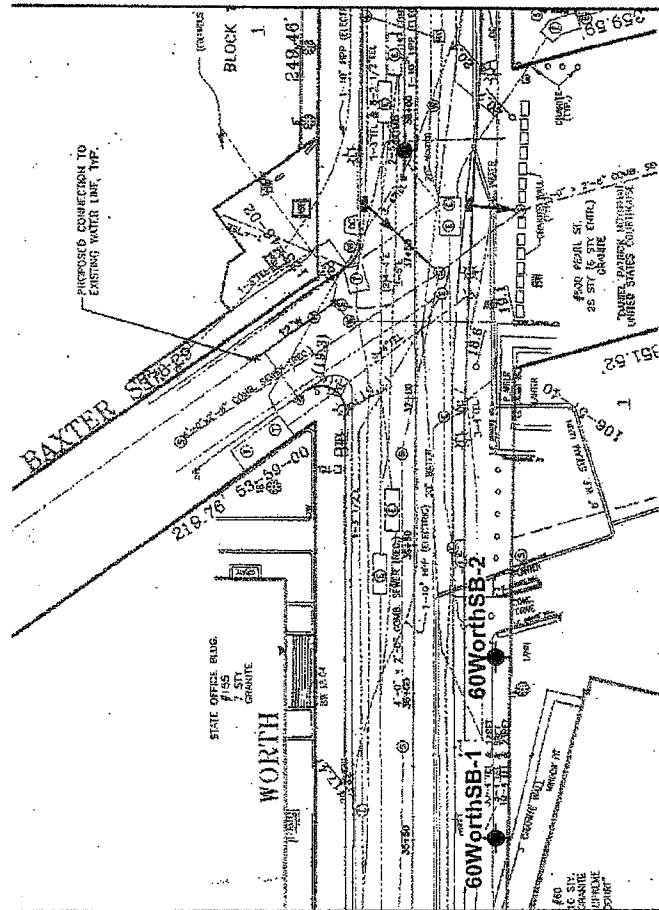
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HWMP-124

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Figure 2  
SHEET 4  
OF 6



State Supreme Court  
60 Centre Street

SVOC, METALS



SOIL BORING



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PARK ROW  
MANHATTAN, NY

DRAWING FILE

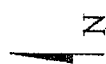
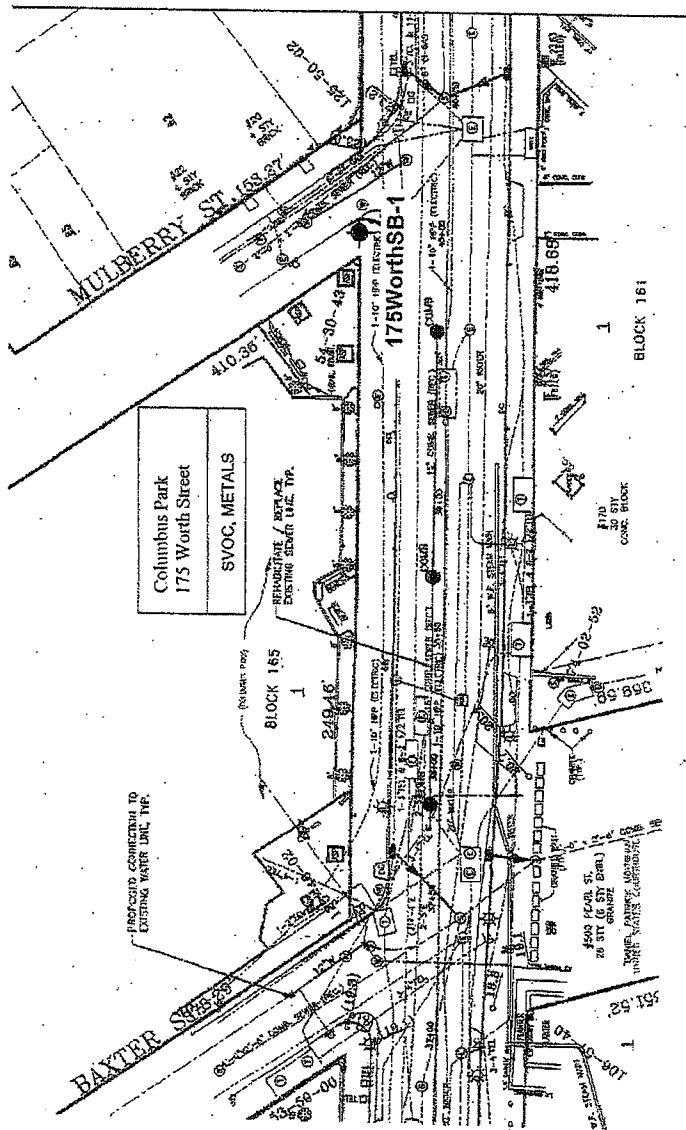
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HWMP124

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DRAWING NO. Figure 2.5 SHEET 5 OF 6



SOIL BORING

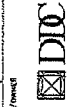




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DEPARTMENT OF DESIGN  
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PROJECT LOCATION  
WORTH STREET BETWEEN  
HUDSON STREET AND  
PARK ROW  
MANHATTAN, NY

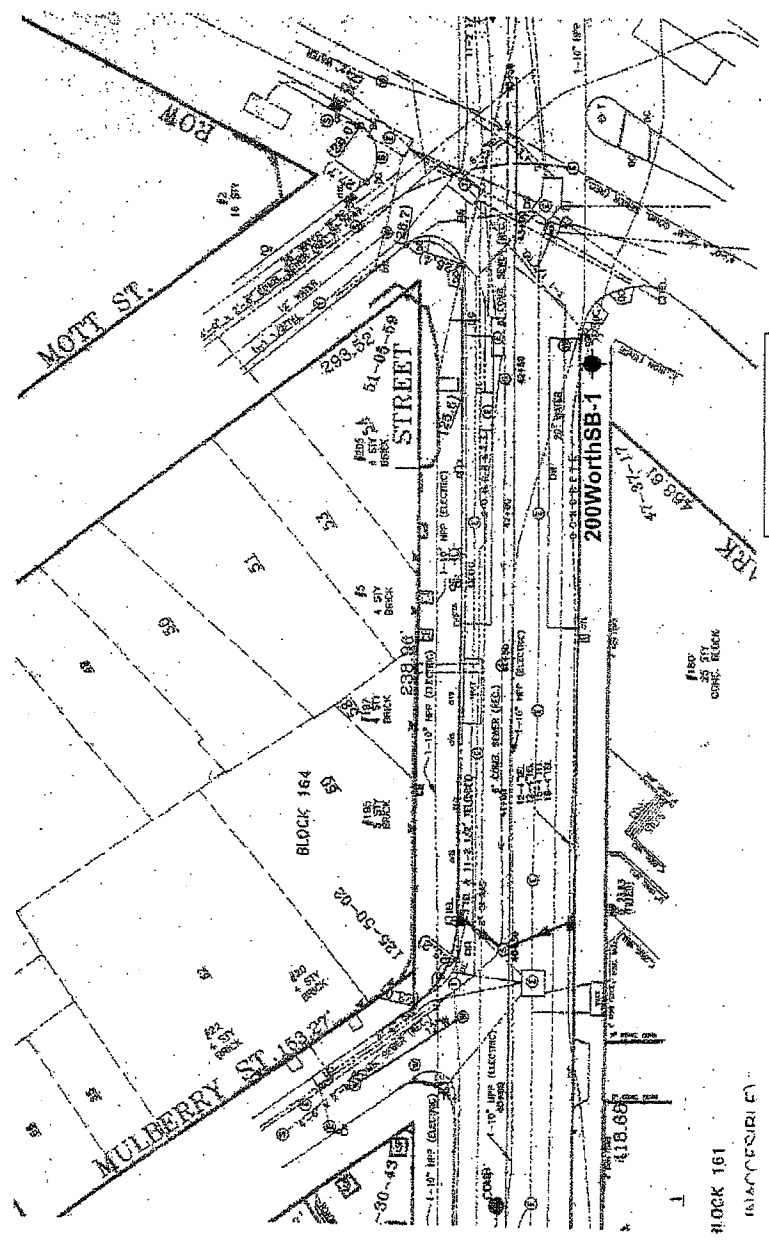
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LOCATION MAP

DATE 7/31/03 SCALE 1:50

PROJECT NO.  
HWMP124

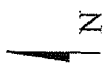
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DRAWER NO. Figure 2 SHEET NO. 6 OF 6



Chatham Towers  
200 Worth Street  
SVOC, METALS

SOIL BORING



**APPENDIX A**  
**GEOLOGIC BORING LOGS**

Date: 6/30/03  
 Start: \_\_\_\_\_  
 Finish: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_



EMTEQUE Corp.  
 505 Eighth Avenue, Suite 900  
 New York, NY 10018

Boring No. 33 Worth SB-1  
 Surface Elev. \_\_\_\_\_  
 GW Depth: Unknown  
 Drilling Method: DPT

**SUBSURFACE LOG**

Project: DDC Worth Street Corridor / Manhattan

Location: AT&T Building 33 Worth Street

Field Manager: Pelletier Adib

Depth (ft)	Samples	Sample No.:	Consistency	Soil Description/Classification	Notes:
0				6" concrete	Fill matter
1				Sand / Brick	Groundwater not encountered
2					
3					
4					
5					
6				" " "	
7					
8					
9					
10				Refusal @ 10' bgs	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Date: 6/30/03  
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 Page \_\_\_\_\_ of \_\_\_\_\_



EMTEQUE Corp.  
 505 Eighth Avenue, Suite 900  
 New York, NY 10018

Boring No. 33 Worth SB-2  
 Surface Elev. \_\_\_\_\_  
 GW Depth: Unknown  
 Drilling Method: DPT

**SUBSURFACE LOG**

Project: DDC Worth Street Corridor / Manhattan

Location: AT & T Building  
 33 Worth Street

Field Manager: Pelletier  
 Adib

Depth (ft)	Samples	Sample No.	Consistency	Soil Description/Classification	Notes:
0				6" concrete	Fill matter Groundwater not encountered
1				Brick (some sand/gravel)	
2				Construction debris	
3					
4					
5					
6					
7	X				
8	X			" " "	
9	X				
10	X				
11	X				
12					
13					
14					
15				No recovery	
16				BT @ 16' bgs	
17					
18					
19					
20					
21					
22					
23					
24					
25					

Date: 2/1/03  
 Start: \_\_\_\_\_  
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 Page \_\_\_\_\_ of \_\_\_\_\_



EMTEQUE Corp.  
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 New York, NY 10018

Boring No. 175 Worth SB-1  
 Surface Elev. \_\_\_\_\_  
 GW Depth: Unknown  
 Drilling Method: DPT

**SUBSURFACE LOG**

Project: DDC Worth Street Corridor / Manhattan

Location: Columbus Park 175 Worth Street Worth + Mulberry

Field Manager: Pelletier Adib

Depth (ft)	Samples	Sample No.:	Consistency	Soil Description/Classification	Notes:
0				6" concrete	Ash / cinder  Groundwater not encountered
1				Mostly brick + some sandy gravel	
2					
3					
4					
5				" " "	
6					
7					
8				Ash / cinder / brick	
9					
10					
11					
12					
13				" " "	
14					
15	X				
16				BT @ 16' bgs	
17					
18					
19					
20					
21					
22					
23					
24					
25					

Date: 7/1/03  
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 Page \_\_\_\_\_ of \_\_\_\_\_



EMTEQUE Corp.  
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 New York, NY 10018

Boring No. 200Worth SB-1  
 Surface Elev. \_\_\_\_\_  
 GW Depth: Unknown  
 Drilling Method: DPT

**SUBSURFACE LOG**

Project: DPC Worth Street  
Corridor / Manhattan  
 Location: Chatham Towers  
200 Worth Street  
SW of Worth & Park

Field Manager: Pelletier  
Adib

Depth (ft)	Samples	Sample No.:	Consistency	Soil Description/Classification	Notes:
0				6" concrete	Fill matter
1				Mostly brick with some sand/gravel	Groundwater not encountered  construction debris
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20				BT @ 20' bgs	
21					
22					
23					
24					
25					

Date: July 01, 03  
 Start: \_\_\_\_\_  
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 Page \_\_\_\_\_ of \_\_\_\_\_



EMTEQUE Corp.  
 505 Eighth Avenue, Suite 900  
 New York, NY 10018

Boring No. 141 Worth SB-1  
 Surface Elev. \_\_\_\_\_  
 GW Depth: Unknown  
 Drilling Method: DPT

**SUBSURFACE LOG**

Project: DDC Worth Street Corridor / Manhattan

Location: State Office Building 141 Worth Street

Field Manager: Pelletier Adib

Depth (ft)	Samples	Sample No.:	Consistency	Soil Description/Classification	Notes:
0				4" concrete	Fill matter
1				Moist silty sandy loam with brick particles	Construction debris
2					
3					
4					
5				Dark brown f-m sand	
6					
7					
8					
9					
10					
11					
12				Red → coarse sand / gravel	
13					
14					
15					
16					
17					
18					
19	X				
20				BT @ 20' bgs	
21					
22					
23					
24					
25					

Date: July 01, 03  
 Start: \_\_\_\_\_  
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 Page \_\_\_\_\_ of \_\_\_\_\_



EMTEQUE Corp.  
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 New York, NY 10018

Boring No. 141 Worth SB-2  
 Surface Elev. \_\_\_\_\_  
 GW Depth: Unknown  
 Drilling Method: DPT

**SUBSURFACE LOG**

Project: DDC Worth Street Corridor / Manhattan

Location: State Office Building 141 Worth Street

Field Manager: Pelletier Adib

Depth (ft)	Samples	Sample No.:	Consistency	Soil Description/Classification	Notes:
0				4" concrete	Fill matter Groundwater not encountered Construction debris
1					
2				Moist silty sandy loam	
3				with brick particles	
4				Dark brown f-m sand	
5					
6					
7					
8					
9					
10					
11					
12				Red → coarse sand / gravel	
13					
14					
15					
16					
17					
18					
19	X				
20				BT @ 20' logs	
21					
22					
23					
24					
25					



Date: July 03, 03  
 Start: \_\_\_\_\_  
 Finish: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_



EMTEQUE Corp.  
 505 Eighth Avenue, Suite 900  
 New York, NY 10018

Boring No. 141 Worth SB-3  
 Surface Elev. \_\_\_\_\_  
 GW Depth: Unknown  
 Drilling Method: DPT

**SUBSURFACE LOG**

Project: DDC Worth Street Corridor / Manhattan

Location: State Office Building 141 Worth Street

Field Manager: Pelletier Adib

Depth (ft)	Samples	Sample No.:	Consistency	Soil Description/Classification	Notes:
0				4" Concrete	Fill matter Groundwater not encountered Construction debris
1					
2				Moist silty sandy loam with brick particles	
3					
4				Dark brown f-m sand	
5					
6					
7					
8					
9					
10					
11					
12				Red → coarse sand / gravel	
13					
14					
15					
16					
17					
18					
19	X				
20				BT @ 20' bgs	
21					
22					
23					
24					
25					

Date: 7/1/03  
 Start: \_\_\_\_\_  
 Finish: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_



EMTEQUE Corp.  
 505 Eighth Avenue, Suite 900  
 New York, NY 10018

Boring No. 60 Worth SB-1  
 Surface Elev. \_\_\_\_\_  
 GW Depth: Unknown  
 Drilling Method: DPT

**SUBSURFACE LOG**

Project: DDC Worth Street Corridor / Manhattan

Location: State Supreme Court  
 60 Center Street

Field Manager: Pelletier  
 Adib

Depth (ft)	Samples	Sample No.:	Consistency	Soil Description/Classification	Notes:
0				4" concrete	Fill matter
1				Silty f-m sands Some brick particles  Brown & coarse sand  " " "  " " "	Groundwater not encountered
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15	X				
16				BT @ 16' 685	
17					
18					
19					
20					
21					
22					
23					
24					
25					

Date: 7/1/03  
 Start: \_\_\_\_\_  
 Finish: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_



EMTEQUE Corp.  
 505 Eighth Avenue, Suite 900  
 New York, NY 10018

Boring No. 60 Worth SB-2  
 Surface Elev. \_\_\_\_\_  
 GW Depth: Unknown  
 Drilling Method: DPT

**SUBSURFACE LOG**

Project: DDC Worth Street Corridor / Manhattan

Location: State Supreme Court  
 60 Center Street

Field Manager: Pelletier  
 Adib

Depth (ft)	Samples	Sample No.:	Consistency	Soil Description/Classification	Notes:
0				4" concrete	Fill matter Groundwater not encountered
1				Silty f-m sands Some brick particles	
2					
3					
4					
5				Brown & coarse sand	
6					
7					
8					
9				" " "	
10					
11					
12					
13				" " "	
14					
15	X				
16				BT @ 16' 685	
17					
18					
19					
20					
21					
22					
23					
24					
25					

Date: 7/3/03  
 Start: \_\_\_\_\_  
 Finish: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_



EMTEQUE Corp.  
 505 Eighth Avenue, Suite 900  
 New York, NY 10018

Boring No. 111 Worth SB-1  
 Surface Elev. \_\_\_\_\_  
 GW Depth: Unknown  
 Drilling Method: DPT

**SUBSURFACE LOG**

Project: DDC Worth Street Corridor / Manhattan

Location: Tribeca Rentals  
 111 Worth Street

Field Manager: Pelletier  
 Adib

Depth (ft)	Samples	Sample No.:	Consistency	Soil Description/Classification	Notes:
0				Concrete	Fill matter
1					Groundwater not encountered
2				Silty sand / brick / gravel	Construction debris
3					
4					
5					
6					
7					
8				Brown medium to coarse sand	
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20				BT @ 20' bgs	
21					
22					
23					
24					
25					

Date: 7/3/03  
 Start: \_\_\_\_\_  
 Finish: \_\_\_\_\_  
 Page \_\_\_\_\_ of \_\_\_\_\_



EMTEQUE Corp.  
 505 Eighth Avenue, Suite 900  
 New York, NY 10018

Boring No. 111 Worth SB-2  
 Surface Elev. \_\_\_\_\_  
 GW Depth: Unknown  
 Drilling Method: DPT

**SUBSURFACE LOG**

Project: DDC Worth Street Corridor / Manhattan

Location: Tribeca Rentals 111 Worth Street

Field Manager: Pelletier Adib

Depth (ft)	Samples	Sample No.:	Consistency	Soil Description/Classification	Notes:
0				Concrete	Fill matter
1				silty sand / brick / gravel	Construction debris
2					
3					
4					
5					
6				Brown medium to coarse sand	
7					
8					
9					
10					
11					
12					
13					
14					
15	X				
16				BT @ 16' bgs	
17					
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Contractors/Consultants can obtain laboratory analytical results from New York City Department of Design and Construction Infrastructure Division, Program Administration – Engineering Support Services.

**END OF ADDENDUM NO. 5**

**This Addendum Consists of Eighty-Four (84) Pages**

ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL AND PRIVATE UTILITY WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO.6

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DATED: November 21, 2014

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THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. The Contractor shall be responsible for compliance with all the provisions of the following Articles, Appendixes, Specifications, Sketches and Scope of Work, which are hereby made a part of the original contract documents:
  - A. The "JOINT BID WITH PRIVATE UTILITY COMPANIES SPECIAL PROVISIONS" (Pages A6-4 through A6-21 in this Addendum); and the following specialty work items (contained on Pages A6-22 through A6-67):
    - JB 402T.V1A - Existing Vacant Concrete Encased Telecommunication Conduits Placed in Final Position with Concrete Encasement
    - JB 404 - Pier and/or Plate Method or Protection for Ductile Iron Water main and Other Shallow Facilities
    - JB 620 - Installation of Steam pipe
    - JB 621 - Installation of Steam pipe fitting
    - JB 625 - Installation of Steam Equipment
    - JB 803 - Line Cut by Pneumatic Tools in Lieu of Saw Cut Associated with Roadway Operations
    - JB 850 - Placing Rubber Sheets for Utility Facilities
  - B. The Private Utilities reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", dated August 1, 2005, and which is available for pick up between 8:30 A.M. and 4:00 P.M. at 30-30 Thomson Avenue, First Floor Bid Procurement Room, L.I.C., N.Y. 11101;
  - C. Private Utilities Scope of Work, Test Pits and Sketches (Pages A6-68 through A6-165 in this Addendum); and,



## D. Private Utility drawings (24 Sheets) consisting of:

- Drawing JB1, Utility's General Notes and Conditions. (All Utilities), (1 Sheet).
- Drawing JB2 through JB4, Mass Excavation Plan (Con Edison, ECS and AT&T) (3 Sheets).
- Drawing JB5 through JB7, Special Care Excavation Plan (JB401A, JB700). (Con Edison, ECS and AT&T), (3 Sheets).
- Drawing JB8 through JB10, Special Care Excavation Plan (802JA, 802JB) . (Con Edison, ECS and AT&T), (3 Sheets).
- Drawing CE1 through CE5, Existing Facilities Plan, (Con Edison), (5 Sheets).
- Drawing CE6 through CE10, Proposed Facilities Plan, (Con Edison), (5 Sheets).
- Drawing CE11 through CE13, Maintenance and Protection of traffic Plans, (Con Edison), (3 Sheets).
- Drawing ECS1, Existing Facilities Plan (ECS), (1 Sheet).

2. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 450, pages 56, 57, and 58;  
Note: Items under JB 450 are task driven operation items and are not based on crew size. These items are divided into three unique types, each of which provides a description of applicability and typical use. The "Method of Measurement", on page 57, states that "The actual crew performing the operation will not be considered by the facility operator, in consultation with the Resident Engineer, when determining the applicable Unit Item Type, which shall be only as per the task performed."
3. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 225, page 10, Article A. Description;  
Delete the last four lines of text in their entirety, beginning with the words: "accordance with Specification under Addendum #1, . . .";  
Substitute the following revised text: "accordance with Specification Section 7.18 - Controlled Low Strength Material (CLSM), in the Standard Highway Specification. All backfill within the maximum excavation limits shown in Sketch No. JB 225 shall be of controlled low strength material (CLSM) in compliance with requirements of Section 7.18, and its cost shall be deemed included in this item."
4. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 225, page 10, Article B. Materials;  
Delete the first sentence in its entirety, beginning with the words: "Furnish Controlled Low Strength Material fill or backfill . . .";  
Substitute the following revised sentence: "Furnish Controlled Low Strength Material fill or backfill as required and specified in Section 7.18 - Controlled Low Strength Material (CLSM), of the Standard Highway Specification."
5. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 226, page 12, Article A. Description;

Delete the last five lines of text in their entirety, beginning with the words: "accordance with Specification under Addendum #1, . . .";  
Substitute the following revised text: "accordance with Specification Section 7.18 - Controlled Low Strength Material (CLSM), in the Standard Highway Specification. All backfill within the maximum excavation limits shown in Sketch No. JB 225 shall be of controlled low strength material (CLSM) backfill in compliance with Section 7.18 in the Standard Highway Specifications, and its cost shall be deemed included in this item."

6. Refer to the Private Utility reference document called "JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN", Specification for JB 226, page 12, Article B. Materials;

Delete the first sentence in its entirety, beginning with the words: "Furnish controlled low strength material fill or backfill . . .";  
Substitute the following revised sentence: "Furnish controlled low strength material fill or backfill as required and specified in Section 7.18 - Controlled Low Strength Material (CLSM), of the Standard Highway Specification."

7. In addition, the Contractor shall be required to adhere to the following guidelines for Con Edison specialty work to ensure that Con Edison's pre-qualifications and approval are satisfied:
  - A. The Contractor may perform Con Edison gas and/or steam specialty work at their option, if they are Con Edison pre-qualified. If the Contractor elects not to perform the specialty work or if the Contractor is not Con Edison gas and/or steam qualified, then the Contractor shall sub-contract the specialty work to Con Edison pre-qualified gas and steam contractors on page A6-33.
  - B. Contractors that would like to become Con Edison gas qualified should contact George Bove, of Con Edison's Learning Center at 718-425-6016 for additional information.
  - C. Contractors that would like to become Con Edison steam qualified should contact Ed Eng, of Con Edison's Steam Operations Department at 212-894-9527 for additional information.

## JOINT BID WITH PRIVATE UTILITY COMPANIES SPECIAL PROVISIONS

The following shall become a part of and apply to the Contract:

As further described in this document, pursuant to the Act, the City is bidding jointly Project ID: HMMWTCA7E. The City has combined its Public Work and the Utility Work into one bid package. All prospective bidders should be alerted to the fact that the City prepared all specifications, drawings, and all other necessary contract documents for the Public Work sections. All prospective bidders should be alerted to the fact that each utility prepared its/ Utility Work specifications, drawings, and all other necessary contract documents for the Utility Work sections.

### Article 1. GENERAL INFORMATION:

.1 Sections 1 through 5, inclusive, of Chapter 24 of the Unconsolidated Laws of the State of New York, 2004 Regular Session, as amended, commonly referred to as the Coordinated Construction Act for Lower Manhattan (the "**Act**"), authorizes the City of New York (the "**City**") to, among other things, plan its work in Lower Manhattan, as defined below, with the Utilities, as defined below, bid jointly with the Utilities, and to enter into an agreement with the Utilities to implement the intentions of the Act.

.2 Pursuant to the Act, the City has entered into an agreement (the "Joint Bid Agreement") with the following Utilities: Consolidated Edison Company of New York, Inc., ("**Con Ed**"), Empire City Subway Company Ltd., ("**ECS**"), Time Warner Entertainment Company, L.P., d/b/a Time Warner Cable through its New York City division ("**TWCNYC**"), and American Telephone and Telegraph ("**AT&T**") to include their Utility Work, as defined below, in contracts let by the City, with regards to the facilities owned by the Utilities in the project area.

Please read over those amended sections to follow and understand clearly the relationship of the City, the Utilities and the Contractor in this joint bid contract. Also, please read over carefully the sections that deal with approval of payments by the City and Utilities and disputes, if any, with the Utilities for the Utility Work sections.

The General Provisions of DDC's infrastructure contract, namely - General Provisions, Articles 10.15 through 10.18 - General Provisions of the Standard Sewer and Water Main Specifications of the New York City Department of Environmental Protection, dated July 1, 2014, and Article 1.06.30 - NYCDOT Standard Specifications, as they apply to those utility companies which have entered into the Joint Bid Agreement with the City are hereby deleted and replaced with the following provisions. The above listed provisions are and shall remain applicable as to utility companies which have not entered into the Joint Bid Agreement.

**DEFINITIONS:**

.3 "Business Days" or "Days" shall mean Monday through Friday, excluding holidays.

.4 "City Accommodations" shall mean any changes made to the Public Work at the request and expense of the Utility during Pre-engineering or at any other time and may include, but shall not be limited to, altering the location of City Facilities; changing the type of City Facilities constructed; extending the length or number of City Facilities constructed, including additional paving; and, changing or adding materials used for the Public Work project.

.5 "City Facility(ies)" shall mean any facility owned by the City, including, but not limited to, roadways, streets, highways, parkways and other thoroughfares, bridges, sewers, culverts, catch basins, chutes and water mains.

.6 "City's RE" shall mean the City's resident engineer, who will have the overall responsibility for overseeing and managing all issues concerning safety, design, coordination, schedules and payments for the Joint Bid Project.

.7 "Commissioner" shall mean the Commissioner of DDC.

.8 "Contingent Items" shall mean the items to be taken and understood to mean all labor, material and equipment necessary to complete extra work and for which unit prices have been fixed in the City's construction contract.

.9 "Coordinated Construction Act for Manhattan" or "Act" shall mean Sections 1 through 5, inclusive, of Chapter 24 of the Unconsolidated Laws of the State of New York, 2004 Regular Session, as amended.

.10 "DDC" or "Department" shall mean the City's Department of Design and Construction, or any other agency or department that is acting as the Department's agent in the development or construction of Public Work projects in Lower Manhattan and Joint Bid Projects.

.11 "DOT" shall mean the City's Department of Transportation.

.12 "Gas Agreement" shall mean a separate gas cost sharing allocation agreement, dated June 29, 1989, as amended, between the City and Con Ed.

.13 "Joint Bid Project(s)" shall mean a construction project in Lower Manhattan that the City and Utilities agree will be awarded pursuant to the Procurement Policy Board Rules and will include both City Facilities and Utility Facilities.

.14 "Interference Work" shall mean such work as is required to be performed by the Contractor during the performance of Public Work, as defined herein, in order to maintain, protect, support, shift, alter, relocate, remove, and/or replace Utility Facilities at the Utilities' expense.

.15 "Lay Outs" shall mean the Utilities' plans and schedules for any proposed Specialty Utility work.

.16 "Manhattan" shall mean that area as defined and described in the Act.

.17 "MPS" shall mean the maintenance and protection of the construction site of a Joint Bid Project.

.18 "MPT" shall mean the maintenance and protection of the traffic on and near a Joint Bid Project.

.19 "Multiplier" shall mean an adjustment factor to be applied to the all-inclusive unit prices set forth in the Unit Price Book that a Contractor will provide in its bid that the City will use to determine the bid price on a Joint Bid Project that includes all of the Contractor's costs and expenses related to the performance of the work, management, supervision and administration, all items of its overhead, and any anticipated profit.

.20 "Other Public Agency" shall mean any government entity other than the City's DOT or Department of Environmental Protection. Such other government entities include, but are not limited to, the Port Authority of New York and New Jersey and the Transit Authority.

.21 "PPB Rules" shall mean the City's Procurement Policy Board rules, as amended.

.22 "Pre-engineer" or "Pre-engineering" shall mean a process undertaken by the Utilities on all Joint Bid Projects whereby the Utilities will determine and mark-out current Utility Facilities, and design the location and/or re-location of Utility Facilities in a manner that is to the extent practicable, efficient and cost-effective for both the City and the Utilities to avoid or ameliorate disturbances to the City Facilities and the Utilities Facilities, and in which the City and Utility participate in prior to the award of a Joint Bid Project contract.

.23 "Project Manager" shall mean the individual(s) designated by each Utility to the Joint Bid Project as a full-time person with the authority to represent the Utility, render binding decisions on behalf of the Utility, coordinate all Utility Work and facilitate all necessary decisions regarding Utility Facilities.

.24 "Public Work" shall mean the following: (a) construction, reconstruction, installation, alteration, maintenance, repair, grading, re-grading, regulating and improvement of roadways, highways, streets, parkways and other thoroughfares, and bridges located within Lower Manhattan and (b) similarly for sewers, culverts, catch basins, chutes and water mains. This also includes all City Accommodations.

.25 "REI" shall mean the resident engineering and inspection services procured by the City in connection with a Joint Bid Project.

.26 "Shared Items" shall mean the bid items in the City's construction contract in which the total cost will be paid for by the City and the Utilities in accordance with their share as mutually agreed upon.

.27 “Specific Public Work Items” shall mean a detailed set of specifications prepared by the City based on the City’s engineering, design and plans that will represent the Public Work portion of the Joint Bid Project and it is these unit price items and quantities related to the Public Work that will be bid upon and evaluated by the City for the Public Work portion of the City’s construction contract.

.28 “Specific Shared Items” shall mean a detailed set of specifications prepared by the City based on the City’s engineering, design and plans that will represent the Shared Items portion of the Joint Bid Project and it is these unit prices and quantities related to Shared Items that will be bid upon and evaluated by the City for the Shared Items portion of the City’s construction contract.

.29 “Specialty Contractors” shall mean any third party contractors hired by a Utility to perform Specialty Utility Work.

.30 “Specialty Utility Work” shall mean work traditionally performed only by the Utility using its own forces or Specialty Contractors that is necessary for the completion of the Joint Bid Project including, but not limited to, the installation and removal of insulation, “live” gas and steam work, pipe ripping, cable-related work and environmental clean-up work.

.31 “Specific Utility Work Items” shall mean a detailed set of specifications prepared by the Utilities based on the Utility’s Pre-engineering that will represent the Utility Work portion of the Joint Bid Project for which unit price items and quantities related to Utility Work will be bid upon by Contractors and evaluated by the City for the Utility Work portion of the City’s construction contract.

.32 “Unit Price Book” shall mean an inclusive list of construction tasks with corresponding all-inclusive unit prices set by the City for its tasks and set individually by each Utility for their individual tasks upon which Contractors will bid a Multiplier. If there is extra work for the City or a Utility, then either the City or Utility may use any available applicable unit from the Unit Price Book regardless of whether it is considered or defined as a City unit or Utility unit.

.33 “Utility Capital Work” shall mean construction of new, relocation or replacement Utility Facilities, the cost of which is not normally expensed by the Utility in accordance with the New York State Public Service Commission’s Uniform System of Accounts or generally accepted accounting principles, and which is not Interference Work, as defined herein.

.34 “Utility Facility(ies)” shall mean the property owned by the Utilities, including, but not limited to, pipes, poles, conduits, wires, lines and other facilities, structures or property of the Utilities that may be below ground, at ground-level or above ground, that could disturb or interfere with the Public Work.

.35 “Utility” or “Utilities” shall mean the following entities: (a) Con Ed, (b) ECS, (c) TWCNYC, (d) and AT&T.

.36 “Utility Work” shall mean all Interference Work and Utility Capital Work.

**Article 2. PERFORMANCE OF A JOINT BID PROJECT:**

The Contractor shall perform all Public Work, Interference Work, Shared Items, and Utility Work, shown in the contract documents.

.1 All of the contract requirements and conditions shall be applicable to the Public Work, Interference Work, Shared Items, and Utility Work.

.2 The bid items, specifications, and estimated quantities have been designed to fully compensate the Contractor for its costs to perform Interference Work, Shared Items, and Utility Work.

.3 The Contractor agrees that its bid items and prices for Interference Work, and Utility Work shall include all incremental costs and/ or additional compensation for performing Public Work including: coordination of its work with the Utilities, loss of productivity and efficiency, idle time, delays (including any delays occasioned by negotiation of a contract change), change in operations, mobilization, remobilization, demobilization, added cost or expense, loss of profit, other damages or impact costs that may be suffered by the Contractor because of direct or indirect obstructions due to the presence of Utility Facilities, such as conduits, ducts or duct banks containing conductors for live and/or abandoned electric, telephone, cable TV, any type of communication cables, "Non Cost Sharing" gas mains and services, steam mains, and various non-hazardous encasement materials or utility structures located within the Public Work project area.

.4 The Contractor agrees that it shall be paid based on the single Multiplier submitted and that such single Multiplier shall apply to the Public Work, Interference Work, Shared Items, and Utility Work. The Contractor further agrees that in the performance of the contract, the Multiplier shall be applied to every item in the Unit Price book (excluding Item Nos. 6.85 A, HW-904, JB-900(CE), JB-900(ECS), JB-900(TW), JB-900(AT&T), and UTL-GCS-2WS) that is or may be necessary to perform the Joint Bid Project, regardless of whether the work is performed for the City or a Utility.

.5 The Contractor agrees that the Utilities are third party beneficiaries of the contract for a Joint Bid Project, and that the Utilities shall be entitled to rely upon and enforce any and all terms and conditions of the contract for a Joint Bid Project as it pertains to the Contractor and the performance of the Interference Work, Shared Items and Utility Work.

.6 The Contractor agrees that by the act of submitting a bid on the Joint Bid Project, the Contractor and its subcontractors shall waive any and all rights they may have, if any, under law, contract or otherwise, to compel (or to compel the City to assert any right the City may have to require, including the issuance of any directives or so-called "order outs" under the New York City Administrative Code) any or all of the Utilities to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove Utility Facilities in connection with the work to be performed on a Joint Bid Project.

.8 The Contractor agrees that where multiple Utilities cross a City trench at a distance of one (1) foot or less at the narrowest point from each another, as per Sketch J.B. 100 E of the JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR MANHATTAN reference document, then payment for support and protection of utilities will be made as one crossing to be paid at the highest unit price of the applicable Utility crossing items.

**Article 3. BIDDING AND AWARDING OF A JOINT BID PROJECT**

.1 General Information. The City has prepared contract documents which include specifications, drawings and all other necessary contract documents for both Public Work and Utility Work. The City will create a Unit Price book for the public Work portion of the Joint Bid Project and each Utility will create a Unit Price Book for the Utility Work portion of the Joint Bid Project. The contract documents include a single Unit Price Book (Volume 1, Bid Booklet) that includes items of work for the Public Work and Utility Work portions of the Joint Bid Project.

.2 Items of Work To Be Bid Upon. In the bid solicitation documents, the City has identified the applicable unit prices from the Unit Price Book and provided estimates of quantities for both Specific Public Work Items and Specific Utility Work Items. Bidders shall be required to bid a Multiplier on all Items. For the purposes of identifying the lowest responsive and responsible bidder, a bidder's Multiplier shall be calculated on the City's Specific Public Work Items and estimates and the Utilities' Specific Utility Work Items and estimates.

.3 Single Multiplier Bid SUBMISSION. On Joint Bid Projects, all bidders shall be required to bid a single Multiplier for the Public Work, Utility Work, and Shared Items.

.4 Application Of The Bidder's Multiplier For Reviewing The Lowest Bid. In reviewing a bid to determine the lowest bid, a bidder's Multiplier will be applied to the Specific Public Work Items and the Specific Utility Work Items.

.5 Application Of The Multiplier During Contract Performance. In administering the contract, the Multiplier will be applied to every item (excluding Item Nos. 6.85 A, HW-904, JB-900(CE), JB-900(ECS), JB-900(AT&T), JB-900(TW), and UTL-GCS-2WS) in the Unit Price Book that is or may be necessary to perform the Joint Bid Project, regardless of whether the work is performed for the City, for a Utility or for some or all parties.

.6 The City's Evaluation Of A Bid On A Joint Bid Project. In compliance with the PPB Rules and the Act, the City will evaluate bids and determine if the lowest monetary bid is responsive. The PPB Rules set forth the factors affecting the responsiveness of bids. A responsive bid will, among other things, comply with all material terms and conditions of the contract solicitation documents. In addition, a bidder's Multiplier shall apply to the estimated unit price for each and every item contained in the Unit Price Book for the entire Joint Bid Project, regardless of whether the City or the Utilities have estimated a quantity for the item or items.

.7 The City's Evaluation To Determine That A bidder Is Responsible. After the City has determined that a bid is responsive, the City will evaluate the bidder to determine if it is a responsible entity eligible to receive public funds. The PPB Rules set forth the factors affecting a bidder's responsibility. A responsible bidder will, among other things, affirmatively demonstrate to the City its responsibility, including, when necessary, the responsibility of its proposed subcontracts.

.8 Calculation Of The Lowest Bid For The Joint Bid Project. The lowest bid for the Joint Bid Project will be calculated by multiplying the bidder's Multiplier by the unit prices for the Specific Public Work Items, the Shared Items and the Specific Utility Work Items by the estimated quantities as set forth in the contract solicitation documents.

.9 The City's Award Of A Contract. In compliance with the Act, the City, in its sole discretion, will award a contract based on the lowest Multiplier as submitted by a responsive and responsible bidder.



**Article 4. CONSTRUCTION MANAGEMENT OF THE JOINT BID PROJECT.**

**.1 Safety, Maintenance and Protection of Site and Traffic.**

- (a) **City's Responsibilities.** The City will inspect the Joint Bid Project site and direct the Contractor to implement the Contractor's safety, MPS and MPT plans. The City or the Contractor will provide the Utilities a copy of the Contractor safety plan on or before the date of the City's Notice To Proceed, but not later than ten (10) Business Days after the Notice To Proceed.
- (b) **Utilities' Responsibilities.** Before any Specialty Contractor starts working, the Utilities will give the City a copy of the Specialty Contractor's safety plans as approved by the Utility and will allow the City to monitor compliance with such safety plans. The Utilities agree that the Specialty Contractor's approved safety plan shall, at a minimum, follow the Contractor's safety plan in place on the specific Joint Bid Project.

**.2 Guarantees and Warrantees.** The Contractors' guarantee and warrantee of the Utility Facilities shall be as stipulated in the Utility specifications. The Utilities agree that upon release of retention and/or any other withholdings by the City upon completion of the Joint Bid Project, the Utilities shall release the City and its contractor from enforcement of any warrantees and/or guarantees of the City Contractor that extend beyond this time frame.

**.3 Disputes On Public Work Only.** In general, the Unit Price Book will control with regard to the pricing of all items. Notwithstanding, there may be disagreements between the City and the Contractor over the quantities of Public Work performed by the Contractor or which unit prices are applicable to the Public Work performed by the Contractor. If there are any disputes over a Contractor's payment requisition and invoice for Public Work only, then the City's standard construction contract will govern how the City and the Contractor will address such disputes.

**.4 Disputes On Utility Work Only.** In general, the Unit Price Book will control with regard to the pricing of all items. Notwithstanding, there may be disagreements between the Utilities and the Contractor over the quantities of Utility Work performed by the Contractor or which unit prices are applicable to the Utility Work performed by the Contractor. If there are any disputes over the Contractor's payment requisition and invoice for Utility Work only, then all such disputes will be resolved through the procedures set forth below and in Appendix "C", which is attached.

**.5 The Utilities' Responsibilities In Identifying Disputes On Utility Work Payment Requisitions and Invoices.** The Utilities will review all payment requisitions by the Contractor for the Utility Work only. If, during the review of a payment requisition, the Utility identifies an issue in the payment requisition for the Utility Work only, the Utility will immediately notify the City and the Contractor by a written notice. After sending such a written notice, the Utility agrees to meet with the Contractor to resolve the issue. If the issue cannot be resolved, then the Utility or the Contractor shall seek arbitration according to the procedures for resolving Utility and Contractor disputes, as set forth herein in Appendix "C". This arbitration process will be outside the jurisdiction of the City's contract dispute resolution board process. The bidders and, ultimately, all Joint Bid Project Contractors, understand and agree that the performance of the Public Work shall continue during all negotiations, discussions, and arbitration proceedings.

.6 The Utilities' Responsibilities During An Arbitration Of A Dispute On Utility Work Payment Requisitions and Invoices. During an arbitration of a dispute, the Utility will continue to review and approve payment requisitions submitted by the Contractor. The City will continue to pay the City Contractor for these disputed work items.

.7 Resolution Of A Dispute On Utility Work Payment Requisitions And Invoices. Once the arbitrator(s) have made a decision or there has been a negotiated settlement, the Utility shall notify the City within ten (10) calendar days from the date of the arbitrator(s)'s award or a negotiated settlement, and shall advise the City as to the final resolution of the dispute, the amount of the award or settlement, and any necessary payment adjustments that may have to be made to the Contractor's requisition(s). If the arbitrator's award or the negotiated settlement alters any payment requisitions that have previously been submitted by the Contractor and approved for payment by the Utilities and the City, then the Contractor shall submit a revised invoice and payment requisition to the City for all previously invoiced disputed Utility Work in accordance with the final arbitrator(s)'s award or the negotiated settlement. The City shall apply a credit toward the payment of the Contractor's revised invoice based on the payments made previously to the Contractor on the disputed Utility Work during the arbitration proceeding, which may result in either a net debit or a net credit balance due on the Contractor's revised invoice.

.8 Claims of Delay. If Contractor claims or alleges that delays were caused by a Utility for failure to supply and/or provide Specialty Contractors in a timely manner, then the Contractor may bring a claim against the Utility. Neither the Contractor nor the Utility shall bring a delay claim action against the City either in a Court of Law or the City's contract dispute resolution board process; and to the extent the Contractor alleges a delay was caused by a Utility, the Contractor will be limited to bringing such legal action in a Court of law and shall not be able to seek arbitration over any delay claims or delay-related claims. If the Contractor and Utility initiate a legal action against each other, this legal action will be outside the jurisdiction of the City's contract dispute resolution board process and the City shall not be a party in the litigation process.

## **Article 5. Extra Work and Quantity Overruns**

.1 Extra Public Work. If there are changes, extra work, or omitted work, regarding the Public Work only, then the City's standard construction contract will govern how the City and the Contractor will address such changes, extra work, or omitted work.

.2 Extra Utility Work. Quantity overruns shall be permitted for all Utility Work items in the Unit Price Book. At all times, the Utilities and the Contractor acknowledge and understand the City's desire to complete the Public Work on schedule, and agree to cooperate with and work with the City and each other to resolve any extra Utility Work issues that may arise in the field. The Contractor and Utilities shall resolve such disputes in accordance with Article 5.above, and Appendix "C" herein.

.3 No Admission. Nothing herein shall be construed to be an admission, acknowledgment or statement that the performance of any Utility Work or any extra Utility Work caused any delay to Public Work or resulted in any additional cost or expenses relating thereto.

.4 Utility Work Is Covered By The Unit Price Book. If the Utility determines that the alleged extra Utility Work is part of the City's contract documents and denies the Contractor's claim or request for a change order, then after receiving the Utility's written response, the Contractor shall either accept the Utility's determination or immediately seek to have the issue resolved

through the dispute resolution process, as set forth in Appendix "C". The parties agree to follow the steps described in Article 5. above, and Appendix "C" herein.

.5 Extra Utility Work For Which There Are Items In The Unit Price Book. If the Utility determines that there is extra Utility Work for which there are items in the Unit Price Book, and if there is arbitration over such extra Utility Work, then while the arbitration is pending, the City shall continue to pay the Contractor based on the Utility's final offer and record keeping, i.e., based on the Unit Price Book and the Contractor's Multiplier.

.6 Use of contract Items JB-900(CE), JB-900(ECS), JB-900(TW), & JB-900(AT&T) for "Extra Utility Work Costs Allowance" – Fixed Sum – These items are applicable only when Utility and Contractor reach a cost agreement for extra Utility Work. If it is determined that there is extra Utility Work for which there are no items in the Unit Price Book or for which there are items and prices listed subject to the Multiplier but no associated quantities, then the Utility and Contractor shall define the scope of work and if there are no applicable items in the Unit Price Book, negotiate the cost of supporting and protecting, and/or alleviating the impact on the Public Work caused by the extra Utility Work with each other with the understanding that the performance of Public Work shall continue during all negotiations and discussions.

- (a) An Agreement Reached. If the parties reach an agreement on cost for the extra Utility Work, then the Contractor and the Utility shall jointly submit to the City's RE a copy of the agreed upon prices together with all supporting documentation. The Contractor shall then be paid by requisitions submitted in accordance with the agreed upon prices. The total value of such agreed upon cost shall be paid with Item JB-900(CE), JB-900(ECS), JB-900(TW), or JB-900(AT&T), as appropriate.
- (b) No Agreement Reached. If the parties do not reach an agreement on cost for the extra Utility Work within seven (7) Business Days from the start of negotiations, then the parties will resolve the dispute through the dispute resolution process, as set forth in Appendix "C". During the arbitration process, the extra Utility Work will be performed and paid for on a time and material basis, as set forth in the City's standard construction contract. Notwithstanding, if the Utility and the Contractor can agree on an alternative method for payment for the Utility Work, then that method may be applied by the Utility, with notice to the City. Contract bid prices for any applicable items of work with bid multiplier used shall be converted to an allowance for time and material charges. The total value of such Time and material or alternative method of payment shall be paid with the applicable Item JB-900.
- (c) Payments. Payments for agreed upon Utility Work extra work or quantity overruns shall be made through the applicable JB-900 allowance items and shall be documented with a proper Change Order Request. Change Order Requests and Overrun Change Order Requests for Utility Work shall be submitted separately from Public Work Change Order Requests and Overrun Change Order Requests. The cost breakdown for each participating Utility shall be clearly tabulated and sub-totaled. Public Work costs shall not be combined with Utility Work Costs on Change Order Requests of any type.

.7 Conclusion Of The Arbitration. Upon conclusion of the arbitration process and resolution of the dispute, the Contractor shall notify the City within ten (10) calendar days from the date of the arbitrator(s)'s award or a negotiated settlement, and shall advise the City as to the final resolution of the dispute, the amount of the award or settlement, and any necessary payment adjustments that may have to be made to the Contractor's requisition. If there is an award to the Contractor deriving from the arbitration proceeding, then the Utility will be responsible to pay such award directly to the Contractor, notifying the City of such

determination, making payment within ten (10) calendar days of such determination, and, if applicable, assisting the City in any necessary contract payment adjustments that may have to be made. If the arbitrator's award or the negotiated settlement alters any payment requisitions that have previously been submitted by the Contractor and approved for payment by the Utility and the City, then the Contractor shall submit a revised invoice and payment requisition to the City for all previously invoiced disputed Utility Work in accordance with the final arbitrator(s)'s award or the negotiated settlement. The City will send a copy of the revised invoice and payment requisition to the Utility for their review and confirmation. Based on the Utility's direction, the City shall apply a credit toward the payment of the Contractor's revised invoice based on the payments made previously to the Contractor on the disputed Utility Work during the arbitration proceeding, which may result in either a net debit or a net credit balance due on the Contractor's revised invoice. The Utilities will be responsible to assist the City in determining any necessary contract payment adjustments that may have to be made as a consequence of the dispute resolution.

## **Article 6. Approval of Extra Utility Work**

.1 Extra Utility Work. To the extent that Utility Work is not specified in the City's contract documents, then the method of performing such extra Utility Work will be subject to the approval of the Utility involved. The Contractor shall immediately notify the City and Utilities of any unplanned extra Utility Work issues. The Utility shall have no more than five (5) Business Days upon receipt of the Contractor's notice to define the scope of work of the extra Utility Work. Notwithstanding the foregoing, the City may reasonably object to a method approved by the Utility if it impacts on a City Facility.

.2 Changes In The Public Work After Pre-engineering. During the performance of the Joint Bid Project, conditions may arise in which the City determines that the Public Work shown on the City's contract plans and documents must be modified. In such event, the City's RE will notify in writing the Utilities' Project Manager of the determination to order a change.

.3 Specialty Utility Work Performed By Utilities. If conditions arise on a Joint Bid project, the City may direct the Utility to perform work itself or the Utility may voluntarily decide to perform the work itself. Since Time is of the Essence, the Utility and the Contractor agree to discuss with the City the method that will best preserve the City's schedule for completing the Joint Bid Project. If the City directs or the Utility elects to perform the work, then the Utility shall have two (2) Business Days to decide whether it will perform such work itself, provide a Specialty Contractor to perform the work, or authorize the Contractor using a Utility-approved subcontractor to perform the work. If the Contractor option is used, then the Utility shall receive all bills directly and make all payments directly to the Contractor. After the Utility has made its decision and notified the City and the Contractor, the Utility shall have an additional two (2) Business Days to mobilize and commence work. If the Utility elects to perform the work with its own workers or with its specialty contractor, the City shall order its Contractor to make the required area of Joint Bid Project site available for a reasonable period of time so that the Specialty Work may be completed. Any cost to the Contractor resulting from the Utility's election to perform Utility Work with its own work forces or with its Specialty Contractor shall be the sole responsibility of the Utility and shall be a matter of adjustment between the Utility and the Contractor.

.4 The Site And Insurance. The Utilities are responsible for furnishing to the City a copy of all certificates of insurance as evidence of such insurance coverage in which the City and the Contractor are Additional Insured or such other documentation of self-insurance coverage if the Utility does not utilize an insurance company.

.5 Failure To Commence The Specialty Utility Work. After notifying the City and the Contractor of what action is to be taken and when the Specialty Utility Work will commence, if the Utility does not mobilize and commence this Specialty Utility Work within two (2) Business Days after such notification, then the City may take whatever action it deems necessary to complete the Public Work.

## **Article 7. LIABILITY**

.1 General Information. It is understood that all Utility personnel assigned to a Joint Bid Project by the Utilities are deemed to be employees, sub consultants or subcontractors of the Utilities and not the City.

.2 Third Party Utility Work. The parties recognize that, the existing division of liabilities to third parties shall remain the same as between the City and the Utilities. Therefore, it is understood that for purposes of any liability to third parties arising solely from the Utility work, the Contractor, when performing Utility Work, shall be deemed the independent contractor of the respective Utility for which the Utility Work is being performed at that time, and not a contractor of the City. In addition, it is further understood that when the Contractor is performing Public Work, then the Contractor is deemed the independent contractor of the City, and not a contractor of the utilities.

.3 Third Party Interference Work. For the purposes of third party liability, the Contractor, when solely supporting and protecting Utility Facilities affected by Public Work, shall be deemed an independent contractor of the respective Utility for which the Utility Work is being performed, and not a contractor of the City.

**Article 8. Insurance And Indemnification.** In addition to the insurance requirements set forth in the City's standard construction contract, the following shall be applicable to this Joint Bid Project:

- (a) The Contractor shall include the Utilities as Additional Insured parties on any and all insurance policies required by the City.
- (b) The Contractor shall furnish copies of insurance certificates to the Utilities, as well as to the City.
- (c) The Contractor does hereby indemnify and hold harmless the Utilities for all matters arising from or related to the performance of Utility Work, including without limitation any extra Utility Work, to the same extent that the City is indemnified in this project.
- (d) The Contractor shall be solely responsible for all physical injuries, including death, to all person(s), including, but not limited to, employees of the Contractor and its' subcontractors, and employees of the City and the Utilities, or damage to property, including, but not limited to, property of the City, the Utilities, or the Contractor or its' subcontractors while at the Joint Bid Project site.
- (e) The Contractor shall indemnify and hold harmless the City and the Utilities from loss and liability from all claims on account of such injuries to persons, including death, or damage to property, and from all costs and expenses in suits which may be brought against the City and/or the Utilities on account of any such injuries to persons, including death, or damage to property, irrespective of the actual cause of the accident and irrespective of whether it shall have been due to

negligence of the Contractor or its' subcontractors or negligence of the City or the Utilities, their respective agents, servants or employees to the extent permitted by law.

.2 Specialty Contractors' Insurance Requirements. If there is Specialty Utility Work performed in connection with the Joint Bid Project, then the Utilities shall provide the following in its contracts with the Specialty Contractors:

- (a) The City and the Contractor shall be listed as an Additional Insured on all insurance policies required to be purchased and maintained by the Utilities;
- (b) If there is an incremental cost for such additional insurance, such cost shall be the responsibility of the Utilities and not the City or the Contractor; and
- (c) The Specialty Contractors shall indemnify and hold harmless the City and the Contractor from matters arising from or related to the performance of Specialty Utility Work to the same extent that the Utilities are indemnified.

#### **Article 9. CONFLICTING PROVISIONS; ADHERENCE TO NYCDEP AND NYCDOT STANDARD PAY LIMITS**

.1 General. In the event that any other provisions of this City contract shall conflict or be inconsistent with these Special Provisions, then these Special Provisions shall govern all Utility Work and extra Utility Work.

.2 Width And Depth Of Trenches. For the purpose of this City contract, the Contractor hereby accepts and agrees that prices for all sewers, water mains, catch basins and connections shall be based on trench widths and depths not greater than New York City Department of Environmental Protection ("DEP") Bureau of Sewers and Bureau of Water Supply payment limits for the respective pipe sizes and basin type as specified, with the exception of trench width restrictions for water main and sewer work items that may be specified in the contract. The Contractor further agrees that its excavation equipment, methods and procedures have been based and selected to insure it for the most efficient procedure and overall cost effective mobilization while performing work and providing trench widths and depths which shall not be greater than the standard NYCDEP and/or NYCDOT payment limits, including all exceptions specified in the City contract for respective pipe sizes and basin types.

- (a) Requests by the Contractor for changes to trench widths and/or depths may be made, in writing, setting forth the reason(s) for requesting a change. Such changes shall not be approved when, in the sole judgment of the City, field conditions allow the water mains and sewer work to be performed within the limits specified or, the sole purpose of such request is to impact adjacent utilities (public or private) whose support and protection are part of this City contract. Approval will only be given at no additional cost to the City and the Utilities.

[NO FURTHER TEXT HERE.]

**Appendix "C"**  
**Resolutions of Certain Disputes**  
**Arising Between the Contractor and the Utilities**

C.1.0 Applicability. In recognition of the usefulness of a process of alternative dispute resolution for its efficiency, speed and cost-effectiveness in managing conflict and settling disputes that may arise under, or by virtue of, these special provisions of Joint Bidding, the City and Utilities have agreed to the procedures set forth in this **Appendix "C"**. Accordingly, this **Appendix "C"** shall apply to disputes between the Contractor and the Utilities that arise under, or by virtue of, the provisions of this contract, which are set forth in pertinent part, below:

- ❖ The Utilities' Responsibilities. If the Utility identifies an issue in the payment requisition for the Utility Work only, the Utility will immediately notify the City and the Contractor by a written notice. After sending such written notice, the Utility agrees to meet with the Contractor to resolve the issue. If the issue cannot be resolved, then the Utility or the Contractor shall seek to resolve the issue through the arbitration process as set forth herein.
- ❖ If The Utility Determines That There Is No Extra Or Disputed Work. If the Utility determines that the alleged extra Utility Work or the disputed Utility Work is part of the City's contract documents and denies the Contractor's claim or request for a change order, then after receiving the Utility's written response, the Contractor shall either accept the Utility's determination or immediately seek to have the issue resolved through the arbitration process as set forth herein.
- ❖ If The Utility Determines That There Is Extra Work. If the Utility determines that there is extra Utility Work, the extra Utility Work will be paid for based on the Unit Price Book and the Contractor's Multiplier. If all or a portion of the agreed upon extra Utility Work items are not in the Unit Price Book, then the Utility and the Contractor shall negotiate the cost of supporting and protecting, and/or alleviating the impact on the Public Work caused by the extra or disputed Utility Work with each other with the understanding that the performance of Public Work shall continue during all negotiations and discussions. If the parties reach an agreement on cost for the extra or disputed Utility Work, then the Contractor and the Utility shall submit to the City's RE a copy of the agreed upon prices together with supporting documentation. If the parties do not reach an agreement on cost for the extra or disputed Utility Work, then the parties will immediately arbitrate the issue as set forth herein.

C.2.0 Joint Bid Projects. Disputes that arise under this contract, as described above, shall be resolved in accordance with the provisions of this **Appendix "C"**. **Appendix "C"** shall NOT apply to any disputes between the City and the Contractor, or any disputes between the City and the Utilities. Since the arbitration of Utility interference disputes, as described in Article C.1.0 above, is a matter solely between the Utilities and the Contractor, and since the parties agree to reduce or eliminate any costs to the City relating to any arbitration pursuant to this **Appendix "C"**, the parties hereby agree that:

C.2.1 The City shall not be a party in the arbitration process;

C.2.2 Neither the Contractor nor the Utilities shall call as a witness in the arbitration process any City employee, agent or consultant, including the City's RE, his staff or City inspection personnel and

C.2.3 The City shall not be responsible for any costs, fees or monetary awards or price adjustments associated in any way with the arbitration process described in this **Appendix "C"**.

C.2.4 Notwithstanding Articles C.2.1 and C.2.2, the City's obligation to furnish information to the parties shall be limited to those requests as set forth under the New York State Freedom of Information Law, as amended.

C.3.0 Pre-Arbitration Procedures.

- C.3.1 Should a dispute arise between any Utility and the Contractor pursuant to the articles of the Joint Bidding Special provisions, the disputing party shall notify the City and the other party in writing within two (2) Business Days of the dispute that a dispute exists, and briefly describe; (i) the nature of the dispute; and (ii) the proposed resolution and rationale supporting its proposal.
- C.3.2 After notifying the City of the dispute, the disputing parties shall have fifteen (15) Business Days to meet, discuss the issues, exchange documents and/or exchange offers with due diligence and in good faith in order to reach an agreement and resolve the dispute.
- C.3.3 If the disputing parties reach an agreement, they shall immediately notify the City in writing that the dispute has been resolved and describe the terms of the resolution.
- C.3.4 If the disputing parties have not reached an agreement within fifteen (15) Business Days of the date the City was first notified of the dispute, the City may at any time thereafter, in its sole discretion, direct the parties to arbitrate the dispute as set forth below. The disputing parties agree that the City's decision to direct the parties to arbitrate shall be final and binding on all parties.
- C.3.5 Upon receipt of the City's notice to proceed to arbitration, the Contractor shall, within five (5) Business Days, submit to the Utility a written Final Offer, which shall consist of: (i) a description (e.g., units and quantities) of all reasonable and necessary disputed work or extra work which the Contractor contends are not covered by application of the Unit Price Book and the Multiplier; and (ii) a detailed breakdown of the Contractor's proposed prices (e.g., unit prices and quantities) for such work.
- C.3.6 Upon receipt of the Contractor's Final Offer, the Utility shall, within five (5) Business Days, either accept the Contractor's Final Offer or submit to the Contractor a written Final Offer which shall consist of: (i) a description (e.g., units and quantities) of all reasonable and necessary disputed work or extra work, if any; and (ii) a detailed breakdown of the Utility's proposed prices (e.g., unit prices and quantities) for such work, if applicable.
- C.3.7 Once Final Offers have been exchanged by the parties, they may not be modified or withdrawn by either party except by mutual agreement or final settlement of the dispute.



- C.3.8 Upon exchange of Final Offers, the Contractor shall have three (3) Business Days, to either accept the Utility's Final Offer or submit the dispute to the American Arbitration Association ("AAA") to be resolved in accordance with the Construction Industry Arbitration Rules ("Rules") in effect on the date the arbitration is initiated, except as such Rules are modified herein.
- C.3.9 Each of the steps described above shall be a condition precedent to the obligations of the parties in succeeding steps. Since **Time is of the Essence**, should either party fail to comply with any of the pre-arbitration procedures described above, that party shall be deemed to be in default. If, upon receipt of written notice of default by the other party, the defaulting party has not cured the default within three (3) Business Days, the other party may proceed to arbitration solely on the issue of whether the defaulting party was in default of these pre-arbitration procedures. If, after hearing evidence, the arbitrator(s) determine that the defaulting party was in default of these pre-arbitration procedures, then the arbitrator(s) shall enter a final decision in favor of the other party in accordance with the Final Offer submitted by the other party or, if no Final Offer has been submitted prior to the default, according to the last written proposal submitted by the other party.

C.4.0 General Provisions.

- C.4.1 The Utility agrees to pay for any disputed Utility Work while the arbitration proceeding is pending based on the Utility's Final Offer and agrees to pay for any extra Utility Work while the arbitration proceeding is pending on a time and materials basis or alternate method mutually agreed to by the parties, whichever is applicable, based on the Utility's record keeping.
- C.4.2 All determinations by the parties required by this **Appendix "C"** shall be clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination.
- C.4.3 The Utility agrees to copy the City on all communications involving the arbitration process and to notify the City of the final determination.
- C.4.4 The Utility agrees to pay the Contractor directly for any final settlement for extra Utility Work that may be agreed to by the Utilities and the Contractor or any final award for extra Utility Work issued by the arbitrator(s), less credits for any payments previously made by the Utility to the Contractor.
- C.4.5 All of the contract defined terms shall apply here, as if they were re-stated herein.
- C.4.6 Since **Time Is Of The Essence** on all Joint Bid Projects, whenever there is a dispute pursuant to this **Appendix "C"**, the terms of the City's Construction Contract shall remain in full force and effect, and the Contractor shall continue performing all of the City Work and the Utility Work as directed by the City.
- C.4.7 The timeframes set forth herein have been established to ensure that the Joint Bid Project does not stop for any disputes between the Contractor and the Utility.

- C.4.8 All of the timeframes are measured in Business Days, which include Monday, Tuesday, Wednesday, Thursday and Friday, but exclude holidays.
- C.4.9 For all disputes that arise under **Appendix "C"**, the City's role shall be limited to receiving copies of all written communications, and, if applicable, exercise the powers described further in Article C.3.4.
- C.4.10 The Contractor and all subcontractors hired by it agree to waive any rights they may have, if any, under law or equity, contract or otherwise to compel the City to assert any right the City may have, including the issuance of any directives or so-called "order outs" under the New York City Administrative Code, to require any or all of the Utilities to maintain, repair, replace, protect, support, shift, alter, relocate, and/or remove Utility facilities in connection with work to be performed under this contract. However, nothing in this Agreement shall preclude the City from exercising its rights under the law, including the right to issue such a directive to a Utility.
- C.4.11 Each Utility, at its option, shall be named as an additional insured on all insurance policies required to be maintained by the Contractor in connection with the Joint Bid Project. In the event that a Utility opts to be so named as an additional insured, the actual incremental cost, if any, to the Contractor of providing such insurance coverage shall be borne by that Utility. The Contractor shall provide a written statement from its insurance provider documenting the actual cost of this added coverage to the Utility. Under no circumstances shall the cost of insurance coverage on behalf of the Utility be borne by the City. Nothing in this paragraph shall be interpreted to imply the City's acceptance of any additional responsibility or liability for any matter related to the performance of Utility Work. In particular, with regard to any Utility Work performed in accordance with or through this **Appendix "C"**, then the Utility and the Contractor bear joint and full responsibility to ensure that any Utility Work performed by the Contractor is in compliance with all applicable government and Utility regulations.

C.5.0 The Arbitration Procedures.

- C.5.1 Once the AAA has appointed an arbitrator(s), the arbitration shall be scheduled as promptly as possible given the arbitrator(s) and the parties' schedules.
- C.5.2 No later than fourteen (14) calendar days prior to the first day of arbitration, the Utility and Contractor shall submit to the arbitrator(s), and to each other, a summary of each party's respective position, all documentary, photographic or physical evidence on which the party intends to rely, and such other information as is deemed appropriate, along with a copy of each party's "Final Offer" as described above.
- C.5.3 The arbitration shall be conducted and concluded in two (2) days.
- C.5.4 On the morning of the first (1<sup>st</sup>) day of the arbitration, Contractor and/or representatives shall have 3 ½ hours to make a presentation of its claim to the arbitrator(s). During its presentation, Contractor shall not be permitted to produce any evidence that has not already been provided to the Utility and

the arbitrator(s) pursuant to Paragraph C.5.2, above. Contractor shall be permitted to produce any analysis or description of its claim that has been prepared for the purpose of its presentation.

- C.5.5 After the Contractor's presentation, Utility and/or its representatives shall have 2 hours to ask the Contractor questions about its claim and its presentation. Thereafter the arbitrator(s) shall have 2 hours to ask the Contractor questions about its claim and its presentation.
- C.5.6 On the morning of the second (2<sup>nd</sup>) day of the arbitration, Utility and/or its representatives shall have 3 ½ hours to make a presentation of its claim to the arbitrator(s). During its presentation, the Utilities shall not be permitted to produce any evidence that has not already been provided to the Contractor and the arbitrator(s) pursuant to Paragraph C.5.2, above. The Utility shall be permitted to produce any analysis or description of its claim that has been prepared for the purpose of its presentation.
- C.5.7 After the Utility's presentation, the Contractor and/or its representatives shall have 2 hours to ask Utility questions about its claim and its presentation. Thereafter the arbitrator(s) shall have 2 hours to ask Utility questions about its claim and its presentation.
- C.5.8 Subject to the above maximum time limitations set forth above, the arbitrator(s) may conduct the arbitration in such manner, as the arbitrator(s) deems reasonable.
- C.5.9 The arbitrator(s) shall then have one (1) week to select in writing, as the arbitrators' award, that party's Final Offer that appears to be more reasonable, based on the presentations at the arbitration hearings.
- C.5.10 The arbitrator(s) shall have no discretion to grant an award other than one (1) of the two (2) Final Offers submitted by the parties.
- C.5.11 The arbitration award shall be final and binding upon the parties to the arbitration and judgment upon the award may be entered in a court having jurisdiction.
- C.5.12 Any award for work that has already been performed shall be paid on the 7<sup>th</sup> day after receipt of the arbitrator's decision, or on the 30<sup>th</sup> day after completion of the work, whichever is later. Payment for work not yet completed at the time of the arbitrator's decision shall be paid within thirty (30) calendar days of completion of work. Interest shall accrue from the date payment is due at the rate of nine (9%) percent per annum. Either party may cause judgment to be entered in accordance with the arbitrator(s) decision in a court in the State of New York, County of New York.
- C.5.13 Utility and the Contractor initially shall share the arbitrator's fees and any other costs of the arbitration equally. The non-prevailing party shall then pay all arbitrator's fees and costs of the arbitration and shall reimburse the prevailing party for its share of such fees and costs theretofore paid.
- C.5.14 The parties may, at any time, settle any matter submitted to arbitration.

C.5.15 Since **Time is of the Essence**, should any party, at any time after the dispute has been submitted for arbitration, materially fail to comply with: (i) the Rules, (ii) any of these arbitration procedures, or (iii) any procedural decisions by the arbitrator(s), then the arbitrator(s) shall enter an order directing the party to cure its non-compliance within five (5) Business Days. If the party shall fail to comply with the arbitrator(s)' order within the five (5) Business Days, upon receipt of evidence that the non-complying party has failed to comply with the arbitrator(s)' order, the arbitrator(s) shall enter a final decision in favor of the other party in accordance with the other party's Final Offer.

**[NO FURTHER TEXT HERE.]**

**JB 402T.V1A –EXISTING VACANT CONCRETE ENCASED TELECOMMUNICATION CONDUITS  
PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT (L.F.)**

**A. Description**

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to adjust and support and protect and maintain and accommodate the integrity of utility facilities including but not limited to:

1. Conduit(s);
2. Cables and Air Pipe
3. Concrete Encased/Capped Conduit Banks

The work shall be performed in accordance with the specifications, the attached Sketch # CET 402 A and at the direction of the facility operator(s).

**B. Materials**

All materials used to adjust and support and protect and maintain and accommodate the integrity of utility facilities shall be similar to those indicated on the standard Sketches CET 100 A & 100 A-1 and shall be supplied by the Contractor and be approved by the facility operator(s).

Materials used for replacing conduit(s) removed under this item shall be supplied by and installed by the Contractor and shall include but not be limited to the following:

1. Bends
2. Split and Solid Conduit(s): PVC and Steel
3. Couplings and Adapters: PVC, Tile and Steel
4. Straps or plastic ties

PVC conduit and fittings shall be as supplied by American Pipe and Plastics, Type "C" or approved equal. Steel Pipe and fittings shall conform to ASTM A53 Schedule 40 Tile to PVC adaptors shall be as supplied by American U-Tel or approved equal.

**C. Methods of Construction**

Lengths of "wing-back" shall be approved by the facility operator(s). All work performed prior to that approval shall be at the contractor's risk.

Methods of construction shall include but not be limited to the following:

1) **Removal and Support**

- a. Break with hand held power tools, remove and dispose of plain or reinforced concrete encasement.
- b. Break with hand held power tools, remove and dispose of conduit(s) enclosures and conduit that contain conductor(s) and/or cable(s) except

steel/iron conduits, inner ducts and 1 ¼" to 1 ½" PVC "quad ducts. Breaking – "ringing and ripping" - of steel/iron conduits belonging to ECS shall be performed by ECS forces only. Contractor shall make safe the work area to accommodate the ECS forces.

- c. Support and protect exposed conduits, cables, inner duct and air pipe as shown in Sketch CET 100A-1 and approved by the facility operator(s).
  - d. Facility operator(s) cables may require inspection, testing and encapsulation before they can be shifted. Contractor shall make safe the work area to accommodate these forces. Contractor shall be notified by the facility operator(s) of requirements before the conduits are broken-out.
- 2) Adjust or Move Conductor(s) and/or cable(s) and support
- a. Cable shall be relocated horizontally and/or vertically as directed by the facility operator and in accordance with Sketch # CET 402 A.
  - b. Support and protect conductors and/or cables as shown on Sketch CET 100 A-1 and/or as directed by the facility operator(s).
- 3) Replacement, Encasement, Protection and Support
- a. Replace vacant and loaded conduit(s) with solid and/or split conduit(s) and adapters.
    - i. Vacant Conduit - Repairs to conduits shall not be permitted. All damaged or impaired lengths of conduit(s) shall be removed and replaced with new conduit(s). The number of vacant conduits replaced shall be confirmed by the facility operator(s).
    - ii. Adapting - Joining plastic conduit to existing conduits of other diameters or material shall be done using single or multiple adapters, (supplied by contractor).
  - b. If due to subsurface conditions, the cover is less than 20" from finished grade, the duct shall be protected with steel plates furnished by the facility operator(s) and measured for payment under Item CET 403.
  - c. Support and protect cable(s) and/or conductor(s) and conduit(s).
  - d. Encase all exposed conduit with concrete (f'c = 1200 to 1500 psi maximum) with slump commensurate to completely fill voids around conduits. Concrete encasement shall extend to two (2") inches beyond the limits of the duct bank vertically and horizontally.

#### **D. Method of Measurement**

The quantity to be measured for breaking out conduits, removing concrete, moving, protecting and supporting cables and replacing conduits with split and solid conduit, shall

be paid for by the linear foot (L.F.) of each conduit replaced. A linear foot of conduit shall be defined as one (1) single conduit measured along its longitudinal axis that has been broken out or moved from its original location either horizontally and/or vertically and measured in its final location between the limits shown on Sketch CET 402 A. Where multiple separate conduits exist within a single enclosed unit similar to multiple tile duct, each separate conduit within the enclosed unit shall be measured for payment under this item. Quad PVC ducts produced as one unit shall be consider one duct for each quad unit. All conduits removed and not restored shall be covered for payment under the appropriate items for Removal of Abandoned Masonry for Utility Facilities and/or Removal of Abandoned Utility Conduits.

#### **E. Price to Cover**

The Contract price per linear foot (L.F.) of conduit under each item shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to shift, adjust, support, protect, maintain and accommodate the integrity of utilities without disruption of service to the facility operator's customers and in accordance with contract documents. The price bid shall also include the cost of: breaking out, removal and disposal of plain or reinforced concrete encasements and conduits, replacement with field split, split and solid conduits, adapters, clamps, straps and couplings; furnish and install concrete encasement, supports, slings and beams for utility support; changes of sheeting method and/or configuration when required and where necessary to accommodate the utilities during all phases of contract work; any impact associated with maintenance and protection of traffic; and removal of sheeting around the utilities, and all else necessary and required to complete the work. The support and protection of utility crossings encountered while installing/removing the affected city facility shall be included in this JB item. No additional payment shall be made for utility crossings.

#### **F. References**

1. Sketches CET 100A and 100 A-1
2. Sketch CET 402 A
3. CET 403
4. American Pipe and Plastics, P.O. Box 577, Binghamton, N.Y. 13902
5. American U-Tel, 9760 Smith Rd., Willoughby, Ohio 44094

**JB 404 (CUSTOM-HMMWTCA7E) – Pier and/or Plate Method of Protection For Ductile Iron Water main and Other Shallow Facilities**

**A. Description:**

Under this item, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to protect ductile iron water mains that are installed with a cover of 24 inches or less crossing over various utility facilities. The work shall be performed in accordance with the contract plans, specifications and at the direction of the facility operator(s), upon approval from the Resident Engineer.

**B. Materials:**

The Contractor shall supply all materials (concrete, beams, plates, etc.) necessary to provide the pier and plate method of protection as shown on BWS Standard Drawing No. 46464-Z.

**C. Method of Construction:**

The Contractor shall provide pier and plate protection in accordance with BWS Standard Drawing No. 46464-Z. The Contractor shall support, maintain and accommodate the water main and all other utility facilities during the installation of the pier and plate components. The Contractor shall be solely and totally responsible for the disturbances and/or any damages to such facilities.

**D. Method of Measurement:**

The quantity to be measured for payment shall be the additional amount of square foot (S.F.) of steel plate required to protect ductile iron water mains crossing over utility facilities with a cover of 24 inches or less, or for other shallow facilities where the pier and plate method may be required, as directed by the Facility Operator upon approval from the Resident Engineer.

**E. Price to Cover:**

The price shall cover the cost of all supervision, labor, material, equipment, and incidentals necessary to construct the specified method of protection. The work shall also cover the cost to cut, break, and remove additional pavement, additional excavation, sheeting, maintenance of traffic, traffic plates, and to furnish and install additional backfill and pavement restoration. This item does not cover the costs for special care excavation around utilities that are covered under separate items.

**F. References:**

1. BWS Standard Drawing No. 46464-Z.



## **JB 620 - INSTALLATION OF STEAM PIPE**

### **A. Description**

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to install steam pipes and service connections. The Contractor shall satisfactorily clean and test install new steam pipes, and steam pipe insulation and steam housing and appurtenances, complete as specified herein and as indicated on the contract drawings / layouts and in accordance with the specifications and directions of the authorized Con Edison field representative in consultation with Con Edison Steam Engineering. All work shall be performed in accordance with Con Edison Requirements, standard drawings and specifications referenced herein.

### **B. Materials**

All materials will be provided by Con Edison unless specifically noted otherwise. All materials provided by Con Edison will be delivered to the Contractor at the construction site and unloaded by the Contractor.

### **PIPE:**

All piping shall conform to Piping Design Criteria for The Steam Distribution System Volume 1 prepared by ABS Consulting Section 4.0 for the Consolidated Edison Company and Con Edison Specifications S-9035-9, S-9036-10 and S-9040-4.

### **C. METHODS OF CONSTRUCTION:**

The Contractor shall install the steam pipe(s), as shown on layouts and or drawings and sketches and as directed by the facility operator from designated facility operator service points and in accordance with the contract plans and Con Edison Standard specifications. The method of construction shall include all labor, equipment and materials that are necessary to complete the installation of the steel steam pipe including cutting of the pipe, joining by welding, one (1) for each 40' random full length of pipe, coating of pipe, insulation installation, concrete housing installation and appurtenances complete, and testing operations.

### **D. METHOD OF MEASUREMENT:**

The quantity to be paid for under this item shall be the actual number of linear feet (LF) of pipe installed for each size, as measured along the center line of the pipe in its final position.

- Type - .1 – Install 2" diameter Pipe
- Type - .2 – Install 3" diameter Pipe
- Type - .3 – Install 4" diameter Pipe
- Type - .4 – Install 6" diameter Pipe

- Type - .5 – Install 8" diameter Pipe
- Type - .6 – Install 10" diameter Pipe
- Type - .7 – Install 12" diameter Pipe
- Type - .8 – Install 14" diameter Pipe
- Type - .9 – Install 16" diameter Pipe
- Type - .10 – Install 18" diameter Pipe
- Type - .11 – Install 20" diameter Pipe
- Type - .12 – Install 24" diameter Pipe
- Type - .13 – Install 30" diameter Pipe
- Type - .14 – Install 36" diameter Pipe

**E. PRICE TO COVER:**

The unit price bid per linear feet (LF) of pipe shall include the cost of all labor, equipment and materials not provided by Con Edison as necessary to complete the work. The price per linear foot of steel steam pipe shall include pipe installation, cutting of pipe, joining by welding, one (1) for each 40' random full length of pipe, coating of pipe, insulation installation, concrete housing installation and appurtenances complete, and testing operations.

Other work such as pavement saw-cutting, trench excavation, temporary timber sheeting, and backfilling with granular materials, compacting, and pavement restoration shall be paid for separately under the appropriate contract item.

**F. REFERENCES:**

- EO-11066 -F.C. Housing for Steam Mains 2" to 30"
- EO-17029 - F.C. of Concrete Housing for 2", 3" & 4" Steam Services
- EO-9382 -Inside & Outside Formwork for Concrete Housing for Steam Mains 2" – 30"
- EO-17115 - Pipe Supports / Pedestal Supports – Engineering Orders:
- EO-6874
- EO-7412
- EO-14936
- EO-13250
- EO-324786
- EO-13167

**SPECIFICATIONS:**

Refer to ABS Consulting Specification Volume One Page 21 of 21 for a complete listing of technical specifications.

## **JB 621 - INSTALLATION OF STEAM PIPE FITTINGS**

### **A. Description**

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to install steam pipe fittings and service connection fittings. The Contractor shall install new steam pipe fittings, and steam pipe fitting insulation and steam pipe fitting housing and appurtenances, complete as specified herein and as indicated on the contract drawings / layouts and in accordance with the specifications and directions of the authorized Con Edison field representative in consultation with Con Edison Steam Engineering. All work shall be performed in accordance with Con Edison Requirements, standard drawings and specifications referenced herein.

### **B. Materials**

All materials will be provided by Con Edison unless specifically noted otherwise. All materials provided by Con Edison will be delivered to the Contractor at the construction site and unloaded by the Contractor.

### **PIPE:**

All piping shall conform to Piping Design Criteria for The Steam Distribution System Volume 1 prepared by ABS Consulting Section 4.0 for the Consolidated Edison Company and Con Edison Specifications S-9035-9, S-9036-10 and S-9040-4.

### **C. METHODS OF CONSTRUCTION:**

The Contractor shall install the steam pipe fittings, including but not limited to valves, elbows, weld end caps and tees as shown on layouts and or drawings and sketches and as directed by the facility operator and in accordance with the contract plans and Con Edison Standard specifications. The method of construction shall include all labor, equipment and materials that are necessary to complete the installation of the steam pipe fittings including miter cuts, weld(s), coating of pipe fittings, fitting insulation installation, fitting concrete housing installation and appurtenances complete, and testing operations.

### **D. METHOD OF MEASUREMENT:**

The quantity to be paid for under this item shall be the actual number of each (EA) pipe fitting installed for each size of pipe.

Type - .1 – Install 2" diameter Pipe Fitting

Type - .2 – Install 3" diameter Pipe Fitting

Type - .3 – Install 4" diameter Pipe Fitting

Type - .4 – Install 6" diameter Pipe Fitting

- Type - .5 – Install 8" diameter Pipe Fitting
- Type - .6 – Install 10" diameter Pipe Fitting
- Type - .7 – Install 12" diameter Pipe Fitting
- Type - .8 – Install 14" diameter Pipe Fitting
- Type - .9 – Install 16" diameter Pipe Fitting
- Type - .10 – Install 18" diameter Pipe Fitting
- Type - .11 – Install 20" diameter Pipe Fitting
- Type - .12 – Install 24" diameter Pipe Fitting
- Type - .13 – Install 30" diameter Pipe Fitting
- Type - .14 – Install 36" diameter Pipe Fitting

**E. PRICE TO COVER:**

The unit price bid shall be the actual number of each (EA) pipe fitting installed for each size of pipe including the cost of all labor, equipment and materials (not provided by Con Edison) necessary to complete the installation work. The price per each steam fitting shall include the installation of the steam pipe fitting including miter cuts, weld(s), coating of pipe fittings, fitting insulation installation, fitting concrete housing installation and appurtenances complete and testing operations.

Other work such as pavement saw-cutting, trench excavation, temporary timber sheeting, and backfilling with granular materials, compacting, and pavement restoration shall be paid for separately under the appropriate contract item.

**F. REFERENCES:**

- EO-11066 -F.C. Housing for Steam Mains 2" to 30"
- EO-17029 - F.C. of Concrete Housing for 2", 3" & 4" Steam Services
- EO-9382 -Inside & Outside Formwork for Concrete Housing for Steam Mains 2" – 30"
- EO-17115 - Pipe Supports / Pedestal Supports – Engineering Orders:
- EO-6874
- EO-7412
- EO-14936
- EO-13250
- EO-324786
- EO-13167
- Fittings and Guides – Engineering Orders:
- EO-16957
- EO-13152-C
- EO-16506-C
- EO-17055-A

**SPECIFICATIONS:**

Refer to ABS Consulting Specification Volume One Page 21 of 21 for a complete listing of technical specifications.

## **JB 625 - INSTALLATION OF STEAM EQUIPMENT**

### **A. Description**

Under this section, the Contractor shall provide all labor, materials, equipment, insurance and incidentals required to construct and install steam equipment and concrete housing and ancillary piping systems to existing or new Con Edison Company facilities. The Contractor shall satisfactorily install and hydrostatically test steam equipment as required in accordance with the specifications and directions of Con Edison Steam Engineering in consultation with the Con Edison field representative. All work shall be performed in accordance with Con Edison Requirements, standard drawings and specifications referenced herein. The steam equipment to be installed shall include but not be limited to:

1. Cooling Chamber Assembly
2. Trap Assembly
3. Drain Assembly
4. Valve Assembly

### **B. Materials**

All materials will be provided by Con Edison unless specifically noted otherwise. All materials provided by Con Edison will be delivered to the Contractor at the construction site and unloaded by the Contractor. Materials supplied by the contractor and utilized in the construction of the steam cooling chamber shall be in accordance with Con Edison standard specifications and applicable Engineering Orders.

### **C. Method of Construction:**

The Contractor shall install the steam assembly equipment and concrete housing, (including but not limited to bolts, water seals, tees, flanges, gaskets, trap valves, blow-off valves, sleeves, reducers, caps, and plates). All work shall comply with the specifications, plans, layouts, and standards of the facility operator. All work shall be performed in accordance with Con Edison standard specifications and applicable Engineering Orders. No traffic shall be allowed on modified structures until permitted by the facility operator.

### **D. Method of Measurement:**

The quantity to be measured shall be for each (EA) steam assembly installed complete.

- JB 625A – Steam Cooling Chamber Assembly
- JB 625B – Steam Trap Assembly
- JB 625C – Steam Drain assembly
- JB 625D – Steam Valve Assembly

**E. Price to Cover:**

The unit price bid for each (EA) steam assembly item installed shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to completely install the steam assembly equipment and concrete housing, (including but not limited to bolts, water seals, tees, flanges, gaskets, trap valves, sleeves, blow-off valves, reducers, caps, and plates). The unit price shall cover the cost associated with the maintenance and protection of traffic and incidentals required to construct the steam assembly. All work shall comply with the plans, layouts, specifications, standards, and directions of the facility operator.

The installation of steam manholes and boxes shall be paid for separately under other appropriate contract bid item.

**F. REFERENCES:**

**Anchors – Engineering Orders:**

EO-7570  
EO-12870  
EO-15389  
EO-15669  
EO-15695  
EO-16050  
EO-16908  
EO-1-6960  
EO-324786

**Fittings and Guides – Engineering Orders:**

EO-16957  
EO-13152-C  
EO-16506-C  
EO-17055-A  
F.C. Steam Manhole Reference Drawing  
EO-16669  
EO-17155 – SST Rebar  
Steam Trap & Blow off Valve Manhole  
EO-11066  
F.C. Housing for Steam Mains 2" to 30"  
EO-15003  
Alternate Roof Construction for Steam Manholes  
EO-16838  
Concrete Slabs Over Steam Facilities Located In Roadways & Sidewalk Areas.  
EO-17025  
Steam Manhole Drains for New Construction – Dry Locations Option 'A' New Construction  
EO-17114  
Steam Manhole Drains for New Construction – Dry Locations Option 'B' Existing Conditions  
EO-17114 – Sheet 2 of 2  
Steam Condensate Drainage Pipe

EO-11065 – Sheets 1-5  
Precast Steam Trap Manhole  
EO-15900  
F.C. Steam Service Valve Manholes  
EO-16498  
F.C. Concrete Cooling Chamber for Condensate & Sump Pump Discharge  
EO-17112  
Condensate Discharge Connection to City Sewer.  
EO-17130  
Riser Connection to City Sewer with Depth Greater Than 13 ft.  
EO-17132  
Direct Drainage Connection to City Sewer with Less Than 13 ft. of Cover.  
EO-17131  
10 Inch Diameter Cooling Chamber for Steam Mains  
EO-6902  
R.C. housing for Cooling Chamber  
EO-16722  
F.C. Chimneys & Collars for Steam Manholes  
EO-17029  
F.C. of Concrete Housing for 2", 3" & 4" Steam Services  
EO-9382  
Inside & Outside Formwork for Concrete Housing for Steam Mains 2" – 30"  
EO-17115

**Pipe Supports / Pedestal Supports – Engineering Orders:**

EO-6874  
EO-7412  
EO-14936  
EO-13250  
EO-324786  
EO-13167

**SPECIFICATIONS:**

Refer to ABS Consulting Specification Volume One Page 21 of 21 for a complete listing of technical specifications.

<b>Gas Approved Contractors</b>	<b>Steam Qualified Contractors</b>
RCI Contracting	RCI Contracting
Dannella Contracting	Dannella Contracting
Mannetta Contracting	
Safeway Contracting	
Mecc Contracting	

**Roadway Contracting Inc.**  
 570 Gardner Ave.  
 Brooklyn, NY, 11222  
 John Roman # 718-963-3500

**Roadway Contracting Inc.**  
 570 Gardner Ave.  
 Brooklyn, NY, 11222  
 John Roman # 718-963-3500

**Danella Construction**  
 80 Business Park Dr. Suite 200  
 Armonk, NY, 10504  
 John Mazzari # 914-403-2179

**Danella Construction**  
 80 Business Park Dr. Suite 200  
 Armonk, NY, 10504  
 John Mazzari # 914-403-2179

**Manetta Industries**  
 44-17 54th Dr.  
 Maspeth, NY, 11378  
 Rick Manetta # 718-937-5656

**Safeway Construction Enterprises**  
 105 West St. St.  
 Brooklyn, NY, 11222  
 Guido Dire # 718-349-6645

**MECC Contracting**  
 21 Autumn Ave.  
 Brooklyn, NY, 11208  
 Luigi Moccia # 718-235-0800



**JB 803 (CUSTOM – HMMWTCA7E) - LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY OPERATIONS**

**A. Description**

Under this Section, the Contractor shall provide all incremental labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities that include but are not limited to oil or static facilities, and any other facilities of various sizes and configurations paralleling or crossing proposed saw cut areas located within a zone of protection associated with roadway removal operations, as determined by the utility operator. Utility facilities which cross under and between the saw cut areas are included within this item. The work shall be performed in accordance with the contract plans, the specifications, and as encountered during construction and determined by the facility operator(s).

**B. Materials – N/A**

**C. Method of Construction**

The Contractor shall maintain, protect, support and accommodate the integrity of all utility facilities of various sizes and configurations paralleling or crossing the saw cut area within a zone of protection as determined by the Facility Operator, during the roadway saw cut. The facility operator(s) shall identify the locations of all utilities within the contract area as required by New York State Industrial Code Rule 753. As provided by the Rule, the Contractor shall use pneumatic tools to line cut the pavement in lieu of saw cut by machine. It is the sole discretion of the facility operator(s) to determine relationships and/or dimensions, and advise the Contractor to proceed with pneumatic tools to line cut existing roadway structure.

**D. Method of Measurement**

The quantity to be measured for payment shall be the number of linear feet of line cut performed by pneumatic tools measured along the length of cut. The contract item specified under this section shall not be measured for payment in conjunction with other types of utility items. Modifications to work methods required in areas between zones of protection for multiple utilities or Joint Bid (JB) facilities shall not be measured for payment and are included in the price bid for this item.

JB 803.1 Line cut Asphalt Roadway (LF)

JB 803.2 Line cut any combination of Asphalt and Concrete Roadway (LF)

JB 803.3 Line cut any combination of Asphalt, Concrete, and Belgium Block (LF)

**E. Price to Cover**

The unit price per linear foot shall include the incremental cost for all labor, equipment, insurance and incidentals required to maintain, protect, support and accommodate the integrity of utility facilities paralleling or crossing the saw cut area associated with the removal of roadway designated for protection of utilities by the facility operator(s).

The unit price shall also include the additional cutting, removing and disposing of roadway materials; and any backfill that may be required to support, protect, maintain and accommodate the integrity of the utility facilities. The price shall also include the incremental cost of providing all vehicular and pedestrian traffic maintenance necessary to perform the work.

The Contractor shall be responsible for any and all damages resulting from and/or due to saw cutting operations that are not performed in accordance with the specifications.

**F. References**

1. NYS Industrial Code Rule 753

**JB 850 (CUSTOM – HMMWTCA7E) - Placing Rubber Sheets for Utility Facilities**

**A. Description**

Under this Section, the Contractor shall place permanent Rubber Sheets supplied by the facility operator(s) to protect utility facilities where directed by the facility operator(s) in consultation with the Resident Engineer.

**B. Materials**

Materials shall be supplied and delivered by the facility operator(s) at the job site or Construction Yard as directed by the Contractor.

**C. Method of Construction**

Rubber Sheets shall be placed in accordance with the attached facility operator(s) Specification for the Installation of High Pressure Pipe For 69, 138 and 345 kV Cable Systems, CE-TS-3352, under section 1.2.4.

**D. Method of Measurement**

The quantity for payment shall be the area of permanent rubber sheets installed and measured in Square Feet (S.F.). Each rubber sheet is typically 1/2" thick, 48" wide by 18' long.

**E. Price to Cover**

The unit price bid shall cover the cost of all labor, material, equipment, insurance, and incidentals necessary to complete the work.

**F. References**

1. Specification for the Installation of High Pressure Pipe For 69, 138 and 345 kV Cable Systems, CE-TS-3352.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.  
4 IRVING PLACE  
NEW YORK, NEW YORK 10003

ENGINEERING SPECIFICATION

CE-TS-3352

SPECIFICATION FOR THE INSTALLATION  
OF HIGH PRESSURE PIPE  
FOR 69, 138 AND 345 kV CABLE SYSTEMS

SECTION I – GENERAL REQUIREMENTS

REVISION 18

NOVEMBER, 2012

Prepared and EHS&  
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Effective Date:

11/15/2012

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**CONSTRUCTION SPECIFICATION**  
**CE-TS-3352 REV. 18, INSTALLATION OF HIGH PRESSURE PIPE**  
**FOR 69, 138, AND 345 kV CABLE SYSTEMS**  
**NOVEMBER, 2012**

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**CONSTRUCTION SPECIFICATION**  
**CE-TS-3352 REV. 18, INSTALLATION OF HIGH PRESSURE PIPE**  
**FOR 69, 138, AND 345 kV CABLE SYSTEMS**

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NOVEMBER, 2012

**SECTION I – GENERAL REQUIREMENTS**

**1.0 SCOPE**

1.1 This specification covers the installation and testing of high pressure pipes for the 69 kV, 138 kV and 345 kV cable systems inside and outside of station areas. It includes pipes to be occupied by the pipe type cable system and the pipes to be used for dielectric fluid associated with pressurizing or cooling of the feeders.

1.2 This specification also:

1.2.1 Identifies all equipment and materials to be supplied and installed by the Contractor.

1.2.2 Identifies all equipment to be supplied by others and installed by the Contractor.

1.2.3 Identifies the location where the equipment and materials are to be installed by the Contractor.

1.2.4 Describes the conditions to be met for the installation of the equipment and materials.

1.2.5 Supply the Contractor with Company and/or Manufacturer's drawings showing details for the proper installation of equipment.

**2.0 PROJECT DESCRIPTION**

2.1 Installation of high pressure pipe for 69, 138 and 345 kV cable systems.

**3.0 APPLICABLE STANDARDS AND REFERENCES**

3.1 The latest editions of the following laws, regulations, codes and standards issued by the following organizations and agencies are applicable to the scope of work covered in this specification:

3.1.1 Institute of Electronic and Electrical Engineers (IEEE)

3.1.2 National Electric Code (NEC)

3.1.3 National Electrical Safety Code (NESC)

3.1.4 American National Standards Institute (ANSI)

3.1.5 National Electric Manufacturers Association (NEMA)

3.1.6 New York State Department of Environmental Conservation (NYSDEC)

3.1.7 New York City Department of Environmental Protection (NYCDEP)

3.1.8 United States Environmental Protection Agency (EPA)

3.1.9 Occupational Safety and Health Administration (OSHA)

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**CONSTRUCTION SPECIFICATION**  
**CE-TS-3352 REV. 18, INSTALLATION OF HIGH PRESSURE PIPE**  
**FOR 69, 138, AND 345 KV CABLE SYSTEMS**  
**NOVEMBER, 2012**

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- 3.1.10 "Articles of the General Condition" of the Consolidated Edison Company of New York, Inc.
- 3.1.11 Contractor HASP Manual.
- 3.2 All violations arising from non-compliance of applicable standards and references are the responsibility of the Contractor and shall be promptly rectified.
- 4.0 CONTRACT DRAWINGS, SUPPLEMENTAL SPECIFICATIONS, AND MATERIALS LISTS**
- 4.1 Drawings, specifications and material lists (electrical, transmission, mechanical, civil, etc.) are provided in Section III of this specification.
- 4.2 All specifications and drawings attached or referenced herein are the latest revisions. Any new revisions dealing with the subject removals will be furnished as an addendum to the specification and attached tables. All work shall be performed in accordance with the latest detail specification and drawings.
- 4.3 The Contractor shall submit the "As Built" Drawings to the Engineer, Transmission Operations and Construction group within three months after the changes have been incorporated in order that the original drawings may be revised.
- 4.4 The bid drawings are construction drawings. The Contractor shall do all work strictly in accordance with such construction drawings.
- 4.5 Specifications and the drawings are complementary and are intended to completely describe the work and what is called for by one, shall be as if, called for by both. If there are any discrepancies or obvious errors in them, the Contractor shall refer the same to the Company for its decision and shall abide by that decision.
- 4.6 Materials or work described in words or phrases, which so applied, have a well-known technical or trade meaning shall be held to refer to such recognized standards.
- 4.7 Certain notes on equipment manufacturers' drawings included in the specification, such as "by others" do not apply to this specification. These notes apply to the equipment manufacturer only and the Contractor shall request a clarification by the Company, when in doubt of their interpretation
- 4.8 Final installation drawings covering this work will be issued for construction purposes. The Contractor shall do all the work strictly in accordance with such installation drawings.
- 4.9 In cases where it may be found impracticable to adhere strictly to a drawing during construction, the Contractor shall inform the Company's representative on the job, who may authorize the Contractor to modify the work and who will initiate the revision of the drawings involved.
- 4.10 The Company will submit to the Contractor a schedule for the performance of the work covered by this specification to which the Contractor shall be required to adhere. Changes in this schedule may be made by mutual agreement of both parties.

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- 4.11 The Contractor shall submit shop or setting drawings and schedules required for the work of the various trades; and the Company will review and approve the drawings with reasonable promptness. The Contractor shall make any corrections required by the Company.

**5.0 SUBMITTALS**

- 5.1 All work by the Contractor shall be performed in accordance with the submitted and approved, site specific Environmental, Health and Safety Plan (eHASP).
- 5.2 The Contractor is responsible for submitting an Environmental and Construction Plan prior to start of all work. The ECP will be approved by the Company.
- 5.3 The Contractor shall furnish for approval any samples of material or workmanship as required and requested by the Company. The final work shall be done in accordance with approved samples.
- 5.4 The Contractor shall submit to the Company, copies of all required permits, licenses, etc., prior to the start of work.

**6.0 SITE REPRESENTATION**

**6.1 Definitions**

6.1.1 Field Representative – When work is performed by a contractor, a representative of the Company's Construction Department, herein referred to as "Field Representative", shall be designated to confer with the Contractor on details concerning the performance of work covered by this Specification. Any proposed tools, equipment or methods for performing the work shall be subject to the Field Representative's approval. He/she shall be notified of all tests so that he/she may arrange to witness the tests, and all test data taken shall be submitted to him/her for approval before the items of work concerned shall be considered as satisfactorily performed. Except where otherwise indicated, the work covered by this specification is to be performed by the contractor.

6.1.2 Engineer – A Discipline Engineer assigned the responsibility for a project by the Central Engineering Department, Advanced Planning and Transmission Engineering section, herein shall be referred to as "the Engineer". He/she shall have final responsibility for any changes and exceptions to this specification. Drawings and specifications listed in Section III shall be considered as part of this Specification. Variations affecting the system design or layout concerning the final quality or condition of the work shall be referred to the Engineer for approval. Construction methods shall have the approval of the Construction Department.

- 6.2 Upon execution of the Contract, the Company will identify in writing to the Contractor, an Engineering Field Representative for the Project. The Engineering Field Representative shall have full authority to act, or to cause others to act, on behalf of the Company, to assure that the work is carried out in full compliance with the requirements of the Contract, and to otherwise generally protect the interests of the Company. The Company may change the Engineering Field Representative at any time by notifying the Contractor,



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in writing, of the name of the new Engineering Field Representative and the effective date of the change.

- 6.3 The Company may also designate one or more additional persons to carry out certain responsibilities on its behalf, and, in that event, the Engineering Field Representative will instruct the Contractor as to the relationship between the Engineering Field Representative and such other designated persons.
- 6.4 Except as specifically set forth elsewhere in these General Requirements or as may be otherwise directed by the Engineering Field Representative, in writing, the Engineering Field Representative shall be the principal first point of contact for the Contractor in all matters relating to the execution of the Work.
- 6.5 No action or decision of the Engineering Field Representative or any other representative of the Company will in any way supersede or diminish the Contractor's obligation to perform the Work in complete conformance with all requirements of the Contract.

**7.0 QUALITY ASSURANCE**

**7.1 Qualification and personnel certifications**

7.1.1 The Contractor shall provide copies of all necessary documentation for personnel qualification and certifications required to perform the work.

**7.2 Regulatory and permit requirements**

7.2.1 The Contractor shall obtain all necessary regulatory and permits required to complete the work and the project. Copies of all permits, licenses, etc, shall be provided to the Company and maintained at the work site. This includes but is not limited to:

- a. Asbestos permits (ACP-5, ACP-7)
- b. SPDES permits
- c. Waste disposal permits
- d. Building demolition permits

**7.3 Test reports, material certifications, and code stamps**

7.3.1 The Contractor shall obtain all necessary code stamps for any materials. He shall also obtain and provide copies of all test reports and material certifications for materials, products, etc.

**8.0 PROPOSALS**

- 8.1 Prior to and as necessary during the progress of the work under the contract, the Contractor's representative shall confer with the Company's representative at the job for the purpose of formulating a working program, so that the work performed under one or more contracts may be coordinated to prevent, if possible, any interference with the progress of work of the other Contractors.

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**9.0 SEQUENCING AND SCHEDULING**

- 9.1 All work shall be carried out in such a manner that there will be no interference with station operation. The Company, through a designated representative, will arrange for outages of equipment and for assuring safe working conditions where electrical circuits and equipment are involved. No work on normally alive electrical circuits shall be started without the express permission of the Company's designated representative.
- 9.2 The Contractor shall do all possible preparatory work in advance of equipment shutdown, and he shall provide adequate manpower to do the outage work in the time allotted. The Company reserves the right to perform any items of work which because of operating conditions, should, in the Company's opinion, be performed by Company forces.
- 9.3 No work will be permitted on live electrical circuits, or in central control areas. No cutting will be allowed into floors, walls or ducts without express approval of the Company's inspectors and the Station Supervisor. The station will be maintained in operation during the entire construction period. No compartments, doors or cabinets may be opened or entered into without Company approval. When permission is obtained to work in operating areas, adequate safety precautions shall be exercised to protect personnel and equipment, including barriers, signs and roped-off area. The work schedule shall include allowance for periods when equipment may be taken out of service for alteration, and for work in confined spaces.

**10.0 TRAINING AND DEMONSTRATION**

- 10.1 None required

**11.0 OWNER ACCEPTANCE**

- 11.1 A final joint inspection of the completed installation shall be made by representatives of the Company and the Contractor. Final acceptance of the Contractor's work will be contingent upon this inspection in conjunction with other requirements of the contract.
- 11.2 The Company and its representatives shall at all times have access to the Work and the Contractor shall provide proper facilities for such access and for the inspection and testing of the Work.
- 11.3 The Contractor shall keep the Company and the Architect informed of the progress of the Work and shall notify the Company sufficiently in advance of enclosing items of Work, or the work of other contractors, to provide reasonable time for the Company to perform the necessary inspection. No Work, nor the work of other contractors, shall be closed or covered until it has been duly inspected and approved. Should uninspected work or work of other Contractors be covered by the Contractor prior to its inspection, the Contractor shall, if directed by the Company and at its own expense, uncover all such Work, or such work of other contractors, so that it can be properly inspected, and after such inspection the Contractor shall properly repair and replace all affected Work, or work of other contractors, at its own cost and expense.
- 11.4 The Company shall arrange for such inspection of the Work as may be necessary. If, in the opinion of the Company or Architect, the Work is not being installed as required by the Contract, the Company may order such work stopped pending further investigation and a decision by the Company.

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- 11.5 Tests to determine the quality of materials will, unless otherwise specified, be ordered by the Company at the discretion of the Company. If the specifications require the Contractor to provide the inspection service or tests, such inspection or tests shall be made by an engineer or laboratory approved by the Company. Such engineer or laboratory must furnish the Company with as many copies of any inspection or test reports as may be requested. Unless otherwise specified, tests on materials are to be made in accordance with standard methods adopted by the American Society for Testing and Materials.
- 11.6 The right of the Company to inspect and generally supervise the Work is to make certain that the Work conforms to the drawings and specifications and the other Contract Documents. Such inspection and general supervision are not intended to control the contractor as to the manner of performance of the Work.
- 11.7 Any Work installed by the Contractor and found, by the Company, to be defective, or not in strict conformance with the requirements of the drawings and specifications, shall be corrected or removed immediately and satisfactory materials or Work substituted therefore without delay, unless the Company approves such Work subject to an appropriate adjustment in the contract price. The Contractor shall also make good the work of all the other Contractors destroyed or damaged by such corrective Work, removal or replacement. The cost of such corrective Work, removal and replacement shall be at the expense of the Contractor. The Contractor shall promptly remove all rejected materials from the Premises. The Company's authority to reject any Work of the Contractor and any decision of either exercising or not exercising such authority shall not give rise to any duty or responsibility of the Company to the Contractor or any Subcontractor or Supplier.
- 11.8 Should the Company elect, at any time before Final Acceptance, to examine Work already completed by removing, uncovering or testing the same, the Contractor shall, on request, promptly furnish all necessary facilities, labor and materials to remove or uncover such Work to permit such inspection, examination or testing. If such Work is found to be defective or nonconforming in any significant respect, the Contractor shall pay all the expenses of such removal, uncovering, examination, testing and satisfactory reconstruction. If the Work is found to meet the requirements of the Contract documents, the Company shall compensate the Contractor by Change Order, for reasonable additional incurred costs involved in such removal, uncovering, examination, testing and reconstruction and if completion of the Work has been delayed thereby, the Company shall grant the Contractor a reasonable extension in the time allowed for completion.
- 11.9 No previous inspection or payment shall be held as an acceptance of defective Work or materials or relieve the Contractor from the obligation to furnish sound materials and perform satisfactory Work in accordance with the Contract Documents.
- 11.10 Final payment shall not relieve the Contractor of the responsibility for faulty materials or workmanship. The Contractor shall remedy all such defects, paying the cost of such corrective Work and of repair of any damage to other work resulting there from, which shall appear within any guarantee or warranty period provided by the Contractor

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## Section II – PRODUCTS AND SERVICES

### 1.0 WORK TO BE PERFORMED BY CONTRACTOR

#### 1.1 General

##### 1.1.1 Dry Air

Prior to the introduction of dry air into any pipe, a Company Representative shall test the air to be used. The dry air and its moisture content shall be in accordance with Con Edison Specification No. *CE-ES-4147*, latest revision. Compressed air, furnished in trailer loads or bottles from an approved supplier and meeting the specified dew point requirements may be used. Since there is the danger of asphyxiation whenever work is to be done in an enclosed space every precaution shall be taken to insure adequate ventilation whenever and wherever personnel must enter such areas.

##### 1.1.2 Cleanliness

Every precaution shall be taken to prevent the entrance of dirt, moisture or any other contaminant into any pipe, and all methods and operations by the Contractor shall be subjected to approval by the Field Representative as to the adequacy of these precautions.

##### 1.1.3 Testing

The Company reserves the right to perform testing with its own personnel. Testing is required to insure the quality of the work or may be needed to provide data concerning the installation.

##### 1.1.4 Excavating Trenches and Openings

- a. All trenches shall be excavated true to the centerline and grade shown on the approved plan and profile drawings except where unforeseen interferences are encountered. In such cases, specific approval shall be obtained from the Field Representative for appropriate modifications.
- b. In general, the trench shall be excavated to a depth sufficient to provide a minimum of thirty-six inches of cover over the cable pipe or pipes as indicated in Specification No. EO-12640-B, latest revision. When less than twenty-four inches of cover over the cable pipes or pipes associated with pressurization or cooling of the feeders is authorized because of special conditions, suitable guards shall be placed over any pipes having insufficient cover prior to backfill. Such guards shall be flat steel plates having a minimum thickness of 1 inch and wide enough to provide a three-inch overhang on each side of the pipe(s). A concrete pad in lieu of a steel plate shall be used to cover stainless steel or copper risers. Whenever steel plating is used to protect shallow installations, a peering arrangement shall be used, if specified by the Engineer, to prevent the plates from directly contacting the pipe should settlement occur.

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- c. Guards placed over cable pipes shall have a cushion of six inches of compacted approved backfill between the pipe and guards, and guards placed over other associated feeder pipes shall have a cushion of six inches of compacted approved backfill between the pipes and guard. If conditions require the protective steel plates to be installed closer than six inches from the top of these pipes, high density polyethylene skids as per Specification No. EO-8069, latest revision, shall be installed on the pipe before the steel plates are set in place. In no case shall there be less than two inches of compacted backfill between the pipes and the protective plates.
- d. The bottom of all trenches shall be smooth, uniform, and free of all loose rock, stones or other foreign matter. Nothing shall be left in the bottom of the trench that might damage the pipe coating. The trench shall be such that a minimum of six inches of compacted approved backfill shall be beneath and beside the pipe as per Specification No. EO-12640-B, latest revision.
- e. Trench widths and spacing of pipes shall conform to EO-12640-B or as specified on the layout. When the trench is in solid rock, changes to the pipe configuration and trench dimensions may be permitted with the written approval of the Engineer. No decrease in dimensions shall be made without specific approval of the Engineer.

**1.2 Clearance from Subsurface Structures**

- 1.2.1. External heat sources such as steam mains, duct banks containing power cables, and the like, limit the current carrying capability of pipe type feeders. To minimize this influence, a face-to-face separation of not less than twelve feet for horizontal runs nor less than two feet for right angle crossings shall be maintained from all steam mains, steam services six inches and over in size, duct bank systems of six ducts or more and all other pipe type feeders. For steam mains under six inches in size and for power duct bank systems of five ducts or less, the separation shall not be less than six feet in a horizontal direction and 1½ feet in a vertical direction. Where these spacings cannot be obtained, specific approval shall be obtained from the Engineer for corrective measures to be applied. Insulating slabs as per Drawing EO-8935-D, latest revision or specifically designed ventilation chambers shall be used if specified in the layout.
- 1.2.2. All new subsurface electric pipes shall be constructed with a standard minimum clearance of 12 inches from liquid petroleum pipelines, gas lines, transmission facilities or concrete structures. When the 12 inches clearance is not practical it may be reduced to a minimum of six inches, provided approval from the Engineer is obtained and piers and skids as described in Specification No. EO-15362-B, latest revision, are installed on the electric pipes to prevent contact from occurring due to settlement.
- 1.2.3. The minimum clearance from the gas distribution facilities shall be six inches provided that piers as described in Specification No. EO-15362-B, latest revision, are installed to prevent contact between the electric facilities and the gas distribution facilities. The minimum clearance from underground gas service

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laterals shall be six inches provided that an approved protective separator or skids are installed on the electric facilities and the gas service pipeline. The six inch clearance shall not be reduced without the written permission of the Engineer.

- 1.2.4 When pipes pass within 2 feet of water mains or services, a half inch thick natural rubber sheet having a durometer measurement of not less than 60 shall be installed, centered between the pipe(s) and the water mains or services. There shall be an overlap of at least 6 inches between rubber sheets if more than 1 sheet is necessary to protect the pipe. The rubber sheet(s) shall overhang the water main or service by a minimum of 18 inches or as directed by Engineer. Under no circumstances shall the rubber sheet be wrapped around the feeder pipe.

**1.3 Pipe through wall sleeves**

- 1.3.1 When feeder pipes pass through walls whose thickness does not exceed 12 inches, they shall be encased in plastic wall sleeves and sealed with one set of link seals. The size of the wall sleeve as well as the position of the link seals are specified in the Specification No. EO-9230, latest revision.

- 1.3.2 When feeder pipes pass through walls that are wider than 12 inches, link seals should be installed at both ends of the penetration. In such cases, sleeves made of plastic or other dielectric materials, cannot be used. This condition should be avoided whenever possible by designing the thickness of the wall in the area of the pipe penetration to be no more than 12 inches. If this is not possible, sleeve made of electrically conductive materials should be used. Sonotubes or equivalent materials can be used in such applications since they will allow cathodic protection current flow into the annular space when moisture is present.

- 1.3.3 Under no circumstances should the pipe within sleeves of any length be left uncoated.

**1.4 Backfill**

- 1.4.1 Approved backfill is to be used for backfilling under, beside and over the pipe as indicated in Specification No. EO-12640-B, latest revision. To obtain the optimum compaction essential for pipe type feeders, the backfill, including thermal backfill as specified in Specification No. EO-1173, latest revision, shall be compacted in maximum of 12 inch lifts in accordance with Specification No. EO-1181, latest revision, unless otherwise approved by the Company.

- 1.4.2 The Field Representative or Engineer may order as many in-place density tests as he deems necessary to insure proper compaction. The sand-cone test as per ASTM-D1556 or Nuclear Density tester may be used for all in place density tests.

**1.5 Manholes.**

- 1.5.1 Manholes shall have exact overall dimensions as specified on the accompanying drawings. Where water or unstable soil conditions exist, filter fabric and 12 inches of crushed stone or recycled concrete (¾ inch to 2 inch) on top of the filter fabric shall be installed, if directed by the Field Representative.

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- 1.5.2 The location of all joint manholes shall be based on field conditions and on pulling tension requirements, as described in section 14.0 of CE-TS-3354, latest revision.
- 1.5.3 Stop joint manholes are required as follows:
- a. Where a dielectric fluid leak from a 69 kV, 138 kV or a 345 kV pipe type cable with a water crossing (over, in or under the water) could enter a waterway, a full stop joint shall be installed at the cable's shore manhole(s) if the need for such a joint is supported by factors such as distance to waterway, feeder elevation profile, sensitive environments (i.e. presence of sensitive threatened or endangered species or wetlands), etc., as well as risks associated with normal operations, failure modes, and catastrophic events.
  - b. A decision not to install a full stop joint at a water crossing shall be approved by the Chief Electrical Engineer with the concurrence of the Vice President of Environmental, Health & Safety.
- 1.6 Pipe
- 1.6.1 Steel Pipe
- a. Steel pipe in accordance with Specification No. CE-TS-4197, latest revision, shall be specified for installation of high pressure cables, pressurization and dielectric fluid circulation systems.
  - b. The cable pipes and associated pressurization or dielectric fluid circulation pipes having a 5 inch or larger diameter, shall be furnished with ends flared in accordance with Specification No. EO-5199-B, latest revision, unless otherwise specified by Central Engineering.
  - c. Each length of steel pipe installed shall have been cleaned and coated externally in accordance with Specification No. G-8196, latest revision. The interior surface of all steel pipes shall have been cleaned and coated as called for in Specification No. EO-8193, latest revision. The pipe shall be provided with end seals tightly plugged to prevent the entrance of dirt and moisture.
- 1.6.2 Stainless Steel Pipe
- a. Stainless steel pipe in accordance with Specification No. EO-8097, latest revision, shall be specified for installation of single phase cable.
  - b. Stainless steel pipe shall be delivered externally uncoated and protected from damage internally and externally as specified in Specification No. EO-8097, latest revision. The external field coating shall be in accordance with the method specified in Specification No. G-8209, latest revision.

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1.6.3 Copper Pipe

- a. Copper pipe, when specified to be used for single phase cable installation, shall be of soft drawn de-oxidized copper, fabricated in accordance with ASTM Specification B-42. Copper pipe shall be supplied uncoated.

1.7 Installation and Tests

- 1.7.1 A visual inspection of each shipment of coated steel pipe shall be made promptly upon receipt, and arrangements shall be made for the replacement of any defective material.
- 1.7.2 The interior of the pipe and the interior coating shall be inspected and all moisture, oil, grease, or other foreign matter shall be removed. No pipe having any rust on its inner surface shall be welded into the line. The external coating on the pipe shall be tested for pinholes or defects as per Paragraph 1.9 of this specification. Each defect detected shall be satisfactorily repaired and retested.
- 1.7.3 Pipe plugs or caps installed at the coating plant shall be kept in place, except during inspection and cleaning, until the pipe is welded. The ends of each section of pipe shall be kept capped at all times except when caps must be removed for construction work.

1.8 Unloading, Handling and Hauling

- 1.8.1 Every precaution shall be exercised in the handling of all pipes. The pipes are to be kept clean, dry and free of any foreign material. Cut ends shall be chamfered to remove burrs or sharp edges and a proper surface shall be provided for welding in accordance with Specification No. G-1064, latest revision. No flame or arc cutting of the pipes shall be permitted. The pipes shall be sealed and purged as specified in Paragraph 1.10.2 and 1.11.4.
- 1.8.2 The coated pipe shall be unloaded, handled, stockpiled, hauled and installed in such a manner as to insure against any damage to the exterior coating. The coated pipe at all times shall be supported on resilient protective padding until it is finally installed in the trench. When supported for their full length, the pipes may be nested and tiered as directed by the Field Representative.
- 1.8.3 No chains or ropes shall be allowed to come in contact with the pipe coating. Canvas slings having a minimum width of ten inches shall be used for lifting the pipe. When lifting or lowering one or more pipe lengths, a sufficient number of canvas slings shall be used to properly distribute the weight and prevent permanent deformation of the pipes or damage to the pipe coating due to flexing. In general, the overhanging pipe length beyond the last support shall not exceed 30% of the pipe length.
- 1.8.4 The coating at all times shall be protected from oil, kerosene, gasoline or other solvents.



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**1.9 Testing External Coatings**

- 1.9.1 A spark test shall be made at 18,000 to 20,000 Volts, peak value, on all coatings as indicated in Specification No. G-8196, latest revision, using an instrument that has been checked by Con Edison. The tests shall be made on the entire length of the pipes including areas coated in the field over welds or at repairs. These tests shall be made as near the time of backfilling as is practicable to insure that the coating is free of defects and to avoid re-excavating to repair defects after the trench has been backfilled. The coater shall furnish Con Edison's Central Stores Department with a written certification as per Specification No. G-8196, latest revision, of a pre-coating inspection.
- 1.9.2 Spark tests shall be made only when the pipe is dry.
- 1.9.3 All defects found shall be repaired as outlined in Specification No. G-8209, latest revision.
- 1.9.4 After the section of pipe has been installed and backfilled, a Coating Resistance Test shall be made by Con Edison's Corrosion Control personnel on the installed section. The minimum acceptable coating resistance value shall be 2,000,000 ohms-square foot. This can be converted into a minimum coating resistance for any length of pipe by the formula: Resistance of section (ohms) = 2,000,000 (ohms-square foot) divided by the surface area of pipe section (sq-ft). This resistance test shall be performed on all pipe sections installed between adjacent manholes; however, tests may be taken at shorter intervals when requested by the Company Field Representative.
- 1.9.5 Whenever the pipe section coating resistance is less than acceptable, an over-the-ground survey shall be conducted to locate coating faults. These faults shall be repaired as outlined in Specification No. G-8209, latest revision, and backfilled. If failing coating resistance values are due to accidental contacts with underground metallic structures, these contacts shall be cleared and all specified clearances shall be maintained. The coating resistance test shall then be repeated to verify that minimum acceptable values are obtained.

**1.10 Pipe Installation - General**

- 1.10.1 Pipe installation shall be carefully planned to insure a minimum elapsed time between the start of trench excavation and the completion of resurfacing over the excavation. Pipe installation shall follow trench excavation as rapidly as possible.
- 1.10.2 Night caps as per Drawing No. EO-7370-B, latest revision, shall be installed to maintain an airtight seal at the ends of the pipes and a positive pressure of dry air maintained within sections so pipes that might become submerged in case of heavy rains.
- 1.10.3 All pipes shall be labeled at each end of every run and at every tie-in point with other piping to positively identify the pipes and their destination.
- 1.10.4 Prior to backfilling, measurements shall be taken so as to provide an "As Constructed" plan and profile of completed lines, including the cover and offset

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from the baseline of each weld. Copies of the "As Constructed" drawings shall be sent to the Engineer and Property Records after completion of work.

- 1.10.5 Before any two pieces or sections of pipe are welded together, the interior of each piece or section shall be inspected. If this inspection reveals any condition other than a perfectly clean, dry interior surface, the pipe shall be swabbed with suitable dry swabs until the cleanliness of the interior surface is acceptable to the Field Representative.
- 1.10.6 Where bends are required, the pipe shall be bent with Company approved bending equipment. In general, the minimum radius of curvature to be permitted shall be 40 feet for 345 kV pipe systems and 30 feet for 69 kV and 138 kV systems, except where specific approval is given for a shorter radius. Radii shall be measured with an instrument approved for use by the Field Representative. Adequate measures shall be taken to prevent the pipe from kinking, flattening or going out of round and to prevent damage to the pipe coating during the bending operation.
- 1.10.7 Each bent section of pipe, including the terminal riser cable pipes, shall be checked for ovality before being welded into the line. This test shall be made by pulling through the pipe a mandrel of the size specified in Drawing No. EO-10569-D, latest revision. No pipe through which the mandrel will not pass freely shall be welded into the line.
- 1.10.8 Where it is necessary to pull pipe into or along the bottom of the trench, suitable rollers, straw bags, or other approved means shall be used to prevent damage to the coating.
- 1.10.9 Before stopping work for the night or for any other reason, it shall be mandatory to close all open ends of the pipe as per Paragraph 1.10.2. The pipe shall be purged with enough dry air to displace twice the cubic content of the pipe lengths added during the day, after which the pipe ends shall be closed and the pressure increased to a positive pressure of between 4 and 6 psig.

#### 1.11 Pipe Installation – Steel Pipes

In addition to Paragraphs 1.6.1 and 1.10, the following also applies to steel pipe installations.

- 1.11.1 Each bent section of steel pipe shall be given a radius acceptance test. A mandrel of the proper size as per Drawing No. EO-16325-B, latest revision, shall be pulled through the pipe to check for sharp bends. No pipe through which the mandrel will not pass freely shall be welded into the line.
- 1.11.2 When fitting of steel pipes in the field, which requires the joining of pipe lengths which are not provided with flared ends in accordance with Drawing No. EO-5199-B, latest revision, prefabricated flared ends in accordance with Drawing No. EO-5199-B, latest revision, shall be welded to the square cut and beveled pipe ends and the inner surface of the welds carefully ground smooth. Any internal coating burned due to welding shall be brushed and removed and the pipe surface left clean.

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- 1.11.3 Where specified on the layout, connector pads, as shown in Drawing No. EO-4796-D, latest revision, shall be field welded to the pipe to permit the attachment of thermocouples, shunt leads or bonding tests leads.
- 1.11.4 The closing of pipe ends in the trench shall be done by means of an approved fitting which will not damage the pipe ends and be capable of withstanding a minimum of 10 psig. In manholes, or other pick up points, the open ends shall be welded closed with a pressure test terminating pipe assembly as specified in Drawing No. EO-14661-D, latest revision.

**1.12 Pipe Installation – Stainless Steel Pipes**

In addition to Paragraphs 1.6.2 and 1.10, the following also applies to stainless steel pipe installations.

- 1.12.1 Stainless steel pipe shall be delivered externally uncoated and shall be field coated as per Specification No. G-8209, latest revision. Stainless steel pipes shall be installed as specified on the layout.
- 1.12.2 The minimum-bending radius for nominal 6 inch O.D. stainless steel pipe shall be 8 feet. When more than one bend is required, the minimum bending radius of 8 feet shall occur only once in the line and all other bends shall have a minimum bending radius of 16 feet. The minimum bending radius for nominal 5" O.D. and nominal 4 inch O.D. stainless steel pipes shall be 6 feet. When it is required to make several bends, the minimum bending radius of 6 feet shall occur only once in the line and all other bends shall have a minimum bending radius of 12 feet. Adequate measures shall be taken to prevent the pipe from kinking, flattening or going out of round.
- 1.12.3 The stainless steel pipes shall be joined by means of stainless steel sleeves in accordance with Specification No. EO-8048, latest revision. After the welds have passed the test requirements, the weld areas shall be coated in accordance with Specification No. G-8209, latest revision.

**1.13 Pipe Installation – Copper Pipes**

In addition to Paragraphs 1.6.3 and 1.10, the following also applies to copper pipe installation.

- 1.13.1 Copper pipes shall be bent with bending machines or by such other means as to prevent the pipe from kinking, flattening or going out of round. The minimum bending radius for copper pipes shall be 6 feet. When it is required to make several bends, the minimum bending radius of 6 feet shall occur only once in the line and all other bends shall have a minimum bending radius of 12 feet, unless otherwise approved by the Engineer.
- 1.13.2 Sleeves for joining copper pipes shall be those supplied by the Company. The sleeves are the same material as that of the pipe. The clearance between O.D. of the pipe and I.D. of the sleeve shall be in accordance with Drawing No. EO-6947-D, latest revision. The brazing material shall have minimum silver content of 15 percent.

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**1.14 Installation of Pipe in Casings or Abandoned Gas Mains**

1.14.1 Whenever the pipe is installed within a steel casing, it shall be kept electrically isolated from the casing by means of approved casing insulating skids as per Specification No. G-100, 280, latest revision. The skids shall be installed on the pipe at intervals not greater than ten feet and at one foot from each end of the casing. Both ends of the casing shall be sealed as per Specification No. G-8096, latest revision.

**1.15 Installation of Pipe within Tunnels**

1.15.1 Whenever a pipe is to be installed in a tunnel, on a bridge or on any other such structure, the pipe shall be kept electrically isolated from the structures. If the Engineer determines that ground connections are required at those locations, these connections shall be made through isolator/surge protectors.

**1.16 Cathodic Protection**

1.16.1 Unless otherwise specified, the cathodic protection for new pipe type feeders shall include D.C. electrical isolation by grounding through isolator/surge protectors with protective current supplied by impressed current rectifiers. Corrosion Engineering shall specify the location and design of impressed current rectifiers for each feeder installation.

**1.17 Test Stations**

1.17.1 Test stations, as specified by Corrosion Engineering shall generally be installed in the proximity of each manhole and at both ends of all casings as per Drawing No. 301709, latest revision.

**1.18 Installation of Dielectric Fluid Circulation Pipes**

1.17.2 Pipes for cable cooling systems using dielectric fluid circulation shall be installed where so specified on the layout and shall be positioned with respect to the high pressure cable pipe as shown in Drawing No. EO-12640-B, latest revision.

1.17.3 The 5 or 6 inch diameter dielectric fluid circulation pipes shall be furnished with flared ends and joined by welding with backing rings in accordance with Drawing No. EO-5199-B, latest revision. Where cut ends are to be joined, the internal coating shall be properly removed 2" from the pipe end, following all Company environmental requirements, and the interior surface dry-swabbed clean before welding on prefabricated flared ends in accordance with Drawing No. EO-5199-B, latest revision. Couplings can only be used with Engineering approval.

**1.19 Sleeves**

1.19.1 Sleeves for joining pipes of all materials are designed for a specified clearance to provide a minimum offset and give a maximum strength joint. To properly install sleeves, care should be taken to maintain the pipe and pipe sleeves as round as possible. In the event the sleeve and/or pipe is out of round it shall be re-rounded. Shaving or machining to increase the clearance shall not be permitted. Installation of the stainless steel or copper sleeves for pothead riser shall be as

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per Drawing No. EO-14276-C, latest revision. After the sleeves have been welded, the sleeves shall be radio-graphically inspected to determine the separation between the pipe ends and the roundness of the pipe ends. In no case shall the pipe end separation exceed  $\frac{1}{4}$  inch.

### 1.20 Welding

- 1.20.1 Steel pipe welding shall be performed as prescribed in Specification No. G-1064, latest revision.
- 1.20.2 Stainless steel pipe welding shall be performed as prescribed in Specification No. EO-8048, latest revision.
- 1.20.3 Steel and stainless steel pipe welding shall be performed by welders who have been qualified by the Company for welding the type of steel as per Specification Nos. G-1065 and EO-8048, latest revisions, respectively.
- 1.20.4 Prior to welding of pipe lengths, the protective masking over the uncoated portion of the pipe ends shall be removed and any rust or foreign material left on the pipe which may leave undesirable ash from welding heat shall be carefully cleaned off.
- 1.20.5 Pipes 2 inches or smaller shall be joined using socket weld fittings. Pipes 3 inches and larger shall be joined using butt welds. Couplings can only be used with Engineering approval.
- 1.20.6 Under no circumstances shall a mitered joint of any angle be made in changing direction of any pipe.
- 1.20.7 All bend fittings used shall be of a large radius type.
- 1.20.8 Separate qualifications shall be made for welding of steel, welding of stainless steel and brazing of copper; that is, an individual performing all three functions shall have been qualified for each function separately as per Specification Nos. G-1065 and/or EO-8048, latest revisions, as applicable.
- 1.20.9 When welding gate or globe valves into any line, care must be taken not to damage any part of the valve. Valves shall be slightly closed or just making contact when welded into the line. When installing ball valves, the pipe flanges shall be tack welded in place, the valve body removed and then the weld completed.
- 1.20.10 All dead end valves provided for vacuum and/or filling ports shall be 2 inch gate valves or 2 inch ball valves as specified on the layout.
- 1.20.11 Whenever possible, the use of "tee" fittings, which would be buried, shall be avoided.

### 1.21 Acceptance of Welds

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- 1.21.1 Acceptance of each weld shall be based upon an acceptance radiograph test. The radiograph test shall be performed as per Specification No. G-1070, latest revision, by an independent vendor, hired by the Company, who shall inform the Company's Field Representative about the acceptability of the weld.
- 1.21.2 Each welded pipeline section is to be pressure tested at 500 psig internal pressure. Test to be conducted at a later date. (See Paragraph 1.23 of this Specification).

**1.22 Final Radius and Ovality Tests**

- 1.22.1 A final radius and ovality acceptance test shall be performed by pulling through the entire welded section a mandrel of the proper size as per Drawing Nos. EO-16325-B and EO-10569-D, latest revisions. If either mandrel does not pass through for any reason, the problem shall be rectified by the Contractor to the satisfaction of the Field Representative before proceeding.

**1.23 Acceptance Proof Test**

- 1.23.1 While the proof tests are in progress using dry air no personnel shall be inside a manhole.
- 1.23.2 All pipes above grade (i.e., risers and pipes associated with bridges and tunnels) shall be tested hydrostatically using water. If this test is being performed during the winter and there is the possibility of the water freezing, the Contractor shall use a mixture of water and isopropyl alcohol (at least 50% alcohol) or other mixture with prior Engineering approval. However, the use of any ethylene glycol mix or anti-freeze is prohibited. The Contractor is responsible for following all applicable regulations and safety precautions in the storage and handling of alcohol.
- a. *In lieu of water test as described above, above grade piping may be tested with dry air in accordance with this procedure providing safety plan, approved by the local EH&S authority prior to the test, ensures the safety of personnel and equipment in the event of a pipe burst caused by the test. Also, Central Engineering should be notified that dry air is being used for the pressure test.*
- 1.23.3 Acceptance of any completed pipeline by the Company shall be based on a (a) free passage of the ovality and radius mandrels through the pipeline, (b) acceptable coating resistance measurement, (c) cleanliness and dryness inside the pipes, (d) 500 psig proof (burst) test, (e) 250 psig pressure drop test, (f) successful completion of vacuum drying requirements and (g) the final acceptance proof test as per Paragraph 2.4
- 1.23.4 Before each pipe section is approved for use, it shall be given a 500 psig (burst) pressure test. This test shall be made using dry air as per Section 5.0 or a liquid as per Paragraph 1.23.2. After the pressure has reached 500 psig, this test pressure shall be maintained for not less than one-half hour. The test shall be performed by the Contractor and witnessed by the Field Representative or by Transmission Operations as follows:

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- a. New Pipe on a new feeder:
    - (1) If tested with air as per Paragraph 1.1.1, the test shall be performed by either Company forces or the Contractor, as specified in the bid documents.
    - (2) If tested with a liquid as per Paragraph 1.23.2, the test shall be performed by the Contractor.
  - b. New Pipe on an existing feeder (cut-over, Tee taps, replacement, etc.):
    - (1) The Contractor shall perform the test on this piping whether the test is performed with air as per Paragraph 1.1.1 or with a liquid as per Paragraph 1.23.2.
- 1.23.5 Whenever a liquid as per Paragraph 1.23.2 is used to test a piping section, the Contractor shall remove all the liquid remaining in the pipe section to the satisfaction of the Field Representative. The Contractor has the responsibility of properly disposing of the used liquid in accordance with all regulations.
- 1.23.6 Where welds cannot be checked for acceptance individually by radiograph tests (i.e., joint casings, by-pass piping, etc.) those welds shall be tested at the time of making the overall acceptance pressure tests on the completed section between manholes as described in Paragraph 2.4 of this Specification.
- 1.23.7 Upon completion of the 500 psig gas pressure test, the pressure within the pipe shall be reduced to 250 psig and held for a minimum of seventy-two (72) hours to check for the presence of leaks in the pipe system. During the seventy-two hour period, the pipe under test shall be connected through a manometer to a buried reference tank that is known to be tight so that the manometer will indicate whether a loss of pressure in the pipe under test is being experienced during the test period. Pressure readings shall be recorded every hour. This work shall be performed by either Company forces or the Contractor, as specified in the bid documents.
- 1.23.8 The reference tank shall be made as per Drawing No. EO-12215-C, latest revision, and shall have a cylindrical steel pressure vessel capable of withstanding the test pressures and having a volume of not less than 1.5 cubic feet. It shall be buried at the manhole locations indicated on construction drawings so as to have at least two feet of cover to minimize the effects of ambient temperature changes.
- 1.23.9 After one of the pipes entering any particular manhole has successfully withstood this comparison test and is found to be tight, this pipe may then be used as a reference tank for the testing of other pipes. This work shall be performed by either Company forces or the Contractor, as specified in the bid documents.
- 1.23.10 Any loss of pressure indicating the presence of leaks shall be fully investigated and the leaks located and repaired. All leaks shall be reported to and inspected by the Field Representative.

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- 1.23.11 The method of repairing leaks shall be subject to the approval of the Field Representative. After the repairs have been made the 500 psig pressure (burst) test and the 250 psig dry air leakage drop test shall be repeated.

**NOTE**

The following work shall be performed by company forces or as indicated otherwise.

## 2.0 WORK TO BE PERFORMED BY OTHERS

### 2.1 Installation of Reducers

- 2.1.1 After these pressure tests have been completed and the pipe is known to be free of leaks, the boiler end caps over the pipe ends in the manhole shall be cut off and the joint reducers welded to the pipe. The point at which the pipe is to be cut shall be determined by the reference to manufacturer's drawings for the joints to be made in the manholes. Any ash from the burning of the internal pipe coating due to welding shall be removed and the pipe left clean.
- 2.1.2 The reducer welds shall be tested at 50 psig, dry air, to insure that no leaks exist on the welds. Refer to section 2.2.4

### 2.2 Cleaning and Mandrelling

- 2.2.1 Each section of pipeline, dielectric fluid circulating line and dielectric fluid supply line shall be individually pigged and swabbed. A projectile shall be blown through the pipe, using dry air as the pressure source, for the purpose of removing burrs (pigging) and also for cleaning (swabbing) of each pipe. If the fittings installed on a pipe section will not allow a pig to pass through, the Engineer shall be contacted for the procedure to be used to properly clean the pipe section.
- 2.2.2 In the terminal sections of pipe, stainless steel or copper, a continuous 3/16 inch polyethylene rope shall be left in each pipe attached to the sealing plates at both ends, after the pipe has been swabbed clean and dry.
- 2.2.3 A mandrel of the proper size for the pipe size involved, per Drawing No. EO-10569-D, latest revision, shall be pulled or blown through the pipe to check for excessive ovality or other obstructions within the pipe. A steel line capable of pulling in the winch rope shall be left in the cable pipe after the mandrelling operation is completed. Steel line having a hemp center shall not be used. A rope shall be used to pull cable in the termination pipes for safety.
- 2.2.4 After the steel line for pulling the winch line in has been installed within the cable pipe, the pipe ends shall be sealed by gasketed blank-off plates bolted to the joint reducers. The pipe section shall be pressurized to 50 psig and the reducer welds soap tested to insure that no leaks exist (refer to section 2.1.2). The pipes shall be left with a positive pressure of dry air sufficient to insure against the entrance of moisture in the event that the pipe is submerged. Such pressure shall in no case be less than 5 psig.



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**2.3 Vacuum Dryness Test**

- 2.3.1 Vacuum drying shall be done after the installation of joint reducers and pilot lines in the pipes.
- 2.3.2 All pipes, including pressure, dielectric fluid circulation and gas pipelines shall be vacuum dried before filling with dielectric fluid or gas. In the event that the new section of pipe shall be attached to an existing section of pipe, the new section shall also be vacuum dried before it is connected to the existing section.
- 2.3.3 After the pipe ends have been closed and prior to cable pulling, a vacuum test shall be made on the pipe section to insure its dryness. Vacuum shall be maintained continuously until the pressure within the pipe is down to 150 microns of mercury. Evacuation shall then continue for a period of four hours. At the end of this period, the vacuum pump shall be valved off and the pressure rise in the pipe over a one-half hour period observed. The pipe shall be considered acceptable if the pressure rise during this one-half hour period is less than 100 microns. Pressure readings taken during evacuation and the pressure rise test, shall be taken at points remote from the vacuum pump. If the pressure rise during the one half hour pressure rise test is in excess of 100 microns, vacuum shall be reapplied continuously again until the pressure is down to 150 microns, a subsequent one half hour pressure rise test made and this procedure continued until the requirements are met.
- 2.3.4 After the pipe has successfully passed the vacuum dryness test, the vacuum shall be broken with tested dry air as per Paragraph 1.1.1. A positive pressure of not less than 10 psig shall then be built up and maintained in the pipe to prevent the entrance of moisture in the case of submersion.

**2.4 Final Acceptance Proof Test**

- 2.4.1 Upon completion of the splicing, evacuation and filling of a feeder with dielectric fluid as per Specification No. EO-1109, latest revision, the completed pipe system, including the dielectric fluid circulation pipes, shall be proof tested with dielectric fluid for not less than one half hour as follows:
- |    |                          |                |
|----|--------------------------|----------------|
| a. | 345 kV System            | 950 psig (Max) |
| b. | 138 kV and 69 kV Systems | 550 psig (Max) |

**NOTE**

Maximum proof test pressure will change if system pressure is increased.

- 2.4.2 The dielectric fluid circulation pipes shall be subjected to proof tests at a higher pressure as required by the Engineer.
- 2.4.3 All safety pressure valves and/or discs, gauges, pressure switches and other components that may be damaged due to the high pressure are to be valved off before the test is commenced.

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2.4.4 After the pressure has been maintained at the 950 psig or 500 psig level as per Paragraph 2.4.1 for one-half hour it shall be reduced to 250 psig and held for a minimum of twenty four (24) hours. During the twenty-four hour test, the pumps and dielectric fluid pressure must constantly be monitored.

**2.5 Spare Pipes**

2.5.1 In the event that a pipe is installed which will not be used for a period of time such as in the case of spares submarine pipes, all the requirements of this specification shall be followed. A ¾ inch pipe connection shall be made to the pipe, terminating in a plugged valve in a suitable place where the pressure may be checked periodically. Consecutive sections of pipes route through the same manhole systems shall be connected in series with 5/8 inch copper tubing. All such pipes are to be left with a positive pressure of 25 psig of dry air and shall have proper identification as indicated in Paragraph 1.10.3. To insure that a positive pressure of 25 psig is maintained, such spare pipes shall be checked periodically as per CE-TS-6045.

**2.6 Pipe Verification**

2.6.1 The following pipe verification shall be performed on new pipes installed prior to the 500 psig burst test. Existing installed pipes, which have not been identified by this verification process, shall be identified prior to installation of new cable and splicing in advance of outage related work. The objective of this test procedure is to confirm and ensure the following:

- a. New Pipes installed are connected to the correct feeder pipe at the cutover location and terminate at the location as specified on construction drawings.
- b. New pipes installed do not cross underground, resulting in pipes terminating in wrong location.
- c. Provide positive confirmation through testing that feeder terminating at the substation pothead is the same feeder identified at the cutover location.
- d. Existing installed pipes are identified and tagged prior to installation of cable and splicing activities.

2.6.2 All data, test information and results shall immediately be submitted to the Field Representative or Transmission Operations and the Engineer for evaluation. A prompt identification of pipes shall ensure that corrective actions can immediately be implemented to correct any problem during installation of new pipes.

**2.6.3 Identification of Feeder at Pickup Location**

- a. The following methods to identify the transmission pipe designation at the cut over location are acceptable for establishing positive feeder identification. Identification of transmission feeder described in this section shall be performed by Company personnel only. The pipe verification process is not to be used for working on the feeder. To

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perform work on the feeder, it must be identified using standard ungrounded tracing current.

- (1) Permanent Feeder Identification Point – Permanent identification tags exist on the pipes.
- (2) Feeder Pressure Variation Method – Pressure gauges shall be placed on both pipes on the upper splice casing valves in the designated cutover manhole. Transmission and Substation Operations personnel shall coordinate the pressure change activity on the proposed feeder. The pumping plant operator shall vary the feeder pressure at the pressurizing plant while the mechanic at the cutover location monitors gauge pressure. The pumping plant operator shall raise the feeder pressure by a maximum of 20 psig, and once positive indication is observed at the cutover location, the mechanic shall request from the pumping plant operator the corresponding feeder designation. Transmission Operations personnel shall tag the feeder pipe accordingly. The Substation Operator shall ensure that he/she is properly identifying the feeder in the pressurizing plant.
- (3) Electrical Test Procedure Method
  - Major Pipe Section Relocation – When extended lengths of pipe are required to be installed due to a major facility relocation, then test pits are to be excavated at both ends at the proposed tie-in locations. Both pipes are to be exposed and one of the two feeder pipes shall be identified by the use of ungrounded tracing current and tagged accordingly by Company personnel. Once positive identification is achieved, the feeder shall be returned to service.
  - Installation of New Manhole – When the new manhole structure will be installed over existing feeders to allow installation of "Wye" joint(s), then a test pit will be excavated at the proposed location exposing the pipes. One of the two feeder pipes shall be identified by use of ungrounded tracing current and tagged accordingly by Company personnel. Once positive identification is achieved, the feeder shall be returned to service.

#### 2.6.4 Installation of New Pipes or Verification of Existing Pipes to Substation

**NOTE**

Either Company forces or the Contractor, as specified in the bid documents, shall perform this work.

- a. Verification of pipes shall be performed on all completed pipe sections and connecting manholes using dry air and pressure gauges. Testing shall begin at the cutover location and proceed towards the station potheads. The existing transmission feeder pipe identified in accordance

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with Paragraph 2.6.3 and the new and/or existing pipe to be connected, will both be designated as the reference pipe. (New pipes are typically installed just outside the manhole wall or placed on top of the existing pipes until the final cutover of the feeder is performed.)

- b. The reference pipe shall be filled with dry air. Steps detailing the verification process are as follows:
- (1) Establish reference pipe in accordance with Paragraph 2.6.3.
  - (2) Install pressure gauges on both pipes in the next connecting manhole.
  - (3) Raise pressure of reference pipe to 10 psig and observe gage pressure at connecting manhole. The pipe that registers a pressure change shall now be designated the reference pipe and tagged accordingly. Remove gauges and connect 5/8" copper tubing in series to the opposite pipe across the manhole.

**NOTE**

If 5/8" copper tubing is not used, then tag the in-line series pipe across manhole and fill with dry air once gauges are installed on pipes in next connecting manhole.

- (4) Install pressure gauges on both pipes in the next connecting manhole.
- (5) Repeat pipe verification as required until station potheads are reached or other positive identification point is reached.
- (6) Verify that installed piping terminates at the designated location in accordance with the construction drawings issued.

**2.6.5 Pipe Replacement between Manhole Sections**

**NOTE**

Either Company forces or the Contractor, as specified in the bid documents, shall perform this work.

- a. Establish reference pipe designation in accordance with Paragraph 35.1 and tag accordingly.
- b. Install pressure gauges on both ends of new pipes at the furthest point away from the established reference pipe.
- c. Raise pressure of the reference pipe to 10 psig and observe gauge pressure at opposite end.

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- d. Tag the associated pipe that registers positive gauge pressure.
- e. Verify that installed piping terminates at the designated location in accordance with the construction drawings issued.

**3.0 REQUIRED SUBMITTALS**

- 3.1 Environmental, Health, and Safety Plans (eHASP).
- 3.2 Environmental Construction Plan (ECP)
- 3.3 Shop drawings, product data, & samples.
- 3.4 Quality Assurance/Control submittals.
- 3.5 "As Constructed" drawings, O&M manuals, training documentation.
- 3.6 Copies of all necessary permits, licenses, etc.
- 3.7 Detailed construction and removal schedule.

**4.0 DELIVERY, STORAGE, AND HANDLING**

- 4.1 The Contractor shall furnish all necessary labor, equipment and material required to unload the equipment and materials at the construction site. Each shipping crate or drum must be inspected for damage before being removed from the transporting vehicles. If there is visible evidence of damage to the crate or equipment, this must be reported immediately to the Company representative on site to facilitate any damage claims against the carrier or manufacturer.
- 4.2 The Contractor shall uncrate the equipment or waste materials carefully, taking all necessary precautions to prevent damage to the existing equipment.
- 4.3 The Contractor shall inspect the shipping manifest and verify that all equipment and/or materials specified herein are on the shipping manifest. The Contractor shall immediately notify the Company representative on site if there is shortage or excess of equipment and/or materials.
- 4.4 The Contractor shall remove and dispose of all shipping crates and packing materials from the construction site immediately after the equipment is unloaded.
- 4.5 The Contractor shall remove, store and transport off site, all associated materials and waste items referred to in the attached drawings and specifications.
- 4.6 The Contractor, on a daily basis, shall dispose of all packing materials, crating, general debris and other waste items from the site, in order to maintain proper safety, environmental and sanitary conditions on the site.
- 4.7 The Contractor shall be responsible for the security and loss of his material and equipment.

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- 4.8 The Contractor shall maintain the work area in a neat and orderly condition at all times. Site clean-up shall be performed on a daily basis and as directed by the field representative, and shall include removal of all material no longer needed for construction purposes as well as papers, cups, cans, and other non-construction debris. The Contractor shall be responsible to furnish and maintain trash receptacles suitable for the type and quantity of material to be removed. Type and quantity shall be subject to the approval of the field representative. At the completion of the job the site should be left in a clean and finished condition.
- 4.9 The Contractor shall dispose of all construction debris, equipment, etc. in accordance with all federal, state and local environmental laws and regulations.

**5.0 FABRICATION**

- 5.1 Items must be manufactured, fabricated, or assembled prior to delivery to the site. If necessary, the Contractor shall pre-assemble all working parts prior to disassembly to shipment to the job site.

**6.0 MATERIALS AND MIXES**

- 6.1 Specifications for materials to be provided.
- 6.2 The Contractor shall furnish any equipment and materials necessary for installing the High pressure pipe.
- 6.3 The Company shall approve all chemicals in advance, be part of the eHASP and the Safety Data Sheets (SDS) sheets must be on site.

**7.0 PREPARATION AND MAINTENANCE**

- 7.1 The Contractor shall do all possible preparatory work in advance of equipment shutdown, and he shall provide adequate manpower to do the outage work in the time allotted. The Company reserves the right to perform any items of work which because of operating conditions, should, in the Company's opinion, be performed by Company forces.
- 7.2 The Contractor shall confine his equipment, storage of materials and the operations of his employees to the limits indicated by law, ordinances, permits or reasonable direction of the Company or it's duly authorized representatives, and shall not unreasonably encumber the premises with his materials or equipment.
- 7.3 All arrangements for the use of the highways, public property and private property for the storage of materials or equipment shall be made by the Contractor, and he shall obtain and pay for any permits that may be required for the storage of materials and equipment.
- 7.4 The detailed part of this specification will inform the Contractor of the environmental conditions and hazards to be found on the job site. The Contractor is responsible for implementing an effective Environment, Health and Safety (EH&S) program for performance of the Work.

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- 7.5 Changes to project activities/materials or unanticipated site conditions may require a re-assessment and/or modification of project EH&S requirements. Additional EH&S measures may be required (sampling, testing, monitoring, personal protective equipment, permits/licenses/approvals). If issues or concerns arise which were not anticipated, the Contractor shall stop work activity, take appropriate precautions and contact the Site Representative immediately.
- 7.6 The Site Representative is responsible for overseeing the environment, health and safety of Company employees and Contractor personnel. The Contractor is required to comply with all federal, state and local requirements, as well as any Company policy or procedure directed by the Site Representative, applicable to the performance of the Work.
- 7.7 The Site Representative will monitor the Contractor's EH&S compliance and to ensure immediate correction of any EH&S hazard or procedural non-compliance. The Site Representative has the authority and responsibility to stop an activity or job, if in his professional assessment, the Contractor shows a disregard, lack of knowledge or expertise for any EH&S requirement. There shall be no increase in cost to the Company or schedule relaxation allowed as a result of work stoppage due to the Contractor's disregard, lack of knowledge or expertise for EH&S requirements.
- 7.8 Prior to bringing any materials on the job site or Company property, the Contractor shall submit Safety Data Sheets (SDS) to the Site Representative for approval. The SDS's will be submitted as part of the required Health and Safety Plan (HASP). The Contractor must keep copies of all SDS's on the job site during the Work
- 7.9 The Contractor shall obtain any permit, license or approval necessary to perform the Work in accordance with all federal, New York State and local regulations, codes and laws.

**8.0 CONSTRUCTION**

- 8.1 None.

**9.0 FIELD QUALITY CONTROL**

- 9.1 All parts of the Work shall throughout the time of the performance of the Contract, be subject to inspection by the Company. The Company shall be final judge of the quality and acceptability of the Work, the materials and equipment used herein, and the process of the manufacture and methods of constructions employed in connection with the Work. The Company shall have the right to witness any tests the Contractor or third party conducts.
- 9.2 If at any time prior to the completion of all of the Work, the Company finds as a result of any inspections any part of the Work, is not suitable or of good quality, or fails to conform to the specifications or drawings, the Company has the options to require the Contractor, at his expense and within reasonable time, to reconstruct, replace or correct the applicable Work.
- 9.3 Upon completion of the work, the Contractor shall clean the entire work area of all unused material and equipment. The Contractor shall remove all of his equipment and construction materials and vacate storage areas which may have been temporarily

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**CONSTRUCTION SPECIFICATION**

**CE-TS-3352 REV. 18, INSTALLATION OF HIGH PRESSURE PIPE  
FOR 69, 138, AND 345 KV CABLE SYSTEMS**

**NOVEMBER, 2012**

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assigned for his use by the Company. The Contractor will not leave any hazardous wastes, solid wastes, chemicals, lead, asbestos or other environmental hazards on the site.

- 9.4 This work will take place in an active, operational, high voltage substation. The Contractor shall not interfere with the normal and/or emergency substation operation. Workers shall limit their access to active work areas only.
- 9.5 The Contractor shall use the Trades having jurisdiction to perform the work covered by this specification and he shall comply with all rules and regulations of Trades covering the type of work as accepted by a recognized group of trade employers. The employees shall be skilled in their particular lines and shall not conflict in any way with those of other Trades employed under other Company contracts at any location.

**10.0 REPAIR AND RESTORATION**

- 10.1 The Contractor shall install equipment and materials as shown on the drawings, except where obvious, unforeseen interferences occur.
- 10.2 When field changes are required, every effort shall be made to coordinate the change with other conduit work, structural work, lighting installations, etc., being done at the same site. The Contractor shall keep a complete record of all such changes being made by his forces on the Contractor's copies of the affected drawings.
- 10.3 In event of any damage, the Contractor shall promptly make replacements and repairs to the approval of the Company's Project Engineer and at no additional cost. Additional time required to secure replacements and to make repairs will not be considered by the Company to justify any extension in the Contract Time of Completion.



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**CONSTRUCTION SPECIFICATION**  
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**SECTION III – CONSTRUCTION PACKAGE DOCUMENTS AND SUPPLEMENTAL SPECIFICATIONS****PART 0 – (Contract Drawings, Tables, & Lists)**

- 1.0 The list of contract drawings included with the construction package
- 2.0 The list of supplemental specifications and applicable revision. If the specification is not provided as a Part in this section, provide instructions where the specifications are to be found (e.g. Con Edison, Manual of Construction) and how to obtain copies.
- 3.0 Reference Drawings
- |      |             |   |
|------|-------------|---|
| 3.1  | 301709      | Cathodic Corrosion Protection for Electrical Feeder Pipe Test Station Installation.                       |
| 3.2  | EO-4796-D   | Connector Plate Assembly for Attaching Bonds, Thermocouple and Shunt Wires to Steel Electric Cable Pipes. |
| 3.3  | EO-5199-B   | Pipe with Flared Ends for Chill Ring Welds on Electric Cable Pipes.                                       |
| 3.4  | EO-6947-D   | Welding Sleeve for Pipe Connection in Pipe Type Cable System.   |
| 3.5  | EO-7370-B   | Night Cap for 5-9/16", 6-5/8" and 10-3/4" OD Pipe and 7" Tubing.  |
| 3.6  | EO-8935-D   | Heat Deflecting Slab for Installation between Steam Mains and Electric Cables.                            |
| 3.7  | EO-9230-C   | Sleeve Details and Method of Sealing H.P. Cable Pipe through Manhole wall.                                |
| 3.8  | EO-10569-D  | Mandrels for H.P. Cable Pipes.  |
| 3.9  | EO- 12215-C | Reference Tank for Leakage Testing of H.P. Pipelines.   |
| 3.10 | EO-12640-B  | B.H.P. Cable and Dielectric Fluid Circulating Pipe Trenching and Backfill.                                |
| 3.11 | EO-14267-C  | Typical Sleeve Installation of High Pressure Cable Pipe Type.   |
| 3.12 | EO-14661-D  | Typical Pressure Test Assemblies and Installation for 5" to 12" Pipes.                                    |
| 3.13 | EO-15362-B  | Pier Installation and Details for 138/345 kV High Pressure Pipes Crossing Facilities.                     |
| 3.14 | EO-16325-B  | Radius Acceptance Mandrel for 5-9/16", 8-5/8" and 10-3/4" O.D.H.P. Pipe.                                  |

**PART 1 thru XX – (Supplemental Specifications)**

- 4.0 Reference Specifications
- |     |  |
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| 4.1 | G-1064 Shielded Metal Arc Welding Procedure for Welding Steel Pipe and Fittings. |
| 4.2 | G-1065 Qualification of Welders and Welding Procedures.                          |

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- 4.3 G-1070 Radiographic Inspection of Pipeline Welds.
- 4.4 EO-1109 High Pressure Pipe Type Cable Systems Cable Installation and Pressurization of Lines.
- 4.5 EO-1173 Specification for Controlled Backfill Material for H.P. Cable Pipe Installation.
- 4.6 EO-1181 General Specification for Backfilling or Trench and Small Openings.
- 4.7 EO-8069 Pipe Skids and Liners.
- 4.8 EO-8048 Specification for Welding Austenitic Stainless Steel Pipe.
- 4.9 EO-8085 General Backfill and Bedding Material for Excavations.
- 4.10 G-8096 Sealing of the Annular Space between Gas Pipe and Casing or Sleeves.
- 4.11 EO-8097 Stainless Steel Pipe for Single Phase Terminal Circuits for Pipe Type Cables.
- 4.12 G-8209 Field Coating of Steel Pipe and Fittings Installed Underground and in Subsurface Structures.
- 4.13 EO-8193 Purchase Specification for Internal Coating of Steel Electric Feeder Pipe.
- 4.14 G-8196 Purchase Specification for Extruded Polyolefin Coating on Steel Electric Feeder Pipe.
- 4.15 CE-TS-4197 Specification for Purchase of Steel Pipes for Electric Facilities. Fuel Oil Facilities and Casings.
- 4.16 G-100, 280 Pipeline Casing Insulating Skids.
- 4.17 CE-ES-4147 General Specification for Dry Compressed Breathable Air.

PRIVATE UTILITY  
SCOPE OF WORK

(NO TEXT IN THIS SECTION)

**JOINT BID (JB) WORKSHEET**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**  
**FOR INFORMATION ONLY**  
**ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE**  
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JOINT BID ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity	Unit Price	Total
JB 100.1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .1)	EA.	30	\$ 443.00	\$ 13,290.00
JB 100.2	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .2)	EA.	8	\$ 829.00	\$ 6,632.00
JB 100.3	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .3)	EA.	8	\$ 1,229.00	\$ 9,832.00
JB 100.4	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .4)	EA.	2	\$ 1,600.00	\$ 3,200.00
JB 101.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	EA.	10	\$ 3,751.00	\$ 37,510.00
JB 101.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	EA.	3	\$ 4,690.00	\$ 14,070.00
JB 101.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	EA.	3	\$ 6,174.00	\$ 18,522.00
JB 108.1	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .1)	EA.	51	\$ 609.00	\$ 31,059.00
JB 108.2	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .2)	EA.	17	\$ 1,894.00	\$ 32,198.00
JB 108.3	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .3)	EA.	9	\$ 3,077.00	\$ 27,693.00
JB 108.4	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .4)	EA.	3	\$ 3,844.00	\$ 11,532.00
JB 108.5	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .5)	EA.	1	\$ 4,489.00	\$ 4,489.00
JB 109.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	EA.	83	\$ 1,563.00	\$ 129,729.00
JB 109.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)	EA.	22	\$ 2,335.00	\$ 51,370.00
JB 109.3	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	EA.	16	\$ 3,734.00	\$ 59,744.00
JB 109.4	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4)	EA.	1	\$ 4,854.00	\$ 4,854.00
JB 109.5	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .5)	EA.	1	\$ 5,361.00	\$ 5,361.00
JB 109.6	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .6)	EA.	2	\$ 5,722.00	\$ 11,444.00
JB 110.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .1)	EA.	70	\$ 2,156.00	\$ 150,920.00
JB 110.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .2)	EA.	19	\$ 2,927.00	\$ 55,813.00
JB 110.3	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .3)	EA.	15	\$ 4,177.00	\$ 62,655.00
JB 110.4	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .4)	EA.	1	\$ 5,412.00	\$ 5,412.00
JB 110.5	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .5)	EA.	1	\$ 6,103.00	\$ 6,103.00
JB 110.6	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .6)	EA.	1	\$ 6,833.00	\$ 6,833.00
JB 111.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1)	EA.	12	\$ 2,935.00	\$ 35,220.00
JB 111.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)	EA.	2	\$ 4,196.00	\$ 8,392.00
JB 111.3	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3)	EA.	2	\$ 5,891.00	\$ 11,782.00
JB 111.4	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .4)	EA.	2	\$ 7,561.00	\$ 15,122.00
JB 200	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	L.F.	120	\$ 149.00	\$ 17,880.00
JB 226	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	16	\$ 4,576.00	\$ 73,216.00
JB 227	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	3	\$ 2,395.00	\$ 7,185.00
JB 300	SPECIAL CARE EXCAVATION AND BACKFILLING	C.Y.	120	\$ 286.00	\$ 34,320.00
JB 301	SPECIAL CARE EXCAVATION AND BACKFILLING FOR OIL-O-STATIC PIPES	C.Y.	190	\$ 351.00	\$ 66,690.00

8/11/2014

HMMWTCA7E Joint Bid - INFORMATION ONLY

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JOINT BID ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity	Unit Price	Total
JB 303	FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL	C.Y.	1,280	\$ 49.00	\$ 61,740.00
JB 330E.1	SUPPORT & PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .1)	L.F.	2,180	\$ 31.00	\$ 67,580.00
JB 330E.2	SUPPORT & PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .2)	L.F.	760	\$ 37.00	\$ 28,120.00
JB 330E.3	SUPPORT & PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .3)	L.F.	1,060	\$ 43.00	\$ 45,580.00
JB 330E.4	SUPPORT & PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .4)	L.F.	200	\$ 60.00	\$ 12,000.00
JB 400	TEST PITS FOR UTILITY FACILITIES	C.Y.	140	\$ 244.00	\$ 34,160.00
JB 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	C.Y.	560	\$ 292.00	\$ 163,520.00
JB 401A	SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES CONNECTED TO THE BASE PAVEMENT	C.Y.	200	\$ 365.00	\$ 73,000.00
JB 402.1	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	100	\$ 87.00	\$ 8,700.00
JB 402.1A	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	200	\$ 93.00	\$ 18,600.00
JB 402.2	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	400	\$ 55.00	\$ 22,000.00
JB 402.2A	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	100	\$ 61.00	\$ 6,100.00
JB 403	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	S.F.	4,000	\$ 3.00	\$ 12,000.00
JB 404	PIER AND/OR PLATE METHOD OF PROTECTION FOR DUCTILE IRON WATER MAINS AND OTHER SHALLOW FACILITIES	S.F.	200	\$ 427.00	\$ 85,400.00
JB 405.1	TRENCH EXCAVATIONS FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET	C.Y.	3,005	\$ 251.00	\$ 754,255.00
JB 405.2	TRENCH EXCAVATIONS FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET	C.Y.	580	\$ 363.00	\$ 210,540.00
JB 406	EXCAVATION FOR UTILITY STRUCTURE	C.Y.	830	\$ 281.00	\$ 233,230.00
JB 410.1	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME UP TO AND INCLUDING 20% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, LESS THAN FIVE FEET.	C.Y.	200	\$ 344.00	\$ 68,800.00
JB 410.2	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME OVER 20%, UP TO AND INCLUDING 40% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, LESS THAN FIVE FEET.	C.Y.	2,790	\$ 436.00	\$ 1,216,440.00
JB 410.3	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME OVER 40%, UP TO AND INCLUDING 60% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, LESS THAN FIVE FEET.	C.Y.	200	\$ 527.00	\$ 105,400.00
JB 410.4	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME OVER 60%, UP TO AND INCLUDING 80% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, LESS THAN FIVE FEET.	C.Y.	200	\$ 619.00	\$ 123,800.00
JB 410.5	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME UP TO AND INCLUDING 20% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, EQUAL TO OR GREATER THAN FIVE FEET.	C.Y.	200	\$ 354.00	\$ 70,800.00
JB 410.6	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME OVER 20%, UP TO AND INCLUDING 40% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, EQUAL TO OR GREATER THAN FIVE FEET.	C.Y.	6,920	\$ 446.00	\$ 3,086,320.00

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JB 410.7	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME OVER 40%, UP TO AND INCLUDING 60% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, EQUAL TO OR GREATER THAN FIVE FEET.	C.Y.	1,890	\$ 536.00	\$ 1,013,040.00
JB 410.8	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME OVER 60%, UP TO AND INCLUDING 80% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, EQUAL TO OR GREATER THAN FIVE FEET.	C.Y.	990	\$ 628.00	\$ 621,720.00
JB 450.1	CONSTRUCTION FIELD SUPPORT REQUIRING AN AVERAGE SIZE SURVEY CREW THAT WILL PERFORM TYPICAL FIELD SURVEY FUNCTIONS AND PROVIDE DATA ANALYSIS REPORTS	Ctrhs.	600	\$ 336.00	\$ 201,600.00
JB 450.2	CONSTRUCTION FIELD SUPPORT REQUIRING AN AVERAGE SMALL SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS, WHICH MAY INCLUDE BUT ARE NOT LIMITED TO: OPENING/CLOSING SUBSURFACE STRUCTURE COVER(S), SETTING/ RESETTING MPT SETUP(S), ASSISTING UTILITY FACILITY/SPECIALTY CREW(S), PERFORMING CONDUIT OCCUPANCY IDENTIFICATION, CLEAN-UP STORAGE WORK-SITE AREA, ETC.	Ctrhs.	800	\$ 332.00	\$ 265,600.00
JB 450.3	CONSTRUCTION FIELD SUPPORT REQUIRING AN AVERAGE MEDIUM SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS, WHICH MAY INCLUDE BUT NOT LIMITED TO: EXCAVATIONS DUE TO CABLE FAILURES, INCLUDING EMERGENCY TYPE EXCAVATIONS, CONSTRUCT MANHOLE ENCLOSURES, DEWATERING UTILITY STRUCTURES AND EXCAVATIONS, OPENING/CLOSING TRAFFIC AND/OR PEDESTRIAN PLATES, ETC.	Ctrhs.	1,600	\$ 938.00	\$ 1,500,800.00
JB 500	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	L.F.	59,700	\$ 4.00	\$ 238,800.00
JB 501	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	C.Y.	200	\$ 368.00	\$ 73,600.00
JB 603E.1	CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	L.F.	1,620	\$ 6.00	\$ 9,720.00
JB 603E.2	CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	64,490	\$ 10.00	\$ 644,900.00
JB 620.4	INSTALL 8" DIAMETER STEAM PIPE	L.F.	45	\$ 183.00	\$ 8,235.00
JB 620.5	INSTALL 8" DIAMETER STEAM PIPE	L.F.	255	\$ 206.00	\$ 52,530.00
JB 620.12	INSTALL 24" DIAMETER STEAM PIPE	L.F.	75	\$ 429.00	\$ 32,175.00
JB 621.4	INSTALL 6" DIAMETER STEAM PIPE FITTING	EA.	6	\$ 1,214.00	\$ 7,284.00
JB 621.5	INSTALL 8" DIAMETER STEAM PIPE FITTING	EA.	6	\$ 1,828.00	\$ 10,968.00
JB 621.12	INSTALL 24" DIAMETER STEAM PIPE FITTING	EA.	4	\$ 4,123.00	\$ 16,492.00
JB 625D	STEAM VALVE ASSEMBLY	EA.	1	\$ 3,500.00	\$ 3,500.00
JB 636 EB	ADJUSTMENT OF UTILITY HARDWARE ( 7" TO UNDER 14" WIDTH )	EA.	5	\$ 374.00	\$ 1,870.00
JB 636 ED	ADJUSTMENT OF UTILITY HARDWARE ( 30" TO UNDER 34" WIDTH )	EA.	5	\$ 965.00	\$ 4,825.00
JB 636 EE	ADJUSTMENT OF UTILITY HARDWARE ( 34" TO UNDER 41" WIDTH )	EA.	80	\$ 1,113.00	\$ 89,040.00
JB 636 EG	ADJUSTMENT OF UTILITY HARDWARE ( 41" TO UNDER 75" WIDTH )	EA.	20	\$ 1,272.00	\$ 25,440.00
JB 636 EH	ADJUSTMENT OF UTILITY HARDWARE ( 75" TO UNDER 125" WIDTH )	EA.	5	\$ 1,452.00	\$ 7,260.00
JB 636 EI	ADJUSTMENT OF UTILITY HARDWARE ( 125" TO UNDER 170" WIDTH )	EA.	2	\$ 1,601.00	\$ 3,202.00
JB 636 R	REPAIR TO UTILITY STRUCTURES	C.Y.	50	\$ 257.00	\$ 12,850.00
JB 636 SA	ADJUSTMENT OF UTILITY STEAM HARDWARE (CONCRETE COLLAR)	S.F.	50	\$ 17.00	\$ 850.00

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JOINT BID ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity	Unit Price	Total
JB 636 SB	ADJUSTMENT OF UTILITY STEAM CASTINGS (UNDER AND INCLUDING 8" WIDTH )	EA.	1	\$ 275.00	\$ 275.00
JB 636 SC	ADJUSTMENT OF UTILITY STEAM CASTINGS (ABOVE 8" TO 34" WIDTH )	EA.	2	\$ 814.00	\$ 1,628.00
JB 638 N	INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE	C.Y.	430	\$ 1,229.00	\$ 528,470.00
JB 638 R	BREAK OUT AND REMOVE UTILITY STRUCTURE	C.Y.	405	\$ 955.00	\$ 386,775.00
JB 700	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	C.Y.	5,505	\$ 56.00	\$ 319,290.00
JB 710.1	REMOVAL OF ABANDONED UTILITY STEEL/ CAST IRON/ PLASTIC PIPES, UP TO AND INCLUDING 12" DIAMETER PIPES	L.F.	14,425	\$ 16.00	\$ 230,800.00
JB 710.2	REMOVAL OF ABANDONED UTILITY STEEL/ CAST IRON/ PLASTIC PIPES, OVER 12" AND UP TO AND INCLUDING 20" DIAMETER PIPES	L.F.	120	\$ 18.00	\$ 2,160.00
JB 711	USE SHEETING LINE AS FORM	L.F.	400	\$ 6.00	\$ 2,400.00
JB 800	MODIFICATION OF CONCRETE YOKE TROLLEY STRUCTURE REMOVAL WHEN CROSSING UTILITY FACILITIES	L.F.	270	\$ 197.00	\$ 53,190.00
JB 801	MODIFICATION OF CONCRETE YOKE TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES	L.F.	850	\$ 182.00	\$ 154,700.00
JB 803.2	LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS (LINE CUT ANY COMBINATION OF ASPHALT AND CONCRETE ROADWAY)	L.F.	200	\$ 10.00	\$ 2,000.00
JB 850	PLACING RUBBER SHEETS FOR UTILITY FACILITIES	S.F.	12,400	\$ 3.00	\$ 37,200.00
JB 900	EXTRA UTILITY WORK COSTS ALLOWANCE	L.S.	1	\$ 3,525,786.50	\$ 3,525,786.50
				<b>Total</b>	<b>\$ 17,628,932.50</b>

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 100.1 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .1) EA.**

At the following locations:

WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
INT. WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
WORTH STREET BTW LAFAYETTE STREET AND CENTRE STREET  
INT. OF WORTH STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
INT. OF WORTH STREET AND BAXTER STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
INT. OF MULBERRY STREET AND PARK STREET

Total quantity for JB 100.1 = 30.00

**JB 100.2 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .2) EA.**

At the following locations:

INT. WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
WORTH STREET BTW LAFAYETTE STREET AND CENTRE STREET  
INT. OF WORTH STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
INT. OF MULBERRY STREET AND PARK STREET

Total quantity for JB 100.2 = 8.00

**JB 100.3 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .3) EA.**

At the following locations:

INT. WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
INT. OF MULBERRY STREET AND PARK STREET

Total quantity for JB 100.3 = 8.00



**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 100.4 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. EA.**  
**AND/OR TEST PIT (TYPE .4)**

At the following locations:  
INT. WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW CHURCH STREET AND BROADWAY

Total quantity for JB 100.4 = 2.00

**JB 101.1 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER EA.**  
**(TYPE .1)**

At the following locations:  
WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
INT. WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET

Total quantity for JB 101.1 = 10.00

**JB 101.2 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER EA.**  
**(TYPE .2)**

At the following locations:  
INT. WORTH STREET AND WEST BROADWAY

Total quantity for JB 101.2 = 3.00

**JB 101.3 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER EA.**  
**(TYPE .3)**

At the following locations:  
INT. WORTH STREET AND WEST BROADWAY

Total quantity for JB 101.3 = 3.00

**JB 108.1 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" EA.**  
**DIAMETER (TYPE .1)**

At the following locations:  
INT. OF WORTH STREET AND HUDSON STREET  
WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
WORTH STREET BTW CHURCH STREET AND BROADWAY

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

BROADWAY N/O WORTH STREET  
INT. OF WORTH STREET AND BROADWAY  
INT. OF WORTH STREET AND LAFAYETTE STREET  
WORTH STREET BTW LAFAYETTE STREET AND CENTRE STREET  
INT. OF WORTH STREET AND BAXTER STREET  
INT. OF WORTH STREET AND MULBERRY STREET  
INT. OF MULBERRY STREET AND PARK STREET  
MULBERRY STREET BTW PARK STREET AND WORTH STREET  
PARK STREET BTW MULBERRY STREET AND MOTT STREET  
INT. OF PARK STREET AND MOTT STREET

Total quantity for JB 108.1 = 51.00

**JB 108.2 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .2) EA.**

At the following locations:

WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND CHURCH STREET  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
INT. OF WORTH STREET AND LAFAYETTE STREET  
CENTRE STREET N/O WORTH STREET  
INT. OF WORTH STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
INT. OF WORTH STREET AND BAXTER STREET  
INT. OF WORTH STREET AND MULBERRY STREET  
INT. OF PARK STREET AND MOTT STREET

Total quantity for JB 108.2 = 17.00

**JB 108.3 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .3) EA.**

At the following locations:

INT. OF WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
BROADWAY N/O WORTH STREET  
INT. OF WORTH STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET

Total quantity for JB 108.3 = 9.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 108.4 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .4) EA.**

At the following locations:  
 INT. OF WORTH STREET AND WEST BROADWAY  
 WORTH STREET BTW CHURCH STREET AND BROADWAY

Total quantity for JB 108.4 = 3.00

**JB 108.5 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .5) EA.**

At the following locations:  
 BROADWAY S/O WORTH STREET

Total quantity for JB 108.5 = 1.00

**JB 109.1 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1) EA.**

At the following locations:  
 INT. OF WORTH STREET AND HUDSON STREET  
 WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
 INT. OF WORTH STREET AND WEST BROADWAY  
 WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
 INT. OF WORTH STREET AND CHURCH STREET  
 WORTH STREET BTW CHURCH STREET AND BROADWAY  
 INT. OF WORTH STREET AND BROADWAY  
 WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
 INT. OF WORTH STREET AND CENTRE STREET  
 WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
 WORTH STREET BTW BAXTER STREET AND MULBERRY STREET

Total quantity for JB 109.1 = 83.00

**JB 109.2 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2) EA.**

At the following locations:  
 WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
 INT. OF WORTH STREET AND WEST BROADWAY  
 WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
 INT. OF WORTH STREET AND CHURCH STREET  
 WORTH STREET BTW CHURCH STREET AND BROADWAY  
 INT. OF WORTH STREET AND BROADWAY

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET

Total quantity for    JB 109.2            =        22.00

**JB 109.3    UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24"        EA.**  
**DIAMETER (TYPE .3)**

At the following locations:  
INT. OF WORTH STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND CHURCH STREET  
WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
INT. OF WORTH STREET AND CENTRE STREET

Total quantity for    JB 109.3            =        16.00

**JB 109.4    UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24"        EA.**  
**DIAMETER (TYPE .4)**

At the following locations:  
WORTH STREET BTW CHURCH STREET AND BROADWAY

Total quantity for    JB 109.4            =        1.00

**JB 109.5    UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24"        EA.**  
**DIAMETER (TYPE .5)**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for    JB 109.5            =        1.00

**JB 109.6    UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24"        EA.**  
**DIAMETER (TYPE .6)**

At the following locations:  
INT. OF WORTH STREET AND CHURCH STREET

Total quantity for    JB 109.6            =        2.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 110.1 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .1) EA.**

At the following locations:

INT. OF WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
INT. OF WORTH STREET AND CHURCH STREET  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
INT. OF WORTH STREET AND BROADWAY  
WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
INT. OF WORTH STREET AND LAFAYETTE STREET  
INT. OF WORTH STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
INT. OF WORTH STREET AND BAXTER STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
INT. OF WORTH STREET, MOTT STREET AND PARK ROW

Total quantity for JB 110.1 = 70.00

**JB 110.2 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .2) EA.**

At the following locations:

WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
INT. OF WORTH STREET AND CHURCH STREET  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
INT. OF WORTH STREET AND BROADWAY  
WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
INT. OF WORTH STREET AND LAFAYETTE STREET  
INT. OF WORTH STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
INT. OF WORTH STREET AND BAXTER STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
INT. OF WORTH STREET, MOTT STREET AND PARK ROW

Total quantity for JB 110.2 = 19.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 110.3 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .3) EA.**

At the following locations:

INT. OF WORTH STREET AND WEST BROADWAY  
 WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
 INT. OF WORTH STREET AND CHURCH STREET  
 INT. OF WORTH STREET AND BROADWAY  
 WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
 INT. OF WORTH STREET AND LAFAYETTE STREET  
 INT. OF WORTH STREET AND CENTRE STREET  
 WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
 INT. OF WORTH STREET, MOTT STREET AND PARK ROW

Total quantity for JB 110.3 = 15.00

**JB 110.4 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .4) EA.**

At the following locations:

AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for JB 110.4 = 1.00

**JB 110.5 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .5) EA.**

At the following locations:

AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for JB 110.5 = 1.00

**JB 110.6 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .6) EA.**

At the following locations:

INT. OF WORTH STREET AND CHURCH STREET

Total quantity for JB 110.6 = 1.00

CON EDISON JOINT BID (JB) SCOPE OF WORK  
SUPPORT & PROTECTION  
HMMWTCA7E  
FOR THE RECONSTRUCTION OF WORTH STREET  
FROM HUDSON STREET TO PARK ROW  
BOROUGH OF MANHATTAN

**JB 111.1 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .1) EA.**

At the following locations:  
 INT. OF WORTH STREET AND HUDSON STREET  
 WORTH STREET BTW HUDSON STREET AND WEST BROADWAY

Total quantity for JB 111.1 = 12.00

**JB 111.2 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2) EA.**

At the following locations:  
 WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
 INT. OF WORTH STREET AND WEST BROADWAY

Total quantity for JB 111.2 = 2.00

**JB 111.3 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3) EA.**

At the following locations:  
 INT. OF WORTH STREET AND WEST BROADWAY

Total quantity for JB 111.3 = 2.00

**JB 111.4 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .4) EA.**

At the following locations:  
 INT. OF WORTH STREET AND WEST BROADWAY

Total quantity for JB 111.4 = 2.00

**JB 200 EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES L.F.**

At the following locations:  
 INT. WORTH STREET AND WEST BROADWAY  
 WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
 WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
 INT. OF MULBERRY STREET AND PARK STREET  
 AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for JB 200 = 120.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 226      INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES      EA.**

At the following locations:  
WORTH STREET BETWEEN HUDSON STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
INT. OF WORTH STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
INT. OF WORTH STREET AND BAXTER STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
INT. OF MULBERRY STREET AND PARK STREET

Total quantity for      JB 226      =      16.00

**JB 227      REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES      EA.**

At the following locations:  
WORTH STREET BETWEEN HUDSON STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET

Total quantity for      JB 227      =      3.00

**JB 300      SPECIAL CARE EXCAVATION AND BACKFILLING      C.Y.**

At the following locations:  
E/S LAFAYETTE STREET S/O WORTH STREET  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for      JB 300      =      120.00

**JB 301      SPECIAL CARE EXCAVATION AND BACKFILLING FOR OIL-O-STATIC PIPES      C.Y.**

At the following locations:  
WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
WORTH STREET BTW LAFAYETTE STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for      JB 301      =      190.00



**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 303 FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL C.Y.**

At the following locations:  
WORTH STREET BETWEEN HUDSON STREET AND WEST BROADWAY  
INT. WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
INT. OF WORTH STREET AND CHURCH STREET  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
INT. OF WORTH STREET AND BROADWAY  
WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
INT. OF WORTH STREET AND LAFAYETTE STREET  
WORTH STREET BTW LAFAYETTE STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
INT. OF WORTH STREET, MOTT STREET AND PARK ROW  
MULBERRY STREET BTW BAYARD STREET AND PARK STREET  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for JB 303 = 1,260.00

**JB 330E.1 SUPPORT & PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .1) L.F.**

At the following locations:  
WORTH STREET BETWEEN HUDSON STREET AND WEST BROADWAY  
WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
INT. OF WORTH STREET AND CHURCH STREET  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
INT. OF WORTH STREET AND LAFAYETTE STREET  
WORTH STREET BTW LAFAYETTE STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
INT. OF WORTH STREET, MOTT STREET AND PARK ROW  
MULBERRY STREET BTW BAYARD STREET AND WORTH STREET  
PARK STREET BTW MULBERRY STREET AND MOTT STREET  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for JB 330E.1 = 2,180.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 330E.2    SUPPORT & PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .2)    L.F.**

At the following locations:  
WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
INT. OF WORTH STREET AND CENTER STREET  
INT. OF WORTH STREET AND BAXTER STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for    JB 330E.2    =    760.00

**JB 330E.3    SUPPORT & PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .3)    L.F.**

At the following locations:  
WORTH STREET BETWEEN HUDSON STREET AND WEST BROADWAY  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
INT. OF WORTH STREET AND MULBERRY STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for    JB 330E.3    =    1,060.00

**JB 330E.4    SUPPORT & PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .4)    L.F.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for    JB 330E.4    =    200.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 400 TEST PITS FOR UTILITY FACILITIES C.Y.**

At the following locations:  
 AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for JB 400 = 140.00

**JB 401 TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES C.Y.**

At the following locations:  
 AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for JB 401 = 560.00

**JB 401A SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES CONNECTED TO THE BASE PAVEMENT C.Y.**

At the following locations:  
 AS SHOWN ON THE SPECIAL CARE EXCAVATION PLANS

Total quantity for JB 401A = 200.00

**JB 402.1 EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT L.F.**

At the following locations:  
 AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for JB 402.1 = 100.00

**JB 402.1A EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT L.F.**

At the following locations:  
 AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE

Total quantity for JB 402.1A = 200.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

- JB 402.2**    **EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT**    **L.F.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE
- Total quantity for    JB 402.2            =    400.00
- 
- JB 402.2A**    **EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT**    **L.F.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE
- Total quantity for    JB 402.2A            =    100.00
- 
- JB 403**    **PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES**    **S.F.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE
- Total quantity for    JB 403                    =    4,000.00
- 
- JB 404**    **PIER AND/OR PLATE METHOD OF PROTECTION FOR DUCTILE IRON WATER MAINS AND OTHER SHALLOW FACILITIES**    **S.F.**
- At the following locations:  
AS ENCOUNTERED AND DIRECTED BY CON EDISON REPRESENTATIVE
- Total quantity for    JB 404                    =    200.00
- 
- JB 405.1**    **TRENCH EXCAVATIONS FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET**    **C.Y.**
- At the following locations:  
WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND CHURCH STREET  
INT. OF WORTH STREET AND BROADWAY  
BROADWAY N/O WORTH STREET  
WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
INT. OF WORTH STREET AND LAFAYETTE STREET  
WORTH STREET BTW LAFAYETTE STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
INT. OF WORTH STREET AND BAXTER STREET

7/21/2014

JB SCOPE

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
INT. OF WORTH STREET AND MULBERRY STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
MULBERRY STREET BTW PARK STREET AND WORTH STREET  
MULBERRY STREET BTW BAYARD STREET AND PARK STREET  
PARK STREET BTW MULBERRY STREET AND MOTT STREET  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 405.1 = 3,005.00

**JB 405.2 TRENCH EXCAVATIONS FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET C.Y.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 405.2 = 580.00

**JB 406 EXCAVATION FOR UTILITY STRUCTURE C.Y.**

At the following locations:  
WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
INT. OF WORTH STREET AND CHURCH STREET  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
INT. OF WORTH STREET AND BROADWAY  
WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
INT. OF WORTH STREET AND BAXTER STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
MULBERRY STREET BTW PARK STREET AND WORTH STREET  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 406 = 830.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 410.1**      **MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME UP TO AND INCLUDING 20% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, LESS THAN FIVE FEET.**      **C.Y.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for      JB 410.1      =      200.00

**JB 410.2**      **MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME OVER 20%, UP TO AND INCLUDING 40% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, LESS THAN FIVE FEET.**      **C.Y.**

At the following locations:  
AS SHOWN ON THE MASS EXCAVATION PLANS

Total quantity for      JB 410.2      =      2,790.00

**JB 410.3**      **MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME OVER 40%, UP TO AND INCLUDING 60% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, LESS THAN FIVE FEET.**      **C.Y.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for      JB 410.3      =      200.00

**JB 410.4**      **MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME OVER 60%, UP TO AND INCLUDING 80% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, LESS THAN FIVE FEET.**      **C.Y.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for      JB 410.4      =      200.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 410.5**      **MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES  
HAVING A VOLUME UP TO AND INCLUDING 20% OF THE TOTAL  
EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE  
TOP OF ROADWAY, EQUAL TO OR GREATER THAN FIVE FEET.**      **C.Y.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for      JB 410.5      =      200.00

**JB 410.6**      **MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES  
HAVING A VOLUME OVER 20%, UP TO AND INCLUDING 40% OF THE  
TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED  
FROM THE TOP OF ROADWAY, EQUAL TO OR GREATER THAN FIVE FEET.**      **C.Y.**

At the following locations:  
AS SHOWN ON THE MASS EXCAVATION PLANS

Total quantity for      JB 410.6      =      6,920.00

**JB 410.7**      **MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES  
HAVING A VOLUME OVER 40%, UP TO AND INCLUDING 60% OF THE  
TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED  
FROM THE TOP OF ROADWAY, EQUAL TO OR GREATER THAN FIVE FEET.**      **C.Y.**

At the following locations:  
AS SHOWN ON THE MASS EXCAVATION PLANS

Total quantity for      JB 410.7      =      1,890.00

**JB 410.8**      **MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES  
HAVING A VOLUME OVER 60%, UP TO AND INCLUDING 80% OF THE  
TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED  
FROM THE TOP OF ROADWAY, EQUAL TO OR GREATER THAN FIVE FEET.**      **C.Y.**

At the following locations:  
AS SHOWN ON THE MASS EXCAVATION PLANS

Total quantity for      JB 410.8      =      990.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 450.1 CONSTRUCTION FIELD SUPPORT REQUIRING AN AVERAGE SIZE SURVEY CREW THAT WILL PERFORM TYPICAL FIELD SURVEY FUNCTIONS AND PROVIDE DATA ANALYSIS REPORTS Crhrs.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 450.1 = 600.00

**JB 450.2 CONSTRUCTION FIELD SUPPORT REQUIRING AN AVERAGE SMALL SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS, WHICH MAY INCLUDE BUT ARE NOT LIMITED TO: OPENING/CLOSING SUBSURFACE STRUCTURE COVER(S), SETTING/ RESETTING MPT SETUP(S), ASSISTING UTILITY FACILITY/SPECIALTY CREW(S), PERFORMING CONDUIT OCCUPANCY IDENTIFICATION, CLEAN-UP STORAGE WORK-SITE AREA, ETC. Crhrs.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 450.2 = 800.00

**JB 450.3 CONSTRUCTION FIELD SUPPORT REQUIRING AN AVERAGE MEDIUM SIZE CREW CAPABLE OF PERFORMING VARIOUS TASKS, WHICH MAY INCLUDE BUT NOT LIMITED TO: EXCAVATIONS DUE TO CABLE FAILURES, INCLUDING EMERGENCY TYPE EXCAVATIONS, CONSTRUCT MANHOLE ENCLOSURES, DEWATERING UTILITY STRUCTURES AND EXCAVATIONS, OPENING/CLOSING TRAFFIC AND/OR PEDESTRIAN PLATES, ETC. Crhrs.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 450.3 = 1,600.00

**JB 500 REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED) L.F.**

At the following locations:  
WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
INT. OF WORTH STREET AND CHURCH STREET  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
INT. OF WORTH STREET AND BROADWAY  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET



**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 500 = 59,700.00

**JB 501 REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES C.Y.**

At the following locations:

WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
INT. OF WORTH STREET AND CHURCH STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 501 = 200.00

**JB 603E.1 CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT L.F.**

At the following locations:

WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
INT. OF WORTH STREET AND CHURCH STREET  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
INT. OF WORTH STREET AND BROADWAY  
BROADWAY N/O WORTH STREET  
WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
INT. OF WORTH STREET AND LAFAYETTE STREET  
INT. OF WORTH STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
INT. OF WORTH STREET AND BAXTER STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
INT. OF WORTH STREET AND PARK AVENUE  
MULBERRY STREET BTW PARK STREET AND WORTH STREET  
MULBERRY STREET BTW BAYARD STREET AND PARK STREET  
PARK STREET BTW MULBERRY STREET AND MOTT STREET  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 603E.1 = 1,620.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 603E.2 CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT L.F.**

At the following locations:

WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
INT. OF WORTH STREET AND CHURCH STREET  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
INT. OF WORTH STREET AND BROADWAY  
BROADWAY N/O WORTH STREET  
WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
INT. OF WORTH STREET AND LAFAYETTE STREET  
WORTH STREET BTW CENTRE STREET AND LAFAYETTE STREET  
INT. OF WORTH STREET AND CENTRE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
INT. OF WORTH STREET AND BAXTER STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
INT. OF WORTH STREET AND PARK AVENUE  
MULBERRY STREET BTW PARK STREET AND WORTH STREET  
MULBERRY STREET BTW BAYARD STREET AND PARK STREET  
PARK STREET BTW MULBERRY STREET AND MOTT STREET  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 603E.2 = 64,490.00

**JB 620.4 INSTALL 6" DIAMETER STEAM PIPE L.F.**

At the following locations:

INT. OF WORTH STREET AND CHURCH STREET

Total quantity for JB 620.4 = 45.00

**JB 620.5 INSTALL 8" DIAMETER STEAM PIPE L.F.**

At the following locations:

WORTH STREET BTW CENTRE STREET AND BAXTER STREET

Total quantity for JB 620.5 = 255.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 620.12 INSTALL 24" DIAMETER STEAM PIPE** **L.F.**

At the following locations:  
 INT. OF WORTH STREET AND CHURCH STREET

Total quantity for JB 620.12 = 75.00

**JB 621.4 INSTALL 6" DIAMETER STEAM PIPE FITTING** **EA.**

At the following locations:  
 INT. OF WORTH STREET AND CHURCH STREET

Total quantity for JB 621.4 = 6.00

**JB 621.5 INSTALL 8" DIAMETER STEAM PIPE FITTING** **EA.**

At the following locations:  
 WORTH STREET BTW CENTRE STREET AND BAXTER STREET

Total quantity for JB 621.5 = 6.00

**JB 621.12 INSTALL 24" DIAMETER STEAM PIPE FITTING** **EA.**

At the following locations:  
 INT. OF WORTH STREET AND CHURCH STREET

Total quantity for JB 621.12 = 4.00

**JB 625D STEAM VALVE ASSEMBLY** **EA.**

At the following locations:  
 INT. OF WORTH STREET AND CHURCH STREET

Total quantity for JB 625D = 1.00

**JB 636 EB ADJUSTMENT OF UTILITY HARDWARE ( 7" TO UNDER 14" WIDTH )** **EA.**

At the following locations:  
 AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 636 EB = 5.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 636 ED ADJUSTMENT OF UTILITY HARDWARE ( 30" TO UNDER 34" WIDTH ) EA.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 636 ED = 5.00

**JB 636 EE ADJUSTMENT OF UTILITY HARDWARE ( 34" TO UNDER 41" WIDTH ) EA.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 636 EE = 80.00

**JB 636 EG ADJUSTMENT OF UTILITY HARDWARE ( 41" TO UNDER 75" WIDTH ) EA.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 636 EG = 20.00

**JB 636 EH ADJUSTMENT OF UTILITY HARDWARE ( 75" TO UNDER 125" WIDTH ) EA.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 636 EH = 5.00

**JB 636 EI ADJUSTMENT OF UTILITY HARDWARE ( 125" TO UNDER 170" WIDTH ) EA.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 636 EI = 2.00

**JB 636 R REPAIR TO UTILITY STRUCTURES C.Y.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 636 R = 50.00

**CON EDISON JOINT BID (JB) SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E**  
**FOR THE RECONSTRUCTION OF WORTH STREET**  
**FROM HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 636 SA ADJUSTMENT OF UTILITY STEAM HARDWARE (CONCRETE COLLAR) S.F.**

At the following locations:  
INT. OF WORTH STREET AND CHURCH STREET

Total quantity for JB 636 SA = 50.00

**JB 636 SB ADJUSTMENT OF UTILITY STEAM CASTINGS (UNDER AND INCLUDING 8" WIDTH) EA.**

At the following locations:  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 636 SB = 1.00

**JB 636 SC ADJUSTMENT OF UTILITY STEAM CASTINGS (ABOVE 8" TO 34" WIDTH) EA.**

At the following locations:  
INT. OF WORTH STREET AND CHURCH STREET

Total quantity for JB 636 SC = 2.00

**JB 638 N INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE C.Y.**

At the following locations:  
WORTH STREET BTW HUDSON STREET AND WEST BROADWAY  
INT. OF WORTH STREET AND WEST BROADWAY  
WORTH STREET BTW WEST BROADWAY AND CHURCH STREET  
INT. OF WORTH STREET AND CHURCH STREET  
WORTH STREET BTW CHURCH STREET AND BROADWAY  
INT. OF WORTH STREET AND BROADWAY  
WORTH STREET BTW BROADWAY AND LAFAYETTE STREET  
WORTH STREET BTW CENTRE STREET AND BAXTER STREET  
INT. OF WORTH STREET AND BAXTER STREET  
WORTH STREET BTW BAXTER STREET AND MULBERRY STREET  
WORTH STREET BTW MULBERRY STREET AND MOTT STREET  
MULBERRY STREET BTW PARK STREET AND WORTH STREET  
AS ENCOUNTERED AND DIRECTED BY THE CON EDISON REPRESENTATIVE

Total quantity for JB 638 N = 430.00









**JOINT BID WORKSHEET**  
**HMMWTCA7E - RECONSTRUCTION OF WORTH STREET**  
**FOR INFORMATION ONLY**  
**ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE**  
**FOR EMPIRE CITY SUBWAY**  
**HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

JOINT BID ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity	Unit Price	TOTAL
JB 100.1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .1)	EA.	9.00	\$595	\$5,355
JB 100.2	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .2)	EA.	7.00	\$808	\$5,656
JB 100.3	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .3)	EA.	10.00	\$998	\$9,980
JB 101.1	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	EA.	2.00	\$2,364	\$4,728
JB 101.2	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	EA.	3.00	\$2,384	\$7,182
JB 101.3	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	EA.	1.00	\$3,309	\$3,309
JB 108.1	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .1)	EA.	15.00	\$886	\$13,290
JB 108.2	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .2)	EA.	11.00	\$1,097	\$12,067
JB 108.3	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .3)	EA.	23.00	\$1,322	\$30,406
JB 108.4	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .4)	EA.	9.00	\$1,622	\$14,598
JB 109.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	EA.	13.00	\$1,003	\$13,039
JB 109.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)	EA.	22.00	\$1,345	\$29,590
JB 109.3	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	EA.	21.00	\$1,666	\$34,986
JB 109.4	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4)	EA.	7.00	\$2,007	\$14,049
JB 110.1	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .1)	EA.	21.00	\$1,345	\$28,245
JB 110.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .2)	EA.	8.00	\$1,505	\$12,040
JB 110.3	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .3)	EA.	21.00	\$1,666	\$34,986
JB 110.4	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .4)	EA.	4.00	\$2,007	\$8,028
JB 111.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)	EA.	3.00	\$1,666	\$4,998
JB 111.3	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3)	EA.	1.00	\$2,007	\$2,007
JB 226	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	18.00	\$2,925	\$52,650
JB 227	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA.	11.00	\$1,463	\$16,093
JB 300	SPECIAL CARE EXCAVATION & BACKFILLING	C.Y.	176.00	\$167	\$29,392
JB 330T1	SUPPORT & PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE IN OR CLOSE PROXIMITY TO TRENCH LIMITS	L.F.	965.00	\$115	\$110,975
JB 400	TEST PITS	C.Y.	40.00	\$218	\$8,720
JB 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	C.Y.	1,019.00	\$228	\$232,332
JB 402T.1A	EXIST. CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. W. CONCR. ENCSMNT.	L.F.	58,551.00	\$53	\$3,103,203
JB 402T.V1A	EXIS. VACANT CONCR. ENCASED TELECOMMUNICATION CONDUITS PLACD IN FINAL POS. W. CONCR. ENCSMNT	L.F.	14,689.00	\$48	\$705,072

**JOINT BID WORKSHEET**  
**HMMWTCA7E - RECONSTRUCTION OF WORTH STREET**  
**FOR INFORMATION ONLY**  
**ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE**  
**FOR EMPIRE CITY SUBWAY**  
**HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

JOINT BID ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity	Unit Price	TOTAL
JB 402T.2	EXIST. NON-CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. WITHOUT CONCR. ENCSMNT.	L.F.	140.00	\$44	\$6,160
JB 403	PLACING STEEL PROTECTION PLATES FOR UTILITIES	S.F.	2,260.00	\$4	\$9,040
JB 410.6	TRENCH EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A TOTAL VOLUME OVER 20%, UP TO AND INCLUDING 40%, WITH MAXIMUM TRENCH DEPTHS EQUAL TO OR GREATER THAN FIVE FEET.	C.Y.	1,732.00	\$187	\$323,884
JB 410.7	TRENCH EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A TOTAL VOLUME OVER 40%, UP TO AND INCLUDING 60%, WITH MAXIMUM TRENCH DEPTHS EQUAL TO OR GREATER THAN FIVE FEET.	C.Y.	980.00	\$246	\$241,080
JB 410.8	TRENCH EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A TOTAL VOLUME OVER 60%, UP TO AND INCLUDING 80%, WITH MAXIMUM TRENCH DEPTHS EQUAL TO OR GREATER THAN FIVE FEET.	C.Y.	370.00	\$445	\$164,650
JB 450.1	CONSTRUCTION FIELD SUPPORT - SURVEY CREW	Crhrs.	160.00	\$276	\$44,160
JB 450.2	CONSTRUCTION FIELD SUPPORT - SMALL CREW	Crhrs.	5,020.00	\$463	\$2,324,260
JB 450.3	CONSTRUCTION FIELD SUPPORT - MEDIUM CREW	Crhrs.	2,507.00	\$1,008	\$2,527,056
JB 501	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	C.Y.	19.00	\$231	\$4,389
JB 636 EE	ADJUSTMENT OF UTILITY HARWARE (34" TO UNDER 41" WIDTH )	EA.	48.00	\$490	\$23,520
JB 638 NT	INSTALLATION OF TELEPHONE MANHOLE STRUCTURES	C.Y.	68.00	\$2,576	\$175,168
JB 638 R	BREAK OUT AND REMOVE UTILITY STRUCTURE	C.Y.	89.00	\$353	\$31,417
JB 700.0	SPECIAL MOD. OF WORK MTHDS TO ACCOM./PROTECT U.G. FACIL. W. LMTD CVR.	C.Y.	1,179.00	\$95	\$112,005
JB 710.1	REM. OF ABND. UTILITY STEEL/CAST IRON PIPE, UP TO & INCL. 12" DIAM. PIPES	L.F.	347.00	\$12	\$4,164
JB 711	USE SHEETING LINE AS FORM	L.F.	50.00	\$6	\$300
JB 781	REMOVABLE CURB SIDEWALK PANEL FOR ACCESS TO UTILITY STRUCTURE OPENINGS	EA.	4.00	\$2,021	\$8,084
JB 900	EXTRA UTILITY WORK ALLOWANCE	L.S.	1.00	\$1,581,947	\$1,581,947
				<b>TOTAL</b>	<b>\$12,122,905</b>

**EMPIRE CITY SUBWAY JOINT BIDDING SCOPE OF WORK**  
**SUPPORT & PROTECTION**  
**HMMWTCA7E - RECONSTRUCTION OF WORTH STREET**  
**HUDSON STREET TO PARK ROW**  
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**JB 100.1 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .1) EA.**

At the following locations:

INT. OF WORTH STREET & WEST BROADWAY	1.00
WORTH STREET BET. CHURCH STREET & BROADWAY	1.00
WORTH STREET BET. BROADWAY & LAFAYETTE STREET	1.00
INT. OF WORTH STREET & CENTRE STREET	1.00
WORTH STREET BET. CENTRE STREET & BAXTER STREET	1.00
WORTH STREET BET. BAXTER STREET & MULBERRY STREET	1.00

Total quantity for JB 100.1 = 9.00

**JB 100.2 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .2) EA.**

At the following locations:

WORTH STREET BET. HUDSON STREET & WEST BROADWAY	1.00
INT. OF WORTH STREET & WEST BROADWAY	1.00
WORTH STREET BET. CHURCH STREET & BROADWAY	1.00
WORTH STREET BET. LAFAYETTE STREET & CENTRE STREET	1.00
INT. OF WORTH STREET & CENTRE STREET	1.00
INT. OF WORTH STREET & BAXTER STREET	1.00
WORTH STREET BET. BAXTER STREET & MULBERRY STREET	1.00

Total quantity for JB 100.2 = 7.00

**JB 100.3 UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .3) EA.**

At the following locations:

WORTH STREET BET. HUDSON STREET & WEST BROADWAY	2.00
INT. OF WORTH STREET & WEST BROADWAY	1.00
WORTH STREET BET. CHURCH STREET & BROADWAY	4.00
WORTH STREET BET. LAFAYETTE STREET & CENTRE STREET	2.00
WORTH STREET BET. CENTRE STREET & BAXTER STREET	1.00

Total quantity for JB 100.3 = 10.00

**JB 101.1 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1) EA.**

At the following locations:

INT. OF WORTH STREET & WEST BROADWAY	2.00
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Total quantity for JB 101.1 = 2.00

**JB 101.2 UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2) EA.**

At the following locations:

WORTH STREET BET. HUDSON STREET & WEST BROADWAY	2.00
INT. OF WORTH STREET & WEST BROADWAY	1.00

Total quantity for JB 101.2 = 3.00

**EMPIRE CITY SUBWAY JOINT BIDDING SCOPE OF WORK**  
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**HUDSON STREET TO PARK ROW**  
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<b>JB 101.3</b>	<b>UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)</b>	<b>EA.</b>
	At the following locations:	
	INT. OF WORTH STREET & WEST BROADWAY	1.00
	Total quantity for JB 101.3 =	1.00
<b>JB 108.1</b>	<b>UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .1)</b>	<b>EA.</b>
	At the following locations:	
	WORTH STREET BET. HUDSON STREET & WEST BROADWAY	1.00
	INT. OF WORTH STREET & WEST BROADWAY	2.00
	WORTH STREET BET. WEST BROADWAY & CHURCH STREET	2.00
	INT. OF WORTH STREET & BROADWAY	1.00
	INT. OF WORTH STREET & LAFAYETTE STREET	1.00
	INT. OF WORTH STREET & BAXTER STREET	1.00
	WORTH STREET BET. BAXTER STREET & MULBERRY STREET	2.00
	MOSCO STREET BET. MULBERRY STREET & MOTT STREET	1.00
	INT. OF MOSCO STREET & MOTT STREET	2.00
	MULBERRY STREET BET. MOSCO STREET & WORTH STREET	2.00
	Total quantity for JB 108.1 =	15.00
<b>JB 108.2</b>	<b>UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .2)</b>	<b>EA.</b>
	At the following locations:	
	INT. OF WORTH STREET & WEST BROADWAY	1.00
	INT. OF WORTH STREET & BROADWAY	1.00
	INT. OF WORTH STREET & LAFAYETTE STREET	4.00
	INT. OF WORTH STREET & CENTRE STREET	1.00
	WORTH STREET BET. CENTRE STREET & BAXTER STREET	2.00
	INT. OF WORTH STREET & BAXTER STREET	1.00
	INT. OF WORTH STREET & MULBERRY STREET	1.00
	Total quantity for JB 108.2 =	11.00
<b>JB 108.3</b>	<b>UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .3)</b>	<b>EA.</b>
	At the following locations:	
	WORTH STREET BET. HUDSON STREET & WEST BROADWAY	3.00
	INT. OF WORTH STREET & WEST BROADWAY	2.00
	WORTH STREET BET. WEST BROADWAY & CHURCH STREET	1.00
	INT. OF WORTH STREET & CHURCH STREET	1.00
	WORTH STREET BET. CHURCH STREET & BROADWAY	1.00
	INT. OF WORTH STREET & BROADWAY	4.00
	INT. OF WORTH STREET & LAFAYETTE STREET	2.00
	WORTH STREET BET. LAFAYETTE STREET & CENTRE STREET	3.00
	INT. OF WORTH STREET & CENTRE STREET	3.00
	WORTH STREET BET. CENTRE STREET & BAXTER STREET	2.00
	WORTH STREET BET. MULBERRY STREET & PARK ROW	1.00
	Total quantity for JB 108.3 =	23.00

**EMPIRE CITY SUBWAY JOINT BIDDING SCOPE OF WORK**  
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**BOROUGH OF MANHATTAN**

**JB 108.4 UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .4) EA.**

At the following locations:

WORTH STREET BET. HUDSON STREET & WEST BROADWAY	1.00
INT. OF WORTH STREET & WEST BROADWAY	3.00
WORTH STREET BET. WEST BROADWAY & CHURCH STREET	2.00
INT. OF WORTH STREET & CHURCH STREET	1.00
WORTH STREET BET. BROADWAY & LAFAYETTE STREET	2.00

Total quantity for JB 108.4 = 9.00

**JB 109.1 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1) EA.**

At the following locations:

INT. OF WORTH STREET & WEST BROADWAY	1.00
WORTH STREET BET. WEST BROADWAY & CHURCH STREET	1.00
INT. OF WORTH STREET & CHURCH STREET	2.00
WORTH STREET BET. CHURCH STREET & BROADWAY	1.00
INT. OF WORTH STREET & BROADWAY	1.00
INT. OF WORTH STREET & LAFAYETTE STREET	1.00
WORTH STREET BET. LAFAYETTE STREET & CENTRE STREET	1.00
INT. OF WORTH STREET & CENTRE STREET	1.00
WORTH STREET BET. CENTRE STREET & BAXTER STREET	4.00

Total quantity for JB 109.1 = 13.00

**JB 109.2 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2) EA.**

At the following locations:

WORTH STREET BET. HUDSON STREET & WEST BROADWAY	4.00
INT. OF WORTH STREET & WEST BROADWAY	2.00
INT. OF WORTH STREET & CHURCH STREET	7.00
INT. OF WORTH STREET & BROADWAY	4.00
WORTH STREET BET. BROADWAY & LAFAYETTE STREET	2.00
WORTH STREET BET. CENTRE STREET & BAXTER STREET	1.00
WORTH STREET BET. BAXTER STREET & MULBERRY STREET	2.00

Total quantity for JB 109.2 = 22.00

**JB 109.3 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3) EA.**

At the following locations:

WORTH STREET BET. HUDSON STREET & WEST BROADWAY	4.00
INT. OF WORTH STREET & WEST BROADWAY	2.00
WORTH STREET BET. WEST BROADWAY & CHURCH STREET	1.00
INT. OF WORTH STREET & CHURCH STREET	2.00
WORTH STREET BET. CHURCH STREET & BROADWAY	2.00
INT. OF WORTH STREET & BROADWAY	6.00
INT. OF WORTH STREET & LAFAYETTE STREET	6.00
INT. OF WORTH STREET & CENTRE STREET	1.00
WORTH STREET BET. CENTRE STREET & BAXTER STREET	2.00

Total quantity for JB 109.3 = 21.00

**EMPIRE CITY SUBWAY JOINT BIDDING SCOPE OF WORK**  
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**HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

**JB 109.4 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4) EA.**

At the following locations:

INT. OF WORTH STREET & WEST BROADWAY	2.00
WORTH STREET BET. WEST BROADWAY & CHURCH STREET	1.00
INT. OF WORTH STREET & CHURCH STREET	3.00
INT. OF WORTH STREET & BROADWAY	1.00

Total quantity for JB 109.4 = 7.00

**JB 110.1 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .1) EA.**

At the following locations:

INT. OF WORTH STREET & WEST BROADWAY	2.00
WORTH STREET BET. WEST BROADWAY & CHURCH STREET	2.00
WORTH STREET BET. CHURCH STREET & BROADWAY	1.00
INT. OF WORTH STREET & BROADWAY	3.00
INT. OF WORTH STREET & LAFAYETTE STREET	1.00
WORTH STREET BET. LAFAYETTE STREET & CENTRE STREET	2.00
INT. OF WORTH STREET & CENTRE STREET	1.00
WORTH STREET BET. CENTRE STREET & BAXTER STREET	4.00
INT. OF WORTH STREET & BAXTER STREET	1.00
WORTH STREET BET. BAXTER STREET & MULBERRY STREET	1.00
INT. OF WORTH STREET & PARK ROW	3.00

Total quantity for JB 110.1 = 21.00

**JB 110.2 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .2) EA.**

At the following locations:

WORTH STREET BET. CHURCH STREET & BROADWAY	1.00
INT. OF WORTH STREET & BROADWAY	2.00
INT. OF WORTH STREET & LAFAYETTE STREET	2.00
WORTH STREET BET. LAFAYETTE STREET & CENTRE STREET	2.00
WORTH STREET BET. CENTRE STREET & BAXTER STREET	1.00

Total quantity for JB 110.2 = 8.00

**JB 110.3 UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .3) EA.**

At the following locations:

INT. OF WORTH STREET & WEST BROADWAY	1.00
WORTH STREET BET. WEST BROADWAY & CHURCH STREET	2.00
WORTH STREET BET. CHURCH STREET & BROADWAY	8.00
INT. OF WORTH STREET & BROADWAY	4.00
INT. OF WORTH STREET & LAFAYETTE STREET	1.00
INT. OF WORTH STREET & CENTRE STREET	1.00
WORTH STREET BET. CENTRE STREET & BAXTER STREET	2.00
INT. OF WORTH STREET & PARK ROW	2.00

Total quantity for JB 110.3 = 21.00

**EMPIRE CITY SUBWAY JOINT BIDDING SCOPE OF WORK**  
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<b>JB 110.4</b>	<b>UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 24" AND UP TO 36" DIAMETER (TYPE .4)</b>	<b>EA.</b>
	At the following locations:	
	WORTH STREET BET. WEST BROADWAY & CHURCH STREET	2.00
	INT. OF WORTH STREET & CHURCH STREET	2.00
	Total quantity for JB 110.4 =	4.00
<b>JB 111.2</b>	<b>UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .2)</b>	<b>EA.</b>
	At the following locations:	
	WORTH STREET BET. HUDSON STREET & WEST BROADWAY	3.00
	Total quantity for JB 111.2 =	3.00
<b>JB 111.3</b>	<b>UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 36" AND UP TO 48" DIAMETER (TYPE .3)</b>	<b>EA.</b>
	At the following locations:	
	INT. OF WORTH STREET & WEST BROADWAY	1.00
	Total quantity for JB 111.3 =	1.00
<b>JB 226</b>	<b>INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES</b>	<b>EA.</b>
	At the following locations:	
	WORTH STREET BET. HUDSON STREET & WEST BROADWAY	3.00
	INT. OF WORTH STREET & WEST BROADWAY	2.00
	WORTH STREET BET. CHURCH STREET & BROADWAY	2.00
	WORTH STREET BET. BROADWAY & LAFAYETTE STREET	2.00
	WORTH STREET BET. LAFAYETTE STREET & CENTRE STREET	1.00
	INT. OF WORTH STREET & CENTRE STREET	1.00
	WORTH STREET BET. CENTRE STREET & BAXTER STREET	3.00
	INT. OF WORTH STREET & BAXTER STREET	2.00
	WORTH STREET BET. BAXTER STREET & MULBERRY STREET	1.00
	INT. OF WORTH STREET & MULBERRY STREET	1.00
	Total quantity for JB 226 =	18.00
<b>JB 227</b>	<b>REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES</b>	<b>EA.</b>
	At the following locations:	
	WORTH STREET BET. HUDSON STREET & WEST BROADWAY	2.00
	INT. OF WORTH STREET & WEST BROADWAY	2.00
	WORTH STREET BET. CHURCH STREET & BROADWAY	2.00
	WORTH STREET BET. BROADWAY & LAFAYETTE STREET	2.00
	WORTH STREET BET. LAFAYETTE STREET & CENTRE STREET	1.00
	WORTH STREET BET. CENTRE STREET & BAXTER STREET	2.00
	Total quantity for JB 227 =	11.00

**EMPIRE CITY SUBWAY JOINT BIDDING SCOPE OF WORK**  
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**JB 402T.1A**      **EXISTING VACANT CONCRETE ENCASED TELECOMMUNICATION CONDUITS  
 PLACED IN FINAL POSITION WITH CONCRETE ENCASMENT**      **L.F.**

At the following locations:

INT. OF WORTH STREET & HUDSON STREET	270.00
WORTH STREET BET. HUDSON STREET & WEST BROADWAY	8,270.00
INT. OF WORTH STREET & WEST BROADWAY	9,729.00
WORTH STREET BET. WEST BROADWAY & CHURCH STREET	1,968.00
INT. OF WORTH STREET & CHURCH STREET	11,690.00
INT. OF WORTH STREET & BROADWAY	3,924.00
WORTH STREET BET. BROADWAY & LAFAYETTE STREET	7,140.00
INT. OF WORTH STREET & LAFAYETTE STREET	2,010.00
WORTH STREET BET. LAFAYETTE STREET & CENTRE STREET	1,440.00
INT. OF WORTH STREET & CENTRE STREET	1,320.00
WORTH STREET BET. CENTRE STREET & BAXTER STREET	1,140.00
WORTH STREET BET. BAXTER STREET & MULBERRY STREET	390.00
WORTH STREET BET. MULBERRY STREET & PARK ROW	3,500.00
INT. OF WORTH STREET & PARK ROW	5,760.00

Total quantity for      **JB 402T.1A**      =      58,551.00

**JB 402T.V1A**      **EXIST. VACANT CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. W. CONCR. ENCSMNT.**      **L.F.**

At the following locations:

INT. OF WORTH STREET & HUDSON STREET	120.00
WORTH STREET BET. HUDSON STREET & WEST BROADWAY	2,150.00
INT. OF WORTH STREET & WEST BROADWAY	2,259.00
INT. OF WORTH STREET & CHURCH STREET	820.00
BROADWAY N/O WORTH STREET	90.00
WORTH STREET BET. BROADWAY & LAFAYETTE STREET	4,590.00
WORTH STREET BET. BAXTER STREET & MULBERRY STREET	120.00
WORTH STREET BET. MULBERRY STREET & PARK ROW	700.00
INT. OF WORTH STREET & PARK ROW	3,840.00

Total quantity for      **JB 402T.V1A**      =      14,689.00

**JB 402T.2**      **EXIST. NON-CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. WITHOUT CONCR. ENCSMNT.**      **L.F.**

At the following locations:

INT. OF WORTH STREET & WEST BROADWAY	20.00
WORTH STREET BET. WEST BROADWAY & CHURCH STREET	100.00
INT. OF WORTH STREET & CHURCH STREET	20.00

Total quantity for      **JB 402T.2**      =      140.00

**JB 403**      **PLACING STEEL PROTECTION PLATES FOR UTILITIES**      **S.F.**

At the following locations:

WORTH STREET BET. HUDSON STREET & WEST BROADWAY	110.00
INT. OF WORTH STREET & WEST BROADWAY	200.00
WORTH STREET BET. WEST BROADWAY & CHURCH STREET	100.00
INT. OF WORTH STREET & CHURCH STREET	1,000.00
INT. OF WORTH STREET & BROADWAY	350.00
INT. OF WORTH STREET & LAFAYETTE STREET	200.00
INT. OF WORTH STREET & CENTRE STREET	200.00
WORTH STREET BET. CENTRE STREET & BAXTER STREET	100.00

Total quantity for      **JB 403**      =      2,260.00





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<b>JB 410.6</b>	<b>TRENCH EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A TOTAL VOLUME OVER 20%, UP TO AND INCLUDING 40%, WITH MAXIMUM TRENCH DEPTHS EQUAL TO OR GREATER</b>	<b>C.Y.</b>
	At the following locations:	
	AS SHOWN ON CONTRACT DRAWINGS AND DIRECTED BY ECS REP.	
	Total quantity for JB 410.6 = 1,732.00	
<b>JB 410.7</b>	<b>TRENCH EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A TOTAL VOLUME OVER 40%, UP TO AND INCLUDING 60%, WITH MAXIMUM TRENCH DEPTHS EQUAL TO OR GREATER THAN FIVE FEET.</b>	<b>C.Y.</b>
	At the following locations:	
	AS SHOWN ON CONTRACT DRAWINGS AND DIRECTED BY ECS REP.	
	Total quantity for JB 410.7 = 980.00	
<b>JB 410.8</b>	<b>TRENCH EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A TOTAL VOLUME OVER 60%, UP TO AND INCLUDING 80%, WITH MAXIMUM TRENCH DEPTHS EQUAL TO OR GREATER THAN FIVE FEET.</b>	<b>C.Y.</b>
	At the following locations:	
	AS SHOWN ON CONTRACT DRAWINGS AND DIRECTED BY ECS REP.	
	Total quantity for JB 410.8 = 370.00	
<b>JB 450.1</b>	<b>CONSTRUCTION FIELD SUPPORT - SURVEY CREW</b>	<b>Crhrs.</b>
	At the following locations:	
	AS ENCOUNTERED AND DIRECTED BY THE ECS REPRESENTATIVE	
	Total quantity for JB 450.1 = 160.00	
<b>JB 450.2</b>	<b>CONSTRUCTION FIELD SUPPORT - SMALL CREW</b>	<b>Crhrs.</b>
	At the following locations:	
	AS ENCOUNTERED AND DIRECTED BY THE ECS REPRESENTATIVE	
	Total quantity for JB 450.2 = 5,020.00	
<b>JB 450.3</b>	<b>CONSTRUCTION FIELD SUPPORT - MEDIUM CREW</b>	<b>Crhrs.</b>
	At the following locations:	
	AS ENCOUNTERED AND DIRECTED BY THE ECS REPRESENTATIVE	
	Total quantity for JB 450.3 = 2,507.00	
<b>JB 501</b>	<b>REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES</b>	<b>C.Y.</b>
	At the following locations:	
	INT. OF WORTH STREET & BROADWAY	16.00
	WORTH STREET BET. BROADWAY & LAFAYETTE STREET	3.00
	Total quantity for JB 501 = 19.00	

**EMPIRE CITY SUBWAY JOINT BIDDING SCOPE OF WORK**  
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**JB 636 EE    ADJUSTMENT OF UTILITY HARWARE ( 34" TO UNDER 41" WIDTH )** **EA.**

At the following locations:

WORTH STREET BET. HUDSON STREET & WEST BROADWAY	6.00
INT. OF WORTH STREET & WEST BROADWAY	4.00
WORTH STREET BET. WEST BROADWAY & CHURCH STREET	4.00
INT. OF WORTH STREET & CHURCH STREET	3.00
WORTH STREET BET. CHURCH STREET & BROADWAY	3.00
INT. OF WORTH STREET & BROADWAY	4.00
WORTH STREET BET. BROADWAY & LAFAYETTE STREET	5.00
INT. OF WORTH STREET & LAFAYETTE STREET	4.00
WORTH STREET BET. LAFAYETTE STREET & CENTRE STREET	2.00
INT. OF WORTH STREET & CENTRE STREET	2.00
WORTH STREET BET. CENTRE STREET & BAXTER STREET	4.00
INT. OF WORTH STREET & BAXTER STREET	1.00
WORTH STREET BET. BAXTER STREET & MULBERRY STREET	2.00
INT. OF WORTH STREET & MULBERRY STREET	1.00
INT. OF WORTH STREET & PARK ROW	1.00
INT. OF WORTH STREET & ST. JAMES PLACE	2.00

Total quantity for            JB 636 EE            =            48.00

**JB 638 NT    INSTALLATION OF TELEPHONE MANHOLE STRUCTURES** **C.Y.**

At the following locations:

INT. OF WORTH STREET & WEST BROADWAY	6.05
WORTH STREET BET. WEST BROADWAY & CHURCH STREET	49.26
INT. OF WORTH STREET & CHURCH STREET	7.56
INT. OF WORTH STREET & BROADWAY	5.00

Total quantity for            JB 638 NT            =            68.00

**JB 638 R    BREAK OUT AND REMOVE UTILITY STRUCTURE** **C.Y.**

At the following locations:

INT. OF WORTH STREET & WEST BROADWAY	6.05
WORTH STREET BET. WEST BROADWAY & CHURCH STREET	49.26
INT. OF WORTH STREET & CHURCH STREET	7.56
INT. OF WORTH STREET & BROADWAY	25.23

Total quantity for            JB 638 R            =            89.00

**JB 700.0    SPECIAL MOD. OF WORK MTHDS TO ACCOM./PROTECT U.G. FACIL. W. LMTD CVR.** **C.Y.**

At the following locations:

AS SHOWN ON CONTRACT DRAWINGS AND DIRECTED BY ECS REP.

Total quantity for            JB 700.0            =            1,179.00

**EMPIRE CITY SUBWAY JOINT BIDDING SCOPE OF WORK**  
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<b>JB 710.1</b>	<b>REM. OF ABND. UTILITY STEEL/CAST IRON PIPE, UP TO &amp; INCL. 12" DIAM. PIPES</b>	<b>L.F.</b>
	At the following locations:	
	INT. OF WORTH STREET & HUDSON STREET	20.00
	WORTH STREET BET. HUDSON STREET & WEST BROADWAY	20.00
	WORTH STREET BET. BROADWAY & LAFAYETTE STREET	7.00
	WORTH STREET BET. CENTRE STREET & BAXTER STREET	300.00
	Total quantity for JB 710.1 = 347.00	
<b>JB 711</b>	<b>USE SHEETING LINE AS FORM</b>	<b>L.F.</b>
	At the following locations:	
	INT. OF WORTH STREET & BROADWAY	14.00
	WORTH STREET BET. BROADWAY & LAFAYETTE STREET	36.00
	Total quantity for JB 711 = 50.00	
<b>JB 781</b>	<b>REMOVABLE CURB SIDEWALK PANEL FOR ACCESS TO UTILITY STRUCTURE OPENINGS</b>	<b>EA.</b>
	At the following locations:	
	WORTH STREET BET. HUDSON STREET & WEST BROADWAY	1.00
	WORTH STREET BET. LAFAYETTE STREET & CENTRE STREET	1.00
	WORTH STREET BET. CENTRE STREET & BAXTER STREET	1.00
	INT. OF WORTH STREET & ST. JAMES PLACE	1.00
	Total quantity for JB 781 = 4.00	
<b>JB 900</b>	<b>EXTRA UTILITY WORK ALLOWANCE</b>	<b>L.S.</b>
	At the following locations:	
	AS ENCOUNTERED AND DIRECTED BY THE ECS REPRESENTATIVE	1.00
	Total quantity for JB 900 = 1.00	

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RECONSTRUCTION OF WORTH STREET FROM HUDSON STREET TO PARK ROW  
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JB ITEM	DESCRIPTION	UNITS	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
JB 100.1	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION	EA	4	\$550.00	\$2,200.00
JB 101.1	UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCLUDING 24" DIAMETER	EA	1	\$2,000.00	\$2,000.00
JB 108.1	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER	EA	3	\$600.00	\$1,800.00
JB 109.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" TO 24" DIAMETER	EA	5	\$1,000.00	\$5,000.00
JB 110.1	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" TO 36" DIAMETER	EA	9	\$1,400.00	\$12,600.00
JB 330T1	PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED TRENCH	LF	90	\$100.00	\$9,000.00
JB 403	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	SF	26	\$4.00	\$104.00
JB 405.1	TRENCH EXCAVATIONS FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET	CY	6	\$150.00	\$900.00
JB 406	EXCAVATION FOR UTILITY STRUCTURE	CY	2	\$150.00	\$300.00
JB 500	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	LF	35	\$4.00	\$140.00
JB 501.1	REMOVAL OF ABANDONED UTILITY CABLE TELEVISION SIDEWALK PULLBOXES	EA	1	\$500.00	\$500.00
JB 603T.2	INSTALL TELECOMMUNICATIONS CONDUIT	LF	52	\$8.00	\$416.00
JB 636EG	PRIVATELY OWNED UTILITY STRUCTURE HARDWARE ADJUSTMENT (41" TO 75" WIDTH)	EA	3	\$500.00	\$1,500.00
JB 700	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/ PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	CY	284	\$75.00	\$21,300.00
JB 900	EXTRA UTILITY WORK COSTS ALLOWANCE	LS	1	\$8,664.00	\$8,664.00
				<b>TOTAL</b>	<b>\$66,424.00</b>

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<b>JB 100.1</b>	<b>UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION</b>	<b>EA</b>
	At the following locations:	
	NWC Worth Street & West Broadway	1
	SEC Worth Street & West Broadway	1
	NWC Worth Street & Lafayette Street	1
	NEC Worth Street & Centre Street	1
	<b>Total Quantity for JB100.1</b>	<b>4</b>
<b>JB 101.1</b>	<b>UTILITIES CROSSING TRENCH FOR SEWERS UP TO AND INCLUDING 24" DIAMETER</b>	<b>EA</b>
	At the following location:	
	NWC Worth Street & West Broadway	1
	<b>Total Quantity for JB101.1</b>	<b>1</b>
<b>JB 108.1</b>	<b>UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER</b>	<b>EA</b>
	At the following locations:	
	SEC Worth Street & West Broadway	1
	NS Worth Street between Church Street & West Broadway	1
	INT Worth Street & Mulberry Street	1
	<b>Total Quantity for JB108.1</b>	<b>3</b>
<b>JB 109.1</b>	<b>UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" TO 24" DIAMETER</b>	<b>EA</b>
	At the following locations:	
	SS Worth Street WO West Broadway	1
	SEC Worth Street & West Broadway	2
	SS Worth Street WO Church Street	1
	SS Worth Street WO Broadway	1
	<b>Total Quantity for JB109.1</b>	<b>5</b>
<b>JB 110.1</b>	<b>UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" TO 36" DIAMETER</b>	<b>EA</b>
	At the following locations:	
	SS Worth Street WO West Broadway	1
	SEC Worth Street & West Broadway	1
	Worth Street WO Church Street	3
	Worth Street WO Broadway	1
	INT Worth Street & Mulberry Street	1
	SS Worth Street WO Mott Street / Park Row	1
	NS Worth Street WO Mott Street / Park Row	1
	<b>Total Quantity for JB110.1</b>	<b>9</b>

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<b>JB 330T1</b>	<b>PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED TRENCH</b>	<b>LF</b>
	At the following locations:	
	SEC Worth Street & West Broadway	24
	Worth Street between West Broadway & Church Street	24
	Worth Street between Church Street & Broadway	32
	Worth Street WO Church St IFO 185 Broadway	10
	<b>Total Quantity for JB330T1</b>	<b>90</b>
<b>JB 403</b>	<b>PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES</b>	<b>SF</b>
	At the following location:	
	NWC Worth Street & West Broadway	26
	<b>Total Quantity for JB403</b>	<b>26</b>
<b>JB 405.1</b>	<b>TRENCH EXCAVATIONS FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET</b>	<b>CY</b>
	At the following location:	
	NWC Worth Street & West Broadway	6
	<b>Total Quantity for JB405.1</b>	<b>6</b>
<b>JB 406</b>	<b>EXCAVATION FOR UTILITY STRUCTURE</b>	<b>CY</b>
	At the following location:	
	NWC Worth Street & West Broadway	2
	<b>Total Quantity for JB406</b>	<b>2</b>
<b>JB 500</b>	<b>REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)</b>	<b>LF</b>
	At the following location:	
	NWC Worth Street & West Broadway	35
	<b>Total Quantity for JB500</b>	<b>35</b>
<b>JB 501.1</b>	<b>REMOVAL OF ABANDONED CABLE TELEVISION SIDEWALK PULLBOXES</b>	<b>EA</b>
	At the following location:	
	NWC Worth Street & West Broadway	1
	<b>Total Quantity for JB501.1</b>	<b>1</b>
<b>JB 603T.2</b>	<b>INSTALL TELECOMMUNICATIONS CONDUIT</b>	<b>LF</b>
	At the following location:	
	NWC Worth Street & West Broadway	52
	<b>Total Quantity for JB603T.2</b>	<b>52</b>

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<b>JB 636EG</b>	<b>Privately Owned Utility Structure Hardware Adjustment (41" to 75" Width)</b>	<b>EA</b>
	At the following locations:	
	NWC Worth Street & West Broadway	1
	NEC Worth Street & Broadway	1
	NWC Worth Street & Mott Street	1
	<b>Total Quantity for JB636EG</b>	<b>3</b>
<b>JB 700</b>	<b>SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER</b>	<b>CY</b>
	At the following locations:	
	NWC Worth Street & West Broadway	13
	NEC Worth Street & West Broadway	12
	SEC Worth Street & West Broadway	11
	SEC Worth Street & West Broadway	4
	SEC Worth Street & West Broadway	1
	NS Worth Street between West Broadway & Church Street	4
	NS Worth Street between West Broadway & Church Street	20
	SS Worth Street between West Broadway & Church Street	42
	NWC Worth Street & Church Street	16
	NWC Worth Street & Broadway	25
	SWC Worth Street & Broadway	16
	SEC Worth Street & Broadway	5
	NWC Worth Street & Lafayette Street	6
	SEC Worth Street & Centre Street	15
	INT Worth Street & Mulberry Street	18
	INT Worth Street & Park Row / Mott Street	52
	INT Mosco Street & Mott Street	24
	<b>Total Quantity for JB700</b>	<b>284</b>
<b>JB 900</b>	<b>EXTRA UTILITY WORK COSTS ALLOWANCE</b>	<b>LS</b>
		1
	<b>Total Quantity for JB900</b>	<b>1</b>



**JOINT BID WORKSHEET**  
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 FOR INFORMATION ONLY  
**ENGINEER'S ESTIMATE OF QUANTITY AND TYPES OF INTERFERENCE**  
 FOR American Telephone & Telegraph  
**HUDSON STREET TO PARK ROW**  
**BOROUGH OF MANHATTAN**

JOINT BID ITEM NUMBER	DESCRIPTION	Unit of Measure	Estimated Quantity	Unit Price	TOTAL
JB 100.8	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE .8)	EA.	1.00	\$1,697	\$1,697
JB 105.1	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE .1)	EA.	1.00	\$886	\$886
JB 105.3	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	EA.	3.00	\$3,009	\$9,009
JB 105.3	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	EA.	2.00	\$1,666	\$3,332
JB 105.4	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4)	EA.	1.00	\$2,007	\$2,007
JB 105.5	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .5)	EA.	1.00	\$2,508	\$2,508
JB 105.6	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .6)	EA.	1.00	\$3,010	\$3,010
JB 300	SPECIAL CARE EXCAVATION & BACKFILLING	C.Y.	26.06	\$167	\$3,507
JB 320.1	SUPPORT & PROTECTION OF COMMUNICATION-UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES ARE IN OR CLOSE PROXIMITY TO TRENCH LIMITS	LF.	650.00	\$715	\$462,500
JB 401	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES	C.Y.	89.00	\$228	\$20,292
JB 402.1A	EXIST. CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. W/ CONCR. ENCSMNT.	LF.	14,420.00	\$53	\$764,260
JB 403	PLACING STEEL PROTECTION PLATES FOR UTILITIES	S.F.	700.00	\$4	\$2,800
JB 410.5	TRENCH EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A TOTAL VOLUME OVER 20%, UP TO AND INCLUDING 40%, WITH MAXIMUM TRENCH DEPTHS EQUAL TO OR GREATER THAN FIVE FEET.	C.Y.	1067.00	\$187	\$199,529
JB 410.7	TRENCH EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A TOTAL VOLUME OVER 40%, UP TO AND INCLUDING 60%, WITH MAXIMUM TRENCH DEPTHS EQUAL TO OR GREATER THAN FIVE FEET.	C.Y.	531.00	\$246	\$130,626
JB 410.8	TRENCH EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A TOTAL VOLUME OVER 60%, UP TO AND INCLUDING 80%, WITH MAXIMUM TRENCH DEPTHS EQUAL TO OR GREATER THAN FIVE FEET.	C.Y.	321.00	\$445	\$142,845
JB 450.1	CONSTRUCTION FIELD SUPPORT - SURVEY CREW	Chrs.	80.00	\$276	\$22,080
JB 450.2	CONSTRUCTION FIELD SUPPORT - SMALL CREW	Chrs.	2,335.00	\$463	\$1,081,155
JB 450.3	CONSTRUCTION FIELD SUPPORT - MEDIUM CREW	Chrs.	1,167.00	\$1,006	\$1,176,398
JB 501	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	C.Y.	22.00	\$231	\$5,082
JB 700.0	SPECIAL MOD. OF WORK MTHDS TO ACCOM. PROTECT U.G. FACIL. W. LMTD CVR.	C.Y.	90.00	\$95	\$8,550
JB 710.1	REM. OF ABND. UTILITY STEEL/CAST IRON PIPE, UP TO & INCL. 12" DIAM. PIPES	LF.	7,580.00	\$12	\$90,960
JB 800	EXTRA UTILITY WORK ALLOWANCE	L.S.	1.00	\$555,700	\$555,700
				<b>TOTAL</b>	<b>\$4,260,371</b>

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JB 100.6	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECT. AND/OR TEST PIT (TYPE 6)	EA.
	At the following locations:	
	S/S WORTH STREET TO CHURCH STREET	
	Total quantity for JB 100.6 = 1.00	
JB 109.1	UTILITIES CROSSING TRENCH FOR WATERMAIN UP TO AND INCL. 12" DIAMETER (TYPE 1)	EA.
	At the following locations:	
	INT. OF WORTH STREET & BROADWAY	
	Total quantity for JB 109.1 = 1.00	1.00
JB 109.2	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE 2)	EA.
	At the following locations:	
	INT. OF WORTH STREET & BROADWAY	
	Total quantity for JB 109.2 = 3.00	3.00
JB 109.3	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE 3)	EA.
	At the following locations:	
	WORTH STREET BET. CHURCH STREET & BROADWAY	
	Total quantity for JB 109.3 = 2.00	2.00
JB 109.4	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE 4)	EA.
	At the following locations:	
	INT. OF WORTH STREET & CHURCH STREET	
	Total quantity for JB 109.4 = 1.00	1.00
JB 109.5	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE 5)	EA.
	At the following locations:	
	INT. OF WORTH STREET & CHURCH STREET	
	Total quantity for JB 109.5 = 1.00	1.00
JB 109.6	UTILITIES CROSSING TRENCH FOR WATERMAIN OVER 12" AND UP TO 24" DIAMETER (TYPE 6)	EA.
	At the following locations:	
	INT. OF WORTH STREET & CHURCH STREET	

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	Total quantity for	JB 109.6	=	1.00	
JB 300	<b>SPECIAL CARE EXCAVATION &amp; BACKFILLING</b>				<b>C.Y.</b>
	At the following locations:				
		WORTH STREET BET. WEST BROADWAY & CHURCH STREET			2.41
		WORTH STREET BET. BROADWAY & LAFAYETTE STREET			17.77
	Total quantity for	JB 300	=	21.00	
JB 330T1	<b>SUPPORT &amp; PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE IN OR CLOSE PROXIMITY TO TRENCH LIMITS</b>				<b>L.F.</b>
	At the following locations:				
		WORTH STREET BET. CHURCH STREET & BROADWAY			170.00
		INT. OF WORTH STREET & BROADWAY			120.00
		WORTH STREET BET. BROADWAY & LAFAYETTE STREET			60.00
	Total quantity for	JB 330T1	=	350.00	
JB 401	<b>TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITIES</b>				<b>C.Y.</b>
	At the following locations:				
		INT. OF WORTH STREET & CHURCH STREET			89.00
	Total quantity for	JB 401	=	89.00	
JB 402T.1A	<b>EXIST. CONCR. ENCASED CONDUITS PLCD. IN FINAL POS. W. CONCR. ENCSMNT.</b>				<b>L.F.</b>
	At the following locations:				
		WORTH STREET BET. WEST BROADWAY & CHURCH STREET			7,375.00
		INT. OF WORTH STREET & CHURCH STREET			3,895.00
		WORTH STREET BET. CHURCH STREET & BROADWAY			2,910.00
		INT. OF WORTH STREET & BROADWAY			240.00
	Total quantity for	JB 402T.1A	=	14,420.00	
JB 403	<b>PLACING STEEL PROTECTION PLATES FOR UTILITIES</b>				<b>S.F.</b>
	At the following locations:				
		INT. OF WORTH STREET & CHURCH STREET			600.00
		WORTH STREET BET. CHURCH STREET & BROADWAY			100.00
	Total quantity for	JB 403	=	700.00	
JB 410.6	<b>TRENCH EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A TOTAL VOLUME OVER 20%, UP TO AND INCLUDING 40%, WITH MAXIMUM TRENCH DEPTHS EQUAL TO OR GREATER</b>				<b>C.Y.</b>
	At the following locations:				
	AS SHOWN ON CONTRACT DRAWINGS AND DIRECTED BY AT&T REPRESENTATIVE				

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Total quantity for JB 410.0 = 1067

JB 410.7 TRENCH EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A TOTAL VOLUME OVER 40%, UP TO AND INCLUDING 60%, WITH MAXIMUM TRENCH DEPTHS EQUAL TO OR GREATER THAN FIVE FEET. C.Y.

At the following locations:

AS SHOWN ON CONTRACT DRAWINGS AND DIRECTED BY AT&T REPRESENTATIVE

Total quantity for JB 410.7 = 531

JB 410.8 TRENCH EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A TOTAL VOLUME OVER 60% UP TO AND INCLUDING 80%, WITH MAXIMUM TRENCH DEPTHS EQUAL TO OR GREATER THAN FIVE FEET. C.Y.

At the following locations:

AS SHOWN ON CONTRACT DRAWINGS AND DIRECTED BY AT&T REPRESENTATIVE

Total quantity for JB 410.8 = 321

JB 450.1 CONSTRUCTION FIELD SUPPORT - SURVEY CREW Chrs.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE AT&T REPRESENTATIVE

Total quantity for JB 450.1 = 80.00

JB 450.2 CONSTRUCTION FIELD SUPPORT - SMALL CREW Chrs.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE AT&T REPRESENTATIVE

Total quantity for JB 450.2 = 7,325.00

JB 450.3 CONSTRUCTION FIELD SUPPORT - MEDIUM CREW Chrs.

At the following locations:

AS ENCOUNTERED AND DIRECTED BY THE AT&T REPRESENTATIVE

Total quantity for JB 450.3 = 1,167.00

JB 501 REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES C.Y.

At the following locations:

WORTH STREET BET. CHURCH STREET & BROADWAY  
 INT. OF WORTH STREET & BROADWAY

8.00  
 14.00

Total quantity for JB 501 = 22.00

American Telephone & Telegraph JOINT BIDDING SCOPE OF WORK  
SUPPORT & PROTECTION  
HMMWTCA7E - RECONSTRUCTION OF WORTH STREET  
HUDSON STREET TO PARK ROW  
BOROUGH OF MANHATTAN

JB 700.0	SPECIAL MOD. OF WORK MTHDS TO ACCOM/PROTECT U.G. FACIL. W. LMTD CYE.	C.Y.
	At the following locations:	
	AS SHOWN ON CONTRACT DRAWINGS AND DIRECTED BY THE AT&T REP.	90.00
	Total quantity for JB 700.0 = 90.00	
JB 710.1	REML. OF ABND. UTILITY STEEL/CAST IRON PIPE, UP TO & INCL. 12" DIAM. PIPES	L.F.
	At the following locations:	
	WORTH STREET BET. WEST BROADWAY & CHURCH STREET	3,250.00
	INT. OF WORTH STREET & CHURCH STREET	2,590.00
	WORTH STREET BET. CHURCH STREET & BROADWAY	1,800.00
	Total quantity for JB 710.1 = 7,580.00	
JB 900	EXTRA UTILITY WORK ALLOWANCE	L.S.
	At the following locations:	
	AS ENCOUNTERED AND DIRECTED BY THE AT&T REPRESENTATIVE	1.00
	Total quantity for JB 900 = 1.00	

# TEST PITS

- (1) **THESE TEST PITS DETAIL EXISTING CONDITIONS (AS OF BID DATE) OF UTILITIES AND OTHER SUBSURFACE FACILITIES AT LOCATIONS AS SHOWN ON THE TEST PIT LOCATIONS PLAN OF THE CONTRACT DRAWINGS.**
  
- (2) **DEPTHS OF FACILITIES ARE FROM EXISTING ROADWAY AND SIDEWALK ELEVATIONS AS SHOWN, OFFSETS ARE FROM EXISTING CURB, PROPERTY AND BUILDING LINES, AS SHOWN.**
  
- (3) **RELEVANT ITEMS ARE NOTED ON EACH TEST PIT DIAGRAM.**

(NO TEXT IN THIS SECTION)



Consolidated Edison  
Company of New York, Inc.

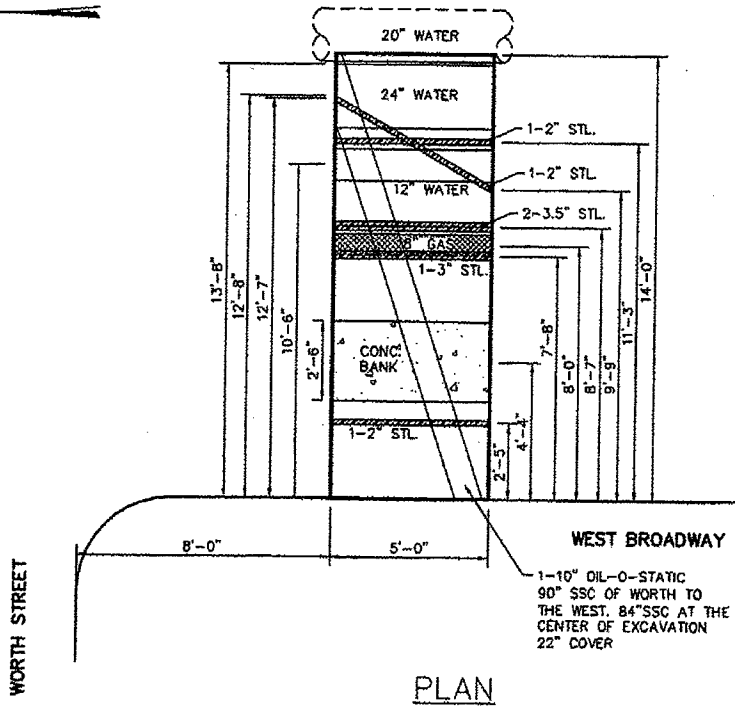
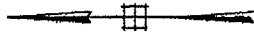
SHEET NO. 1 OF XX

conEdison  
a Consolidated Edison, Inc. company

JOB: WORTH STREET PREPARED BY: CA DATE: 04/20/2012  
 JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

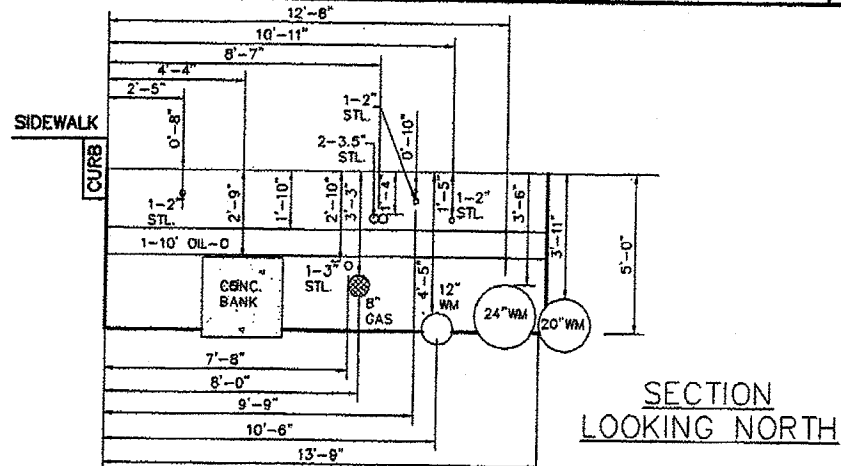
TEST PIT # 5A LOCATION: W/S WEST BROADWAY, 8'± S/S/C WORTH STREET  
 PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 5'-0"X14'-0"X5'-0"



PLAN

NOTE:  
 1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECT WORK ARE FOR REFERENCE ONLY.



SECTION  
LOOKING NORTH



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 2 OF XX

conEdison  
a Consolidated Edison Company

JOB: WORTH STREET

PREPARED BY: CA

DATE: 04/20/2012

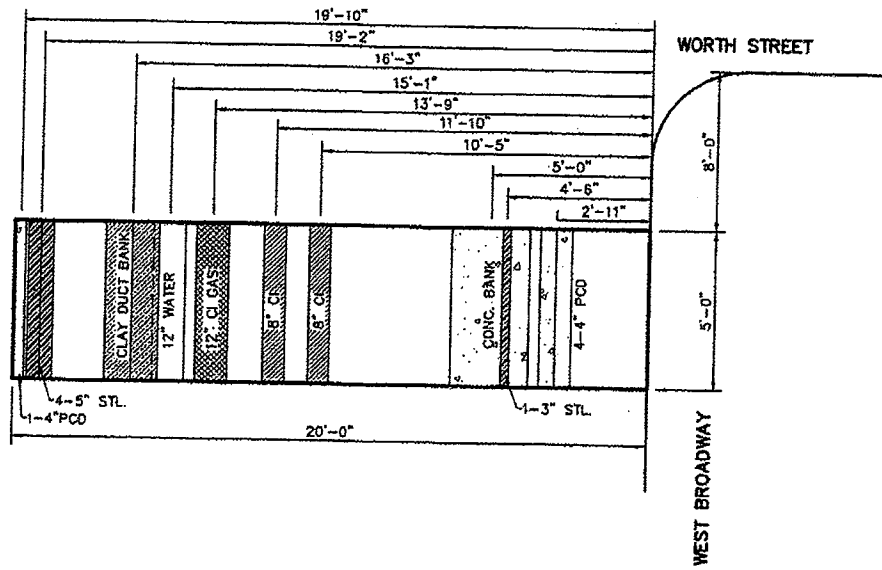
JOB NO: HMMWTCA7E

CHECKED BY:

DATE:

TEST PIT # 5B LOCATION: E/C WEST BROADWAY, 8'± S/S/C WORTH STREET  
PURPOSE: LOCATE FACILITIES

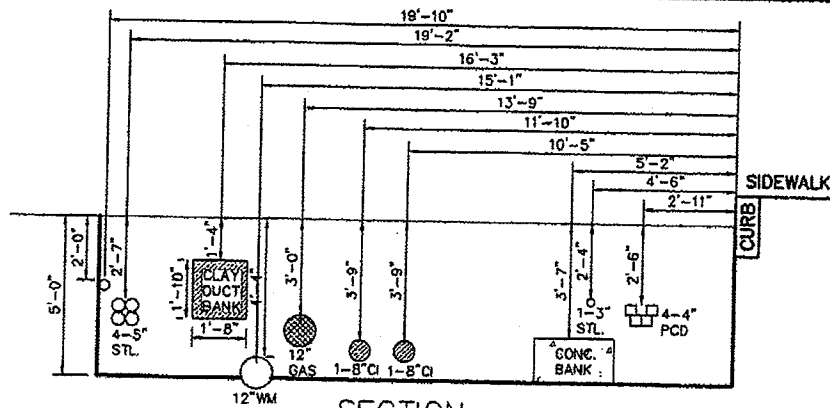
TEST PIT DIMENSION 5'-0"X20'-0"X5'-0"



PLAN

NOTE:

1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECT WORK ARE FOR REFERENCE ONLY.



SECTION  
LOOKING NORTH







Consolidated Edison  
Company of New York, Inc.

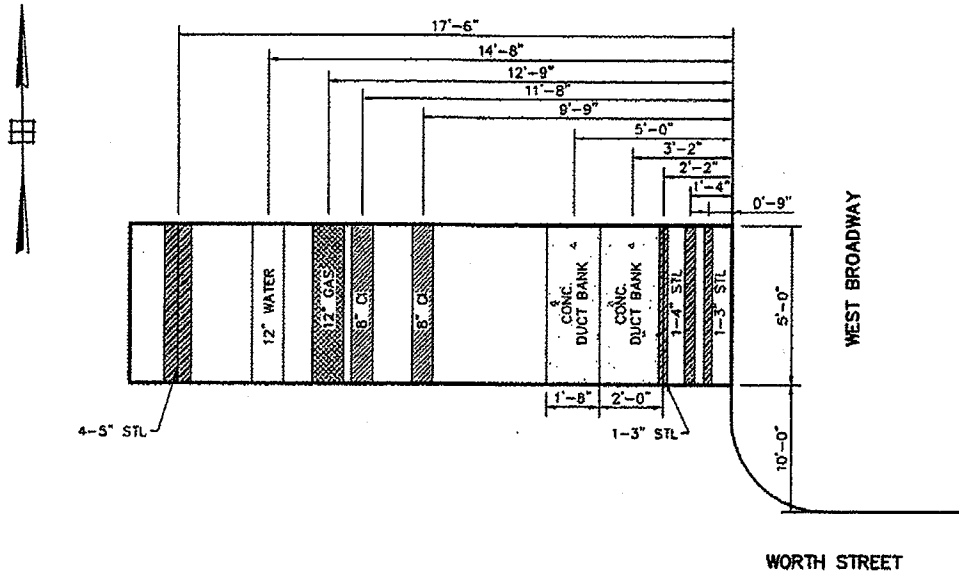
SHEET NO. 4 OF XX

conEdison  
A Consolidated Edison Company

JOB: WORTH STREET PREPARED BY: CA DATE: 04/20/2012  
 JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

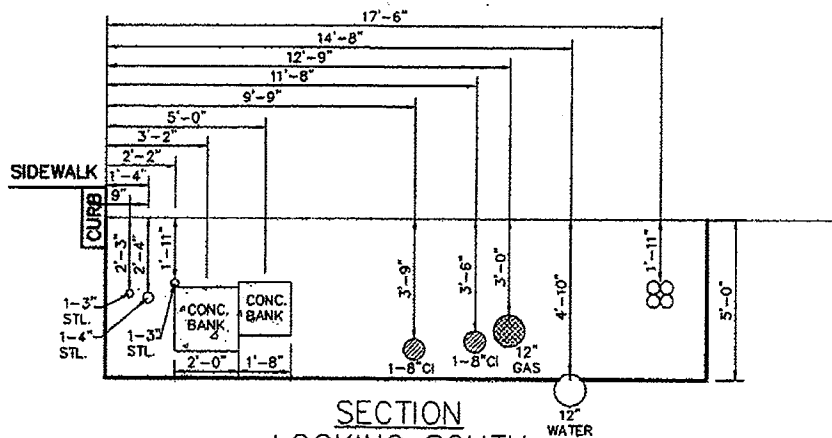
TEST PIT # 6B LOCATION: E/C WEST BROADWAY, 14'± N/N/C WORTH STREET  
 PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 5'-0"X19'-0"X5'-0"



PLAN

NOTE:  
 1. ALL DRAWINGS SHOWING UTILITY  
 SUPPORT AND PROTECT WORK ARE  
 FOR REFERENCE ONLY.



SECTION  
 LOOKING SOUTH



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 5 OF XX

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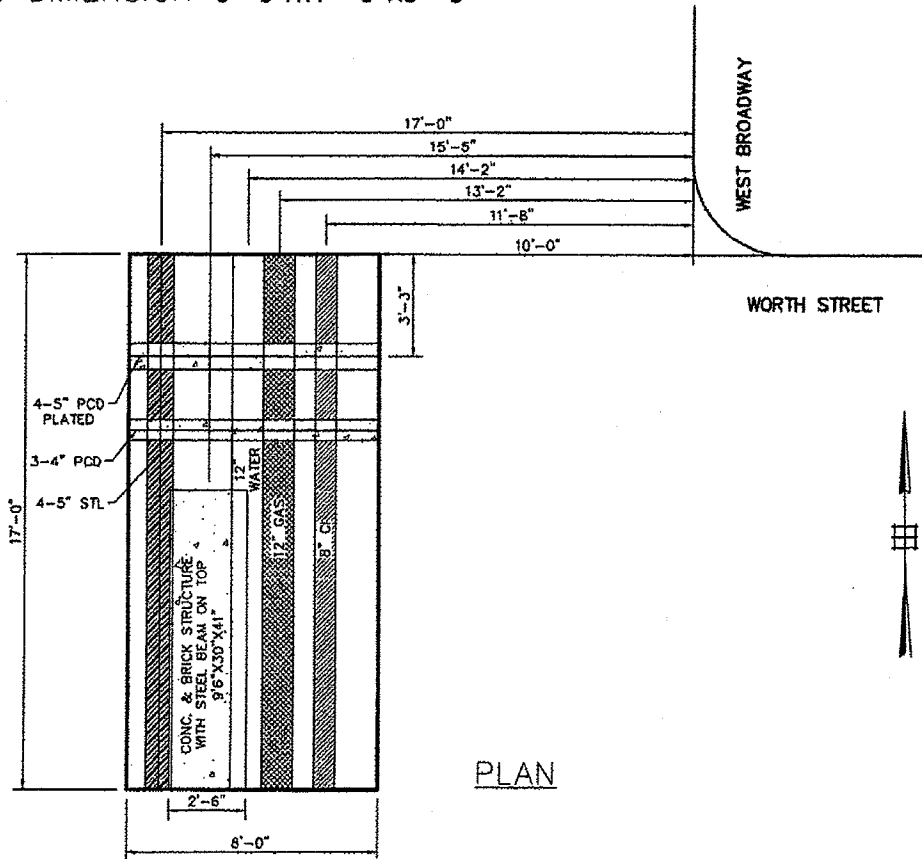
JOB: WORTH STREET PREPARED BY: CA DATE: 04/20/2012

JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

TEST PIT # 7A LOCATION: INT. OF WORTH STREET AND WEST BROADWAY

PURPOSE: LOCATE FACILITIES

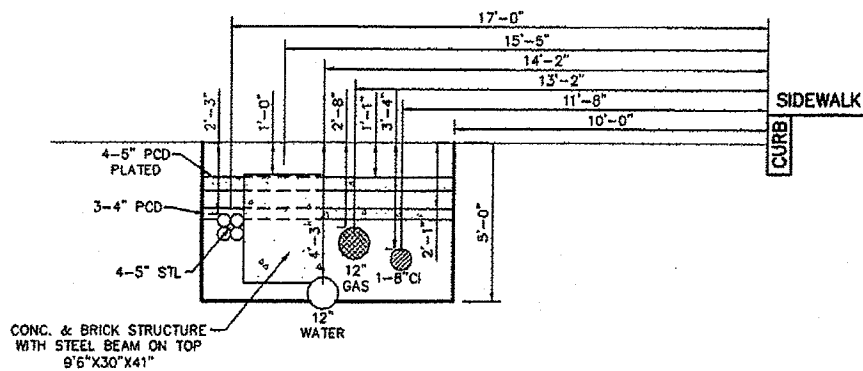
TEST PIT DIMENSION 8'-0"X17'-0"X5'-0"



PLAN

NOTE:

- 1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECT WORK ARE FOR REFERENCE ONLY.



SECTION  
LOOKING NORTH



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 6 OF XX

conEdison  
a Consolidated Edison, Inc. company

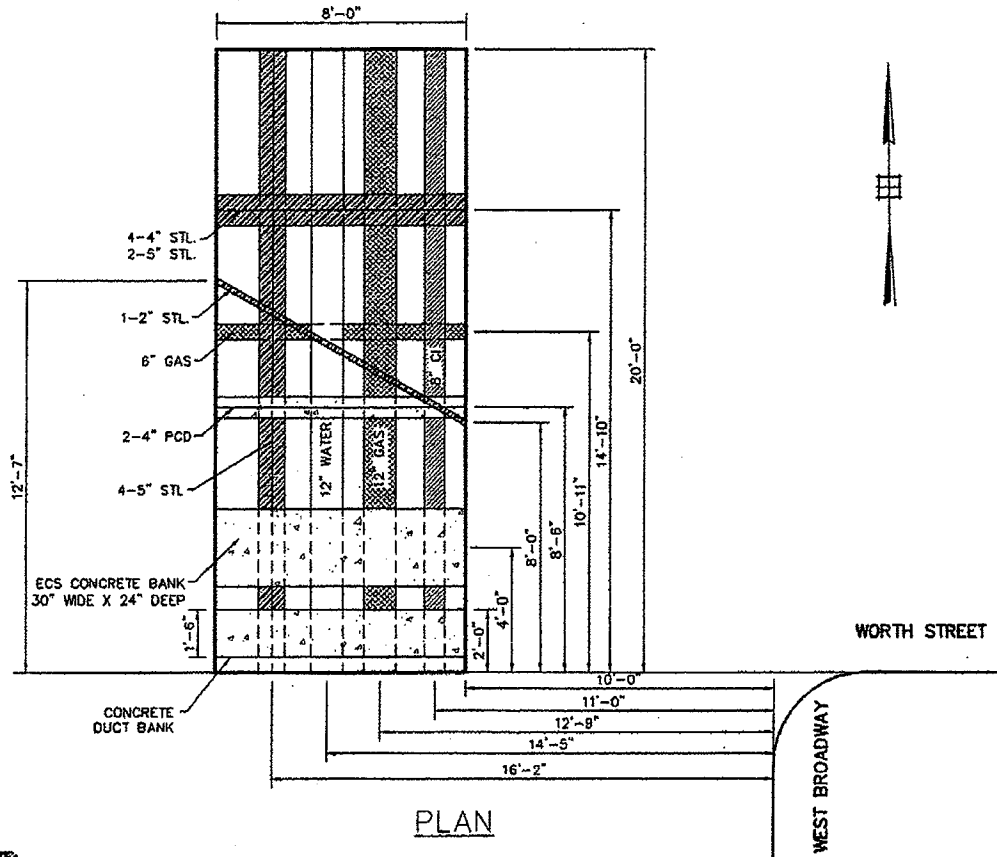
JOB: WORTH STREET PREPARED BY: CA DATE: 04/20/2012

JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

TEST PIT # 7B LOCATION: INT. OF WORTH STREET AND WEST BROADWAY

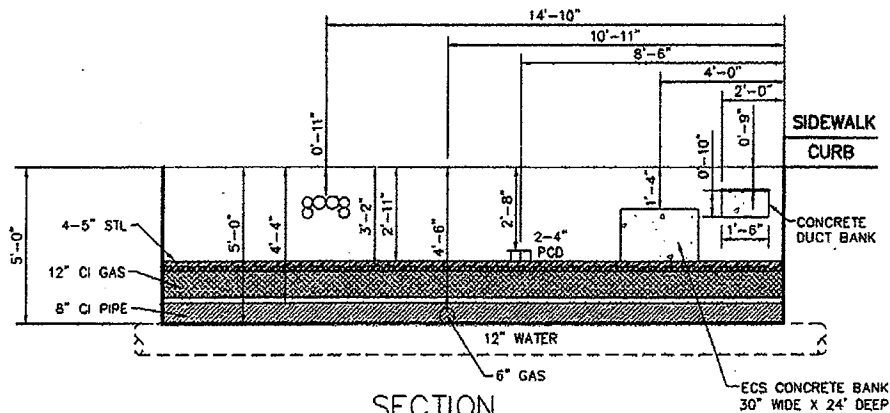
PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 8'-0" X 20'-0" X 5'-0"



PLAN

NOTE:  
1. ALL DRAWINGS SHOWING UTILITY  
SUPPORT AND PROTECT WORK ARE  
FOR REFERENCE ONLY.



SECTION  
LOOKING EAST



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 7 OF XX

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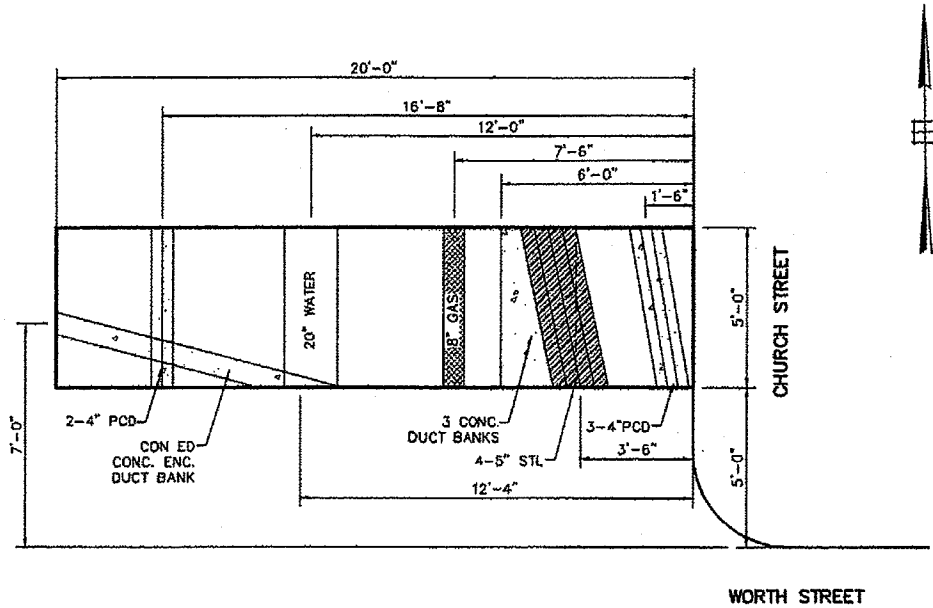
JOB: WORTH STREET PREPARED BY: CA DATE: 04/30/2012

JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

TEST PIT # 11A LOCATION: E/S CHURCH STREET 5'± N/N/C WORTH STREET

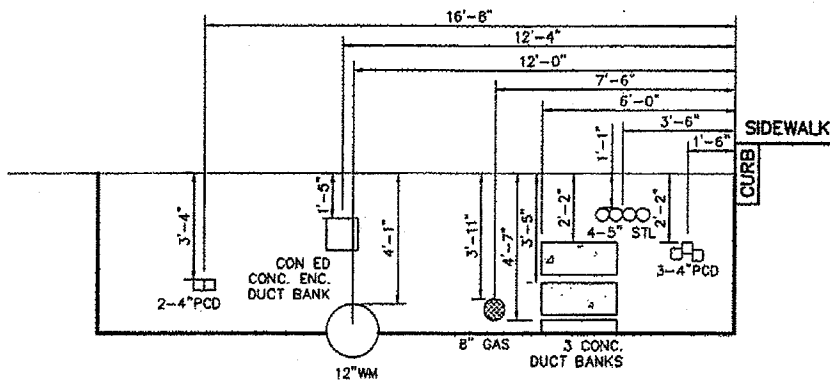
PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 5'-0"X20'-0"X5'-0"



**NOTE:**

- 1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECT WORK ARE FOR REFERENCE ONLY.





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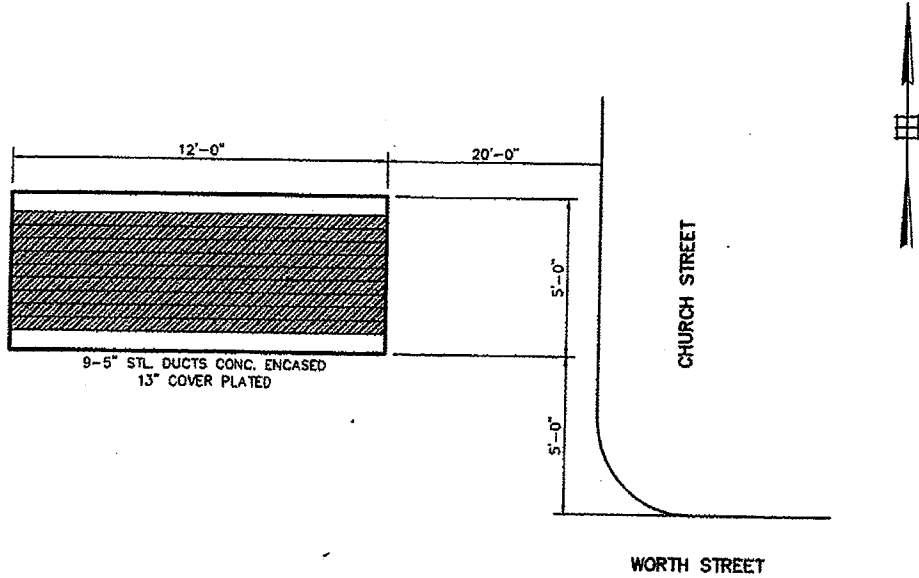
SHEET NO. 8 OF XX

conEdison  
a Consolidated Edison Company

JOB: WORTH STREET PREPARED BY: CA DATE: 04/30/2012  
JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

TEST PIT # 11B LOCATION: E/S CHURCH STREET 5'± N/N/C WORTH STREET  
PURPOSE: LOCATE FACILITIES

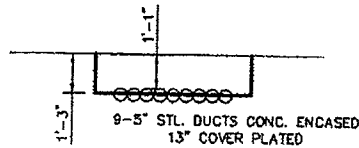
TEST PIT DIMENSION 5'-0"X12'-0"X0'-15"



9-5" STL. DUCTS CONC. ENCASED  
13" COVER PLATED

PLAN

NOTE:  
1. ALL DRAWINGS SHOWING UTILITY  
SUPPORT AND PROTECT WORK ARE  
FOR REFERENCE ONLY.



SECTION  
LOOKING WEST



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 9 OF XX

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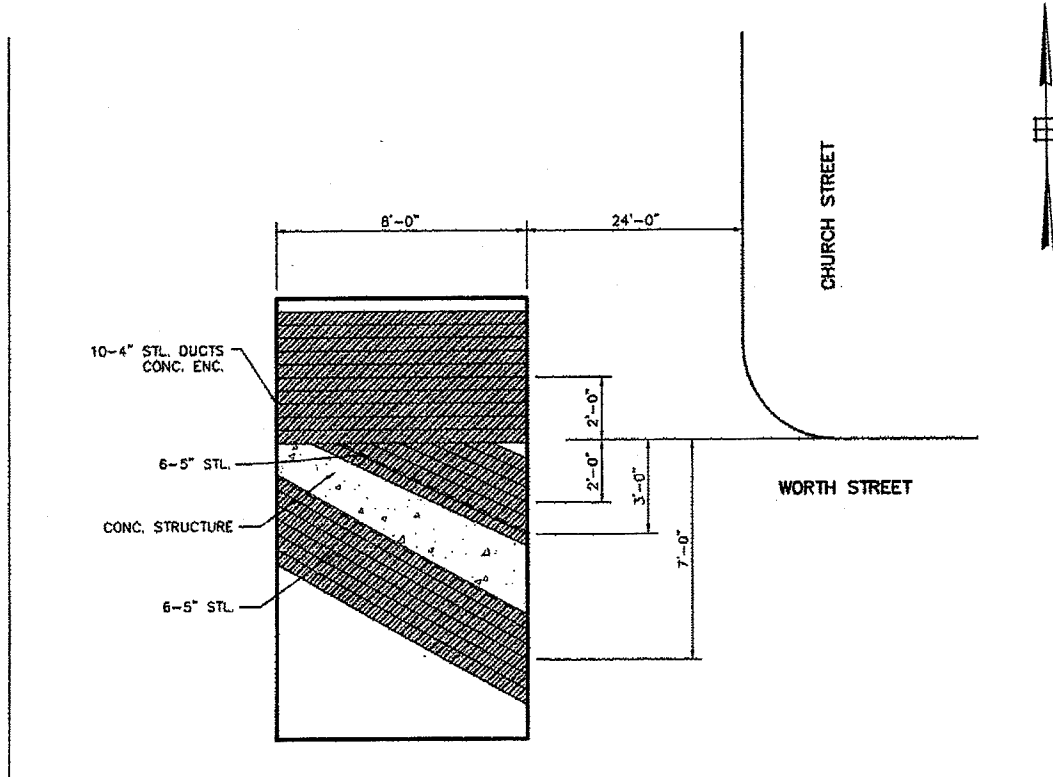
JOB: WORTH STREET PREPARED BY: CA DATE: 04/30/2012

JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

TEST PIT # 12A LOCATION: INT. OF WORTH STREET AND CHURCH STREET

PURPOSE: LOCATE FACILITIES

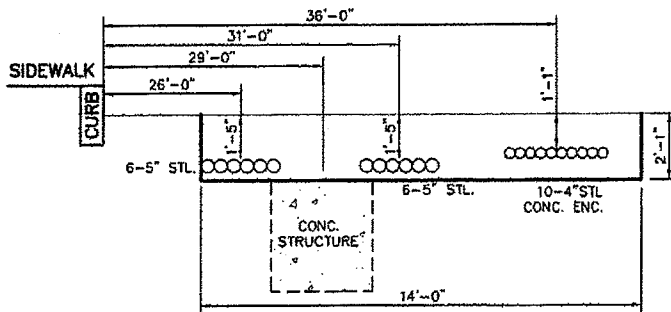
TEST PIT DIMENSION 8'-0"X14'-0"X0'-25"



PLAN

NOTE:

- 1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECT WORK ARE FOR REFERENCE ONLY.



SECTION  
LOOKING WEST



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 10 OF XX

conEdison  
a Consolidated Edison, Inc. company

JOB: WORTH STREET

PREPARED BY: CA

DATE: 04/30/2012

JOB NO: HMMWTCA7E

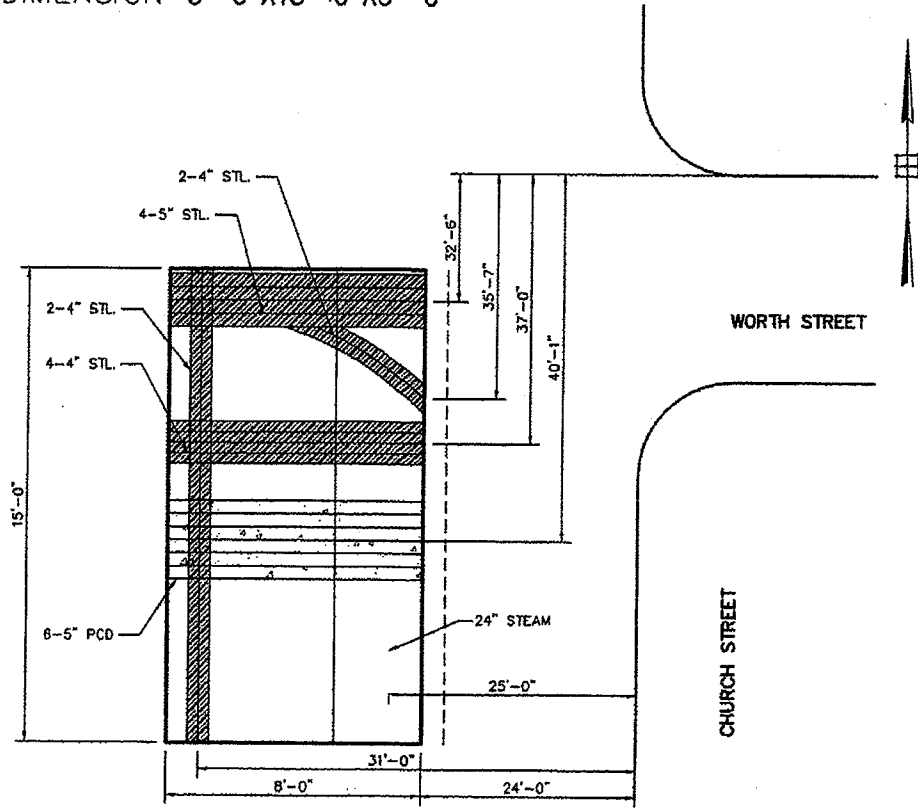
CHECKED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

TEST PIT # 12B LOCATION: INT. OF WORTH STREET AND CHURCH STREET

PURPOSE: LOCATE FACILITIES

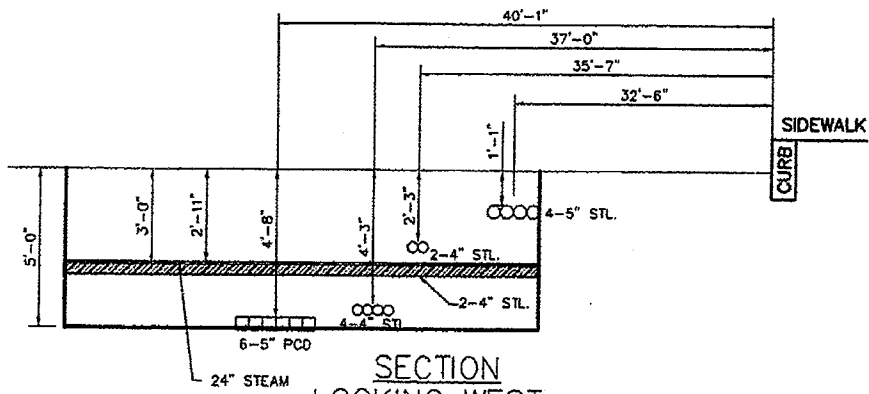
TEST PIT DIMENSION 8'-0"X15'-0"X5'-0"



PLAN

NOTE:

- 1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECT WORK ARE FOR REFERENCE ONLY.



SECTION  
LOOKING WEST





Consolidated Edison  
Company of New York, Inc.

SHEET NO. 11 OF XX

conEdison  
a consolidated Edison company

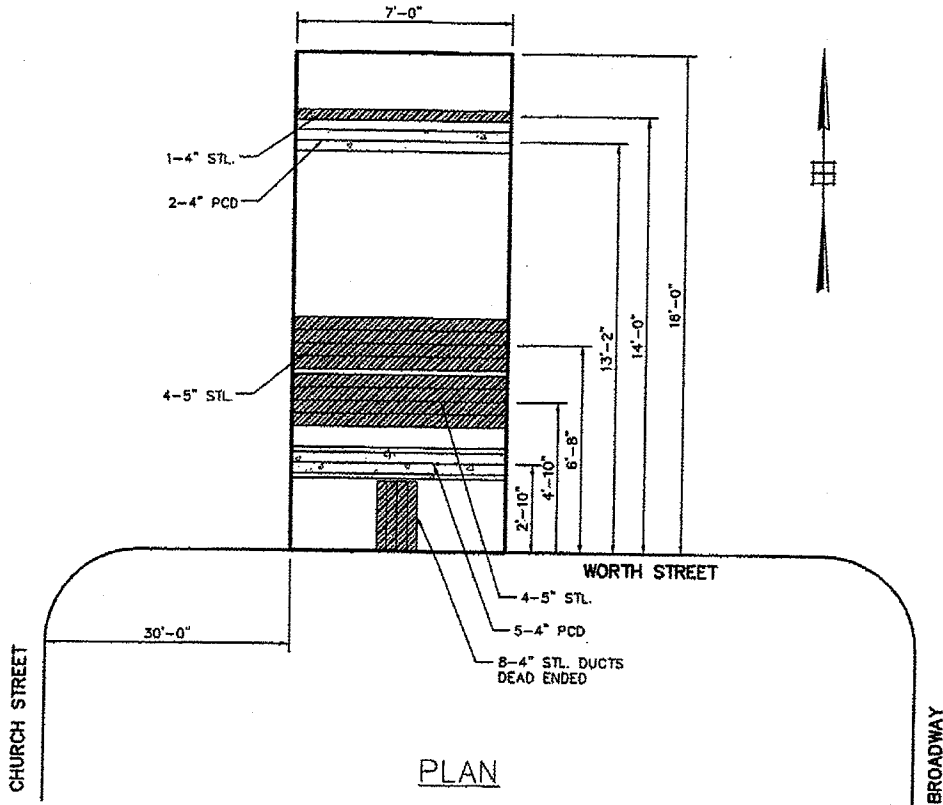
JOB: WORTH STREET PREPARED BY: CA DATE: 04/20/2012

JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

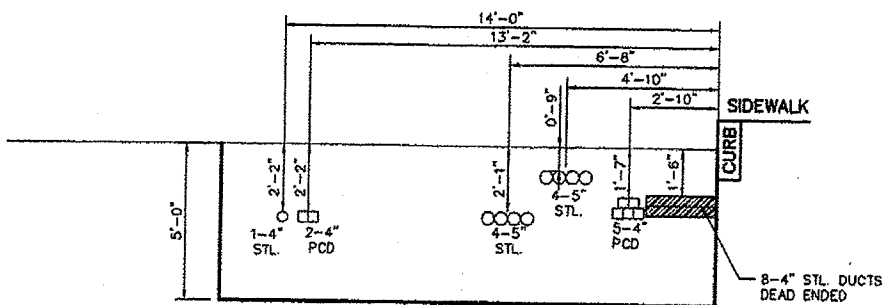
TEST PIT # 15 LOCATION: WORTH STREET, 32'± E/E/C CHURCH STREET

PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 7'-0"X16'-0"X5'-0"



NOTE:  
1. ALL DRAWINGS SHOWING UTILITY  
SUPPORT AND PROTECT WORK ARE  
FOR REFERENCE ONLY.



SECTION  
LOOKING EAST



Consolidated Edison  
Company of New York, Inc.

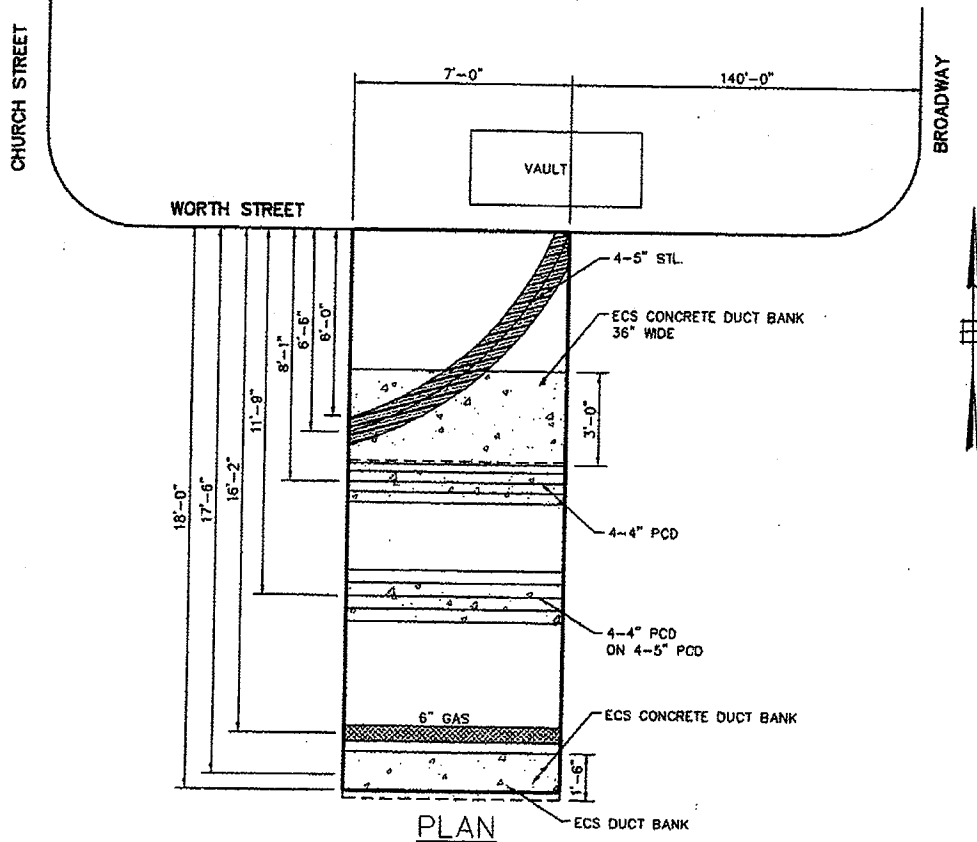
SHEET NO. 12 OF XX

conEdison  
a consolidated Edison company

JOB: WORTH STREET PREPARED BY: CA DATE: 04/20/2012  
 JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

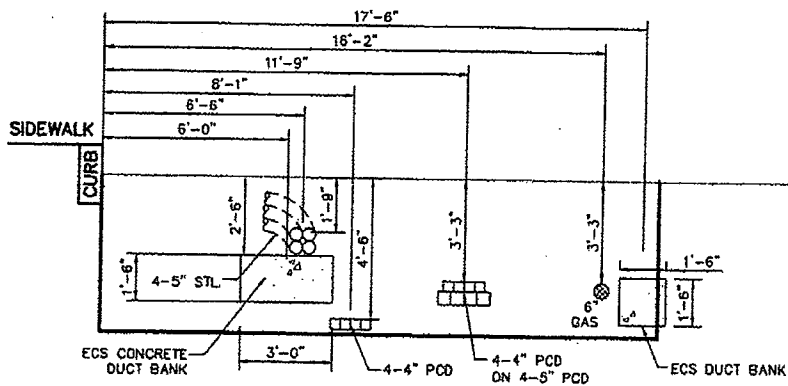
TEST PIT # 17A LOCATION: N/S WORTH STREET, 140'± W/W/C OF BROADWAY  
 PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 7'-0"X18'-0"X5'-0"



PLAN

NOTE:  
 1. ALL DRAWINGS SHOWING UTILITY  
 SUPPORT AND PROTECT WORK ARE  
 FOR REFERENCE ONLY.



SECTION  
 LOOKING EAST



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 13 OF XX

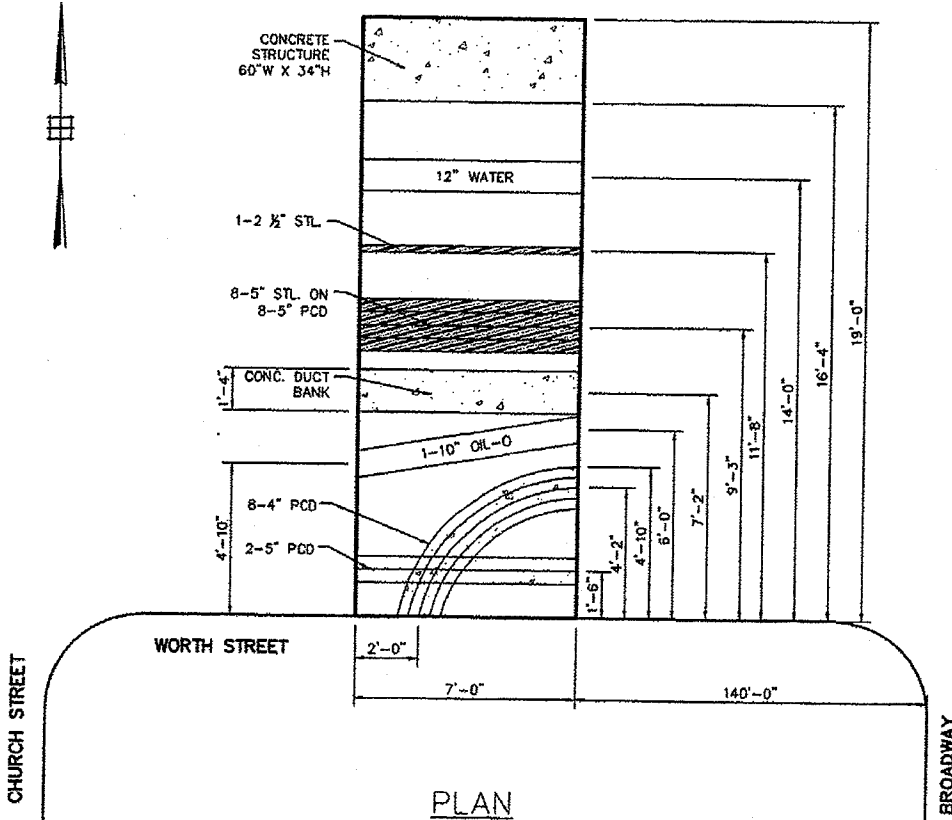
conEdison  
a Consolidated Edison Company

JOB: WORTH STREET PREPARED BY: CA DATE: 04/20/2012

JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

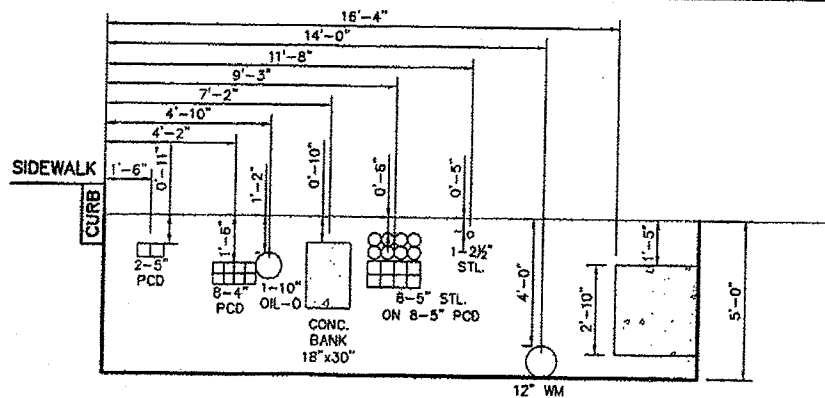
TEST PIT # 17B LOCATION: S/S WORTH STREET, 142'± W/W/C OF BROADWAY  
PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 7'-0"X19'-0"X5'-0"



PLAN

NOTE:  
1. ALL DRAWINGS SHOWING UTILITY  
SUPPORT AND PROTECT WORK ARE  
FOR REFERENCE ONLY.



SECTION  
LOOKING WEST



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 14 OF XX

conEdison  
a Consolidated Edison, Inc. company

JOB: WORTH STREET

PREPARED BY: CA

DATE: 04/30/2012

JOB NO: HMMWTCA7E

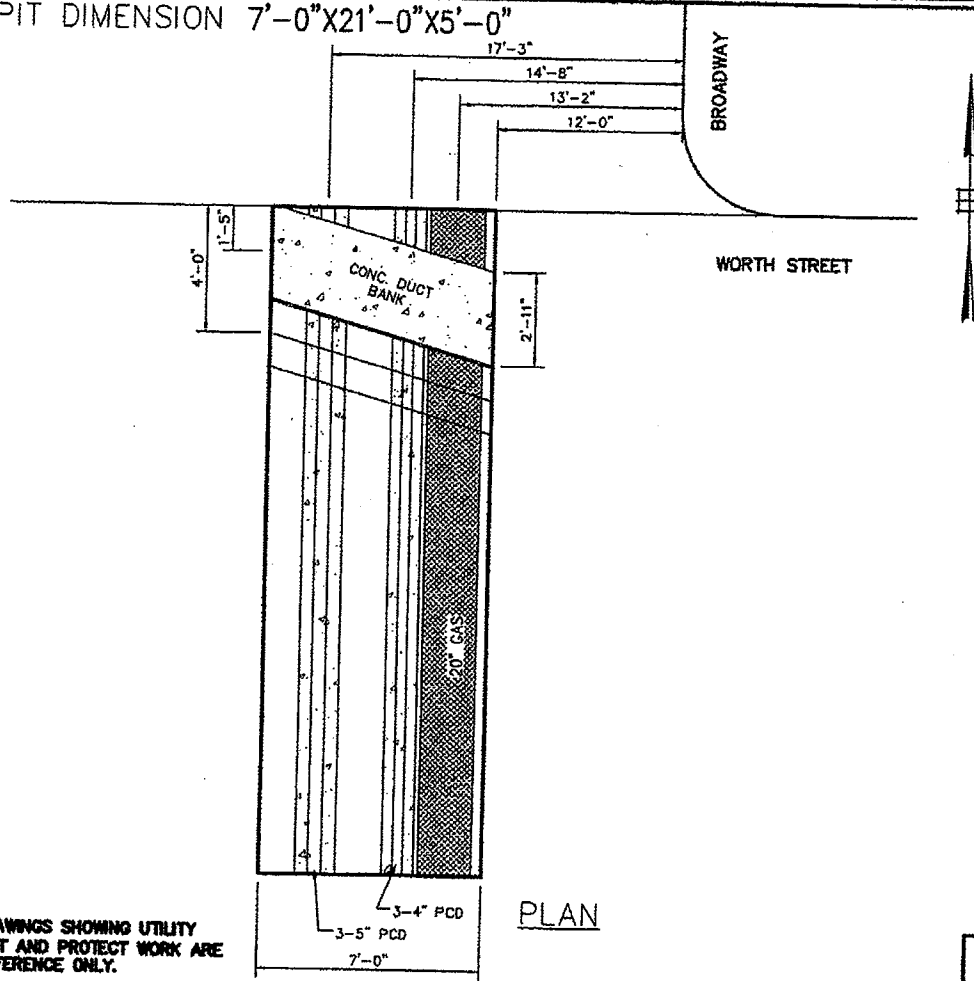
CHECKED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

TEST PIT # 20A LOCATION: INT. OF WORTH STREET AND BROADWAY

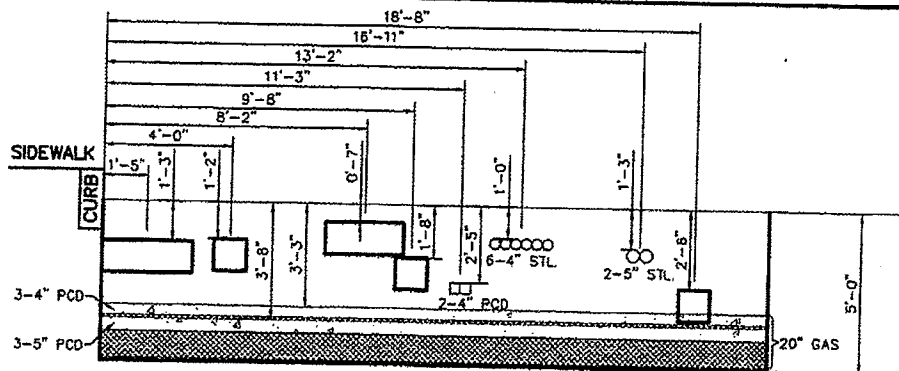
PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 7'-0" X 21'-0" X 5'-0"



NOTE:  
1. ALL DRAWINGS SHOWING UTILITY  
SUPPORT AND PROTECT WORK ARE  
FOR REFERENCE ONLY.

PLAN



SECTION  
LOOKING EAST



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 15 OF XX

conEdison  
A Consolidated Edison, Inc. company

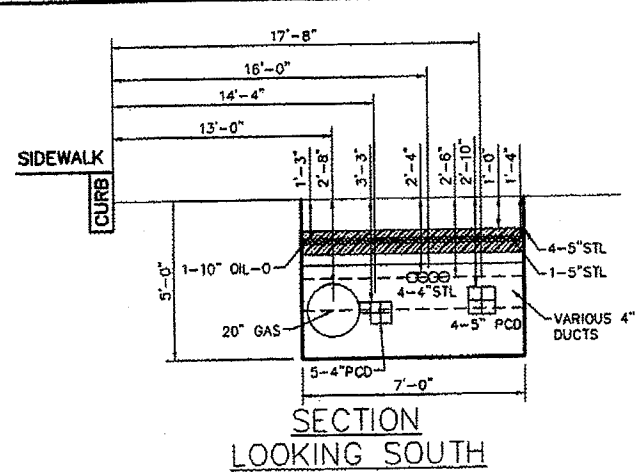
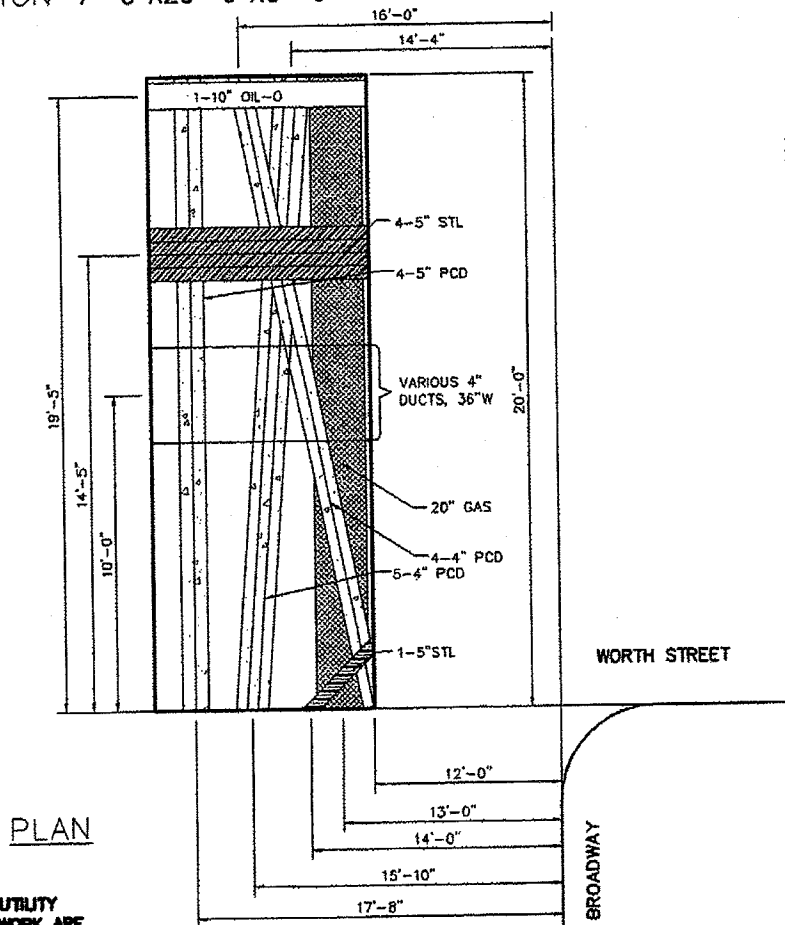
JOB: WORTH STREET PREPARED BY: CA DATE: 04/30/2012

JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

TEST PIT # 20B LOCATION: INT. OF WORTH STREET AND BROADWAY

PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 7'-0"X20'-0"X5'-0"





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Company of New York, Inc.

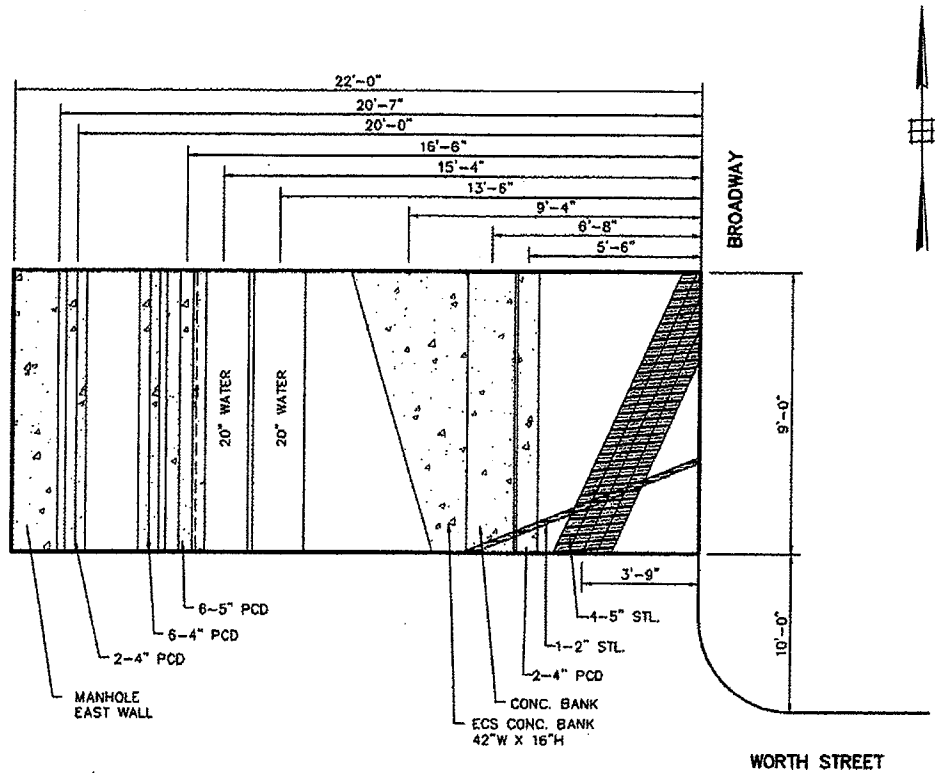
SHEET NO. 16 OF XX

conEdison  
a Consolidated Edison, Inc. company

JOB: WORTH STREET PREPARED BY: CA DATE: 04/20/2012  
 JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

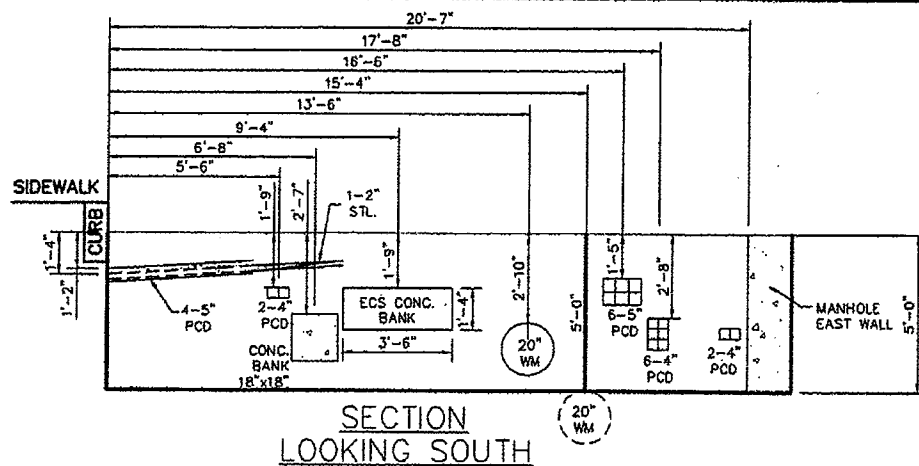
TEST PIT # 21 LOCATION: E/S BROADWAY, 10'± N/N/C OF WORTH STREET  
 PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 9'-0" X 22'-0" X 5'-0"



PLAN

NOTE:  
 1. ALL DRAWINGS SHOWING UTILITY  
 SUPPORT AND PROTECT WORK ARE  
 FOR REFERENCE ONLY.



SECTION  
 LOOKING SOUTH



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 17 OF XX

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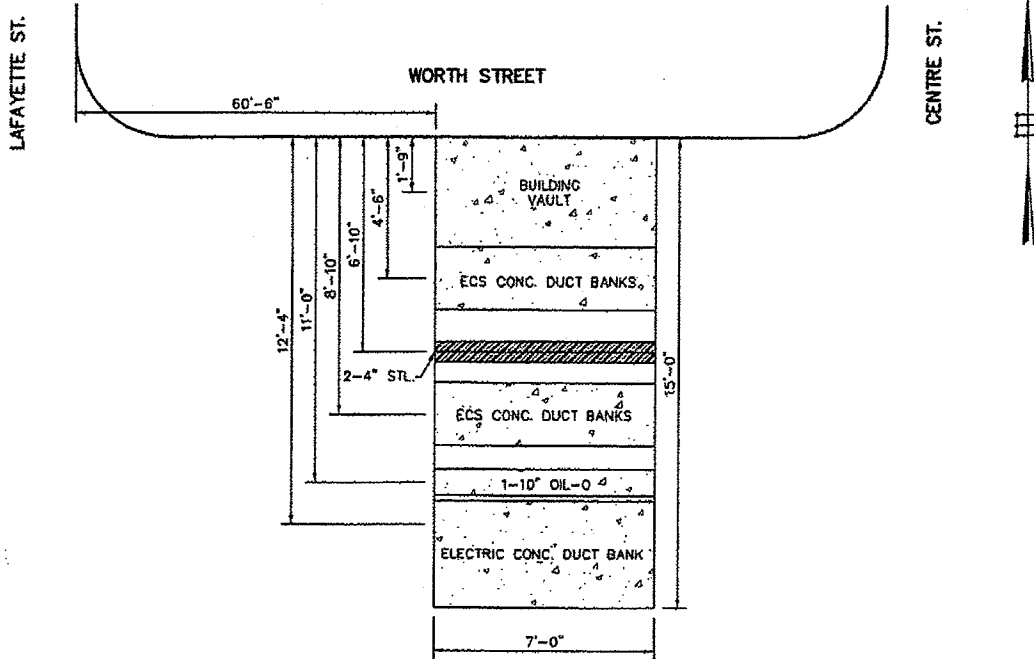
JOB: WORTH STREET  
JOB NO: HMMWTCA7E

PREPARED BY: PM  
CHECKED BY: \_\_\_\_\_

DATE: 05/07/2012  
DATE: \_\_\_\_\_

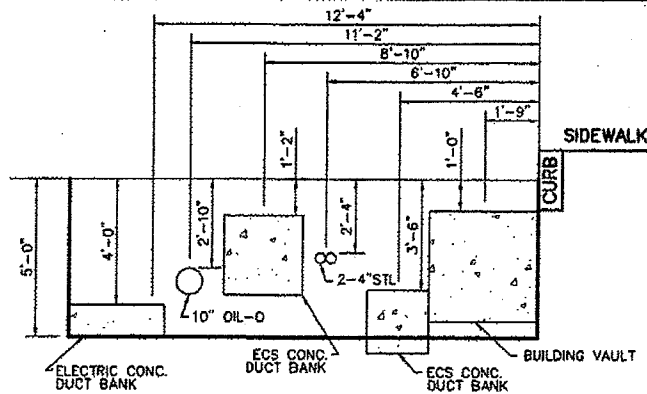
TEST PIT # 28A LOCATION: WORTH STREET, 60'± E/E/C OF LAFAYETTE STREET  
PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 15'-0"X7'-0"X5'-0"



PLAN

NOTE:  
1. ALL DRAWINGS SHOWING UTILITY  
SUPPORT AND PROTECT WORK ARE  
FOR REFERENCE ONLY.



SECTION  
LOOKING WEST



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 18 OF XX

conEdison  
a conEdison, inc. company

JOB: WORTH STREET

PREPARED BY: PM

DATE: 05/07/2012

JOB NO: HMMWTCA7E

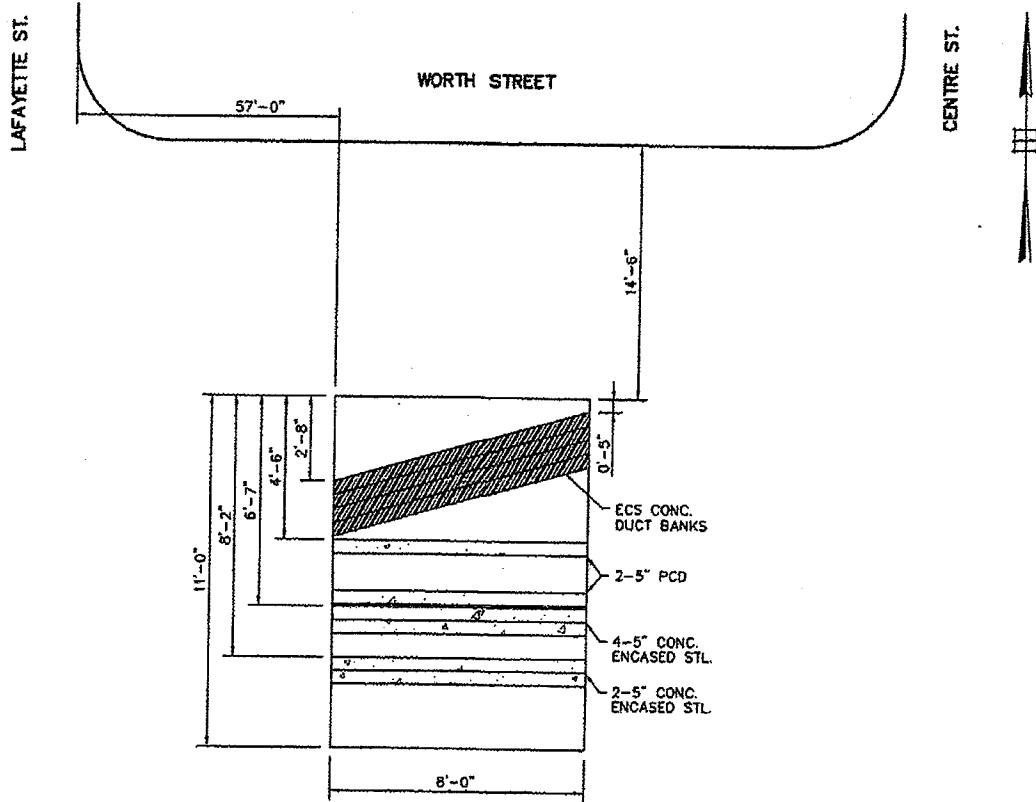
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DATE: \_\_\_\_\_

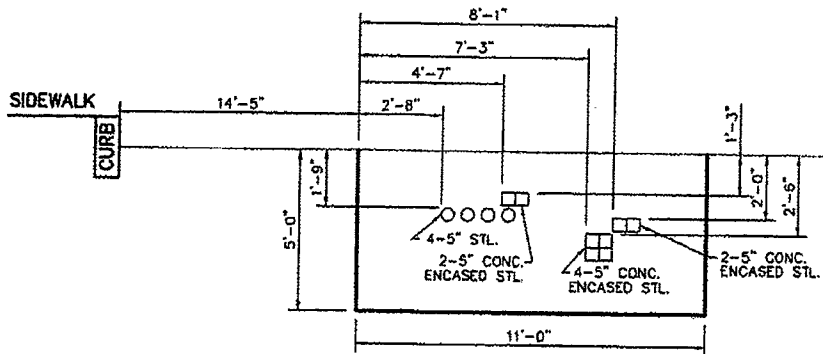
TEST PIT # 28B LOCATION: WORTH STREET, 57'± E/E/C OF LAFAYETTE STREET

PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 11'-0"X8'-0"X5'-0"



**NOTE:**  
 1. ALL DRAWINGS SHOWING UTILITY  
 SUPPORT AND PROTECT WORK ARE  
 FOR REFERENCE ONLY.



LOOKING EAST





Consolidated Edison  
Company of New York, Inc.

SHEET NO. 19 OF XX

conEdison  
a Consolidated Edison Company

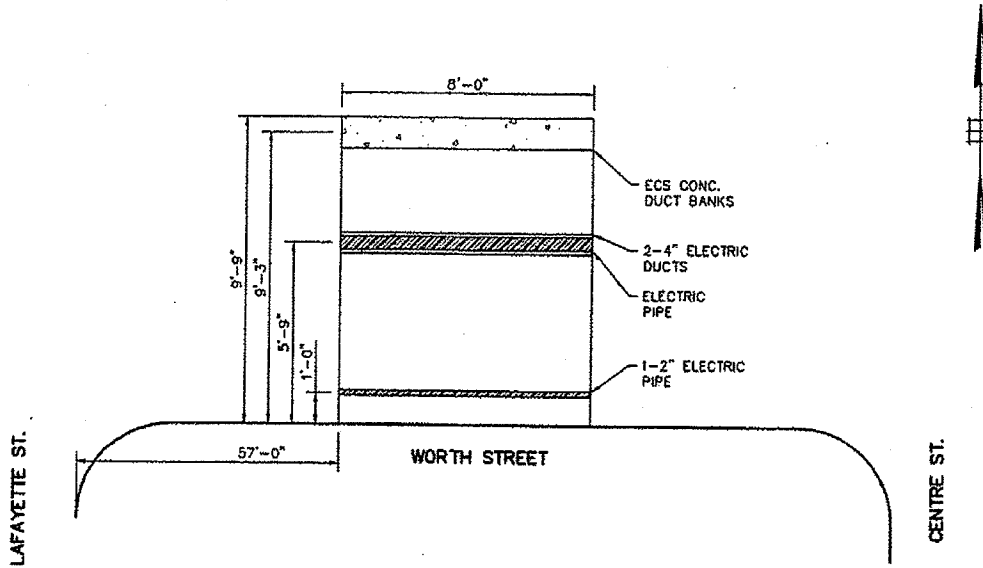
JOB: WORTH STREET PREPARED BY: PM DATE: 05/07/2012

JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

TEST PIT # 28C LOCATION: WORTH STREET, 57'± E/E/C OF LAFAYETTE STREET

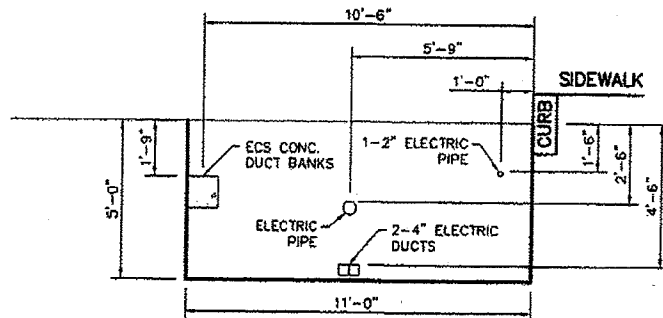
PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 11'-0"X8'-0"X5'-0"



**NOTE:**

- 1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECT WORK ARE FOR REFERENCE ONLY.



LOOKING EAST



Consolidated Edison  
Company of New York, Inc.

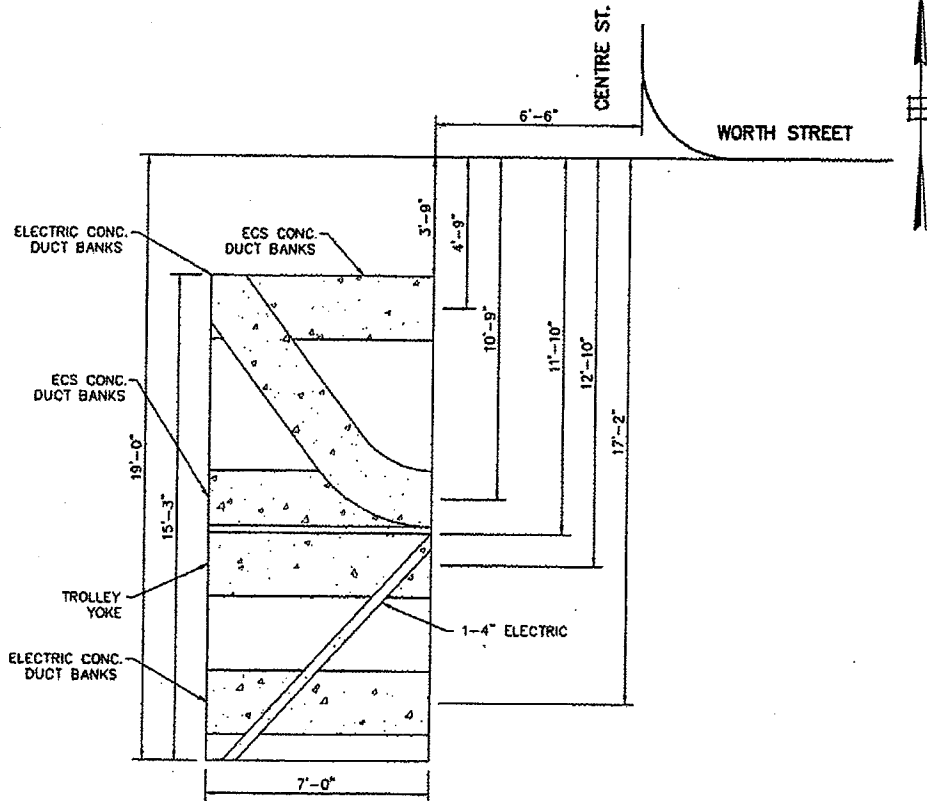
SHEET NO. 20 OF XX

conEdison  
a conEdison, Inc. company

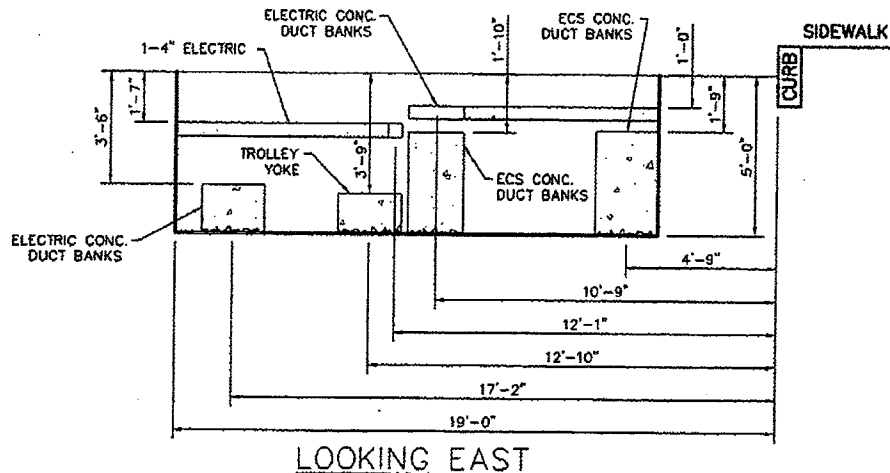
JOB: WORTH STREET PREPARED BY: PM DATE: 05/07/2012  
JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

TEST PIT # 31A LOCATION: WORTH STREET, 6'± W/E/C OF CENTRE STREET  
PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 15'-3"X7'-0"X5'-0"



**NOTE:**  
1. ALL DRAWINGS SHOWING UTILITY  
SUPPORT AND PROTECT WORK ARE  
FOR REFERENCE ONLY.





Consolidated Edison  
Company of New York, Inc.

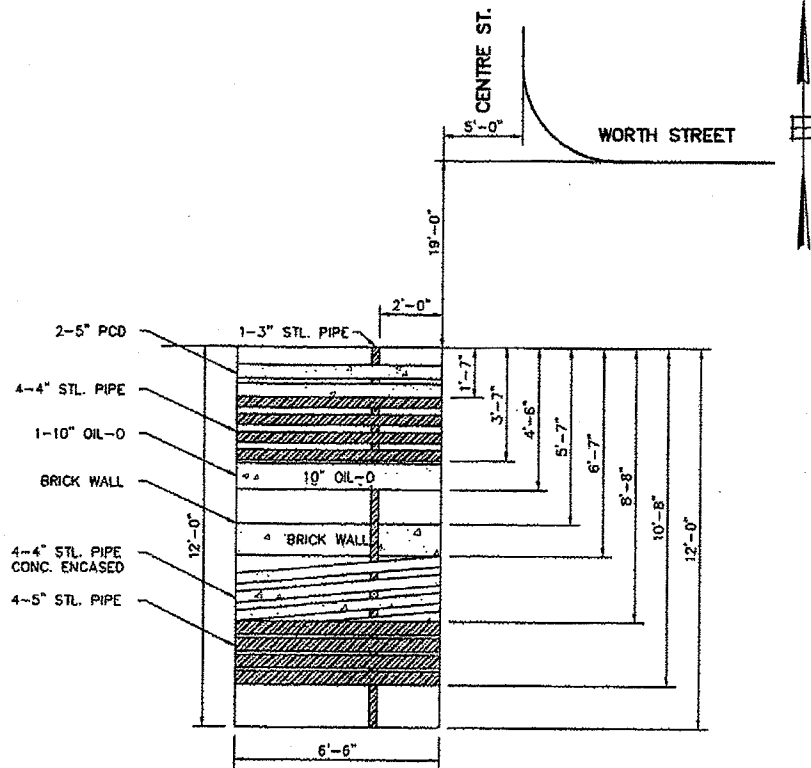
SHEET NO. 21 OF XX

conEdison  
A Consolidated Edison, Inc. Company

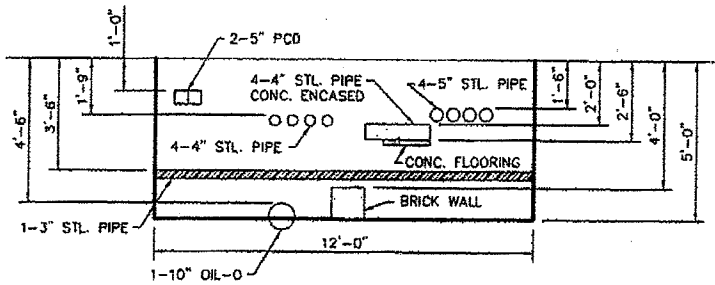
JOB: WORTH STREET PREPARED BY: PM DATE: 05/07/2012  
JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

TEST PIT # 31B LOCATION: WORTH STREET, 5'± W/E/C OF CENTRE STREET  
PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 12'-0"X6'-6"X5'-0"



NOTE:  
1. ALL DRAWINGS SHOWING UTILITY  
SUPPORT AND PROTECT WORK ARE  
FOR REFERENCE ONLY.



LOOKING EAST



Consolidated Edison  
Company of New York, Inc.

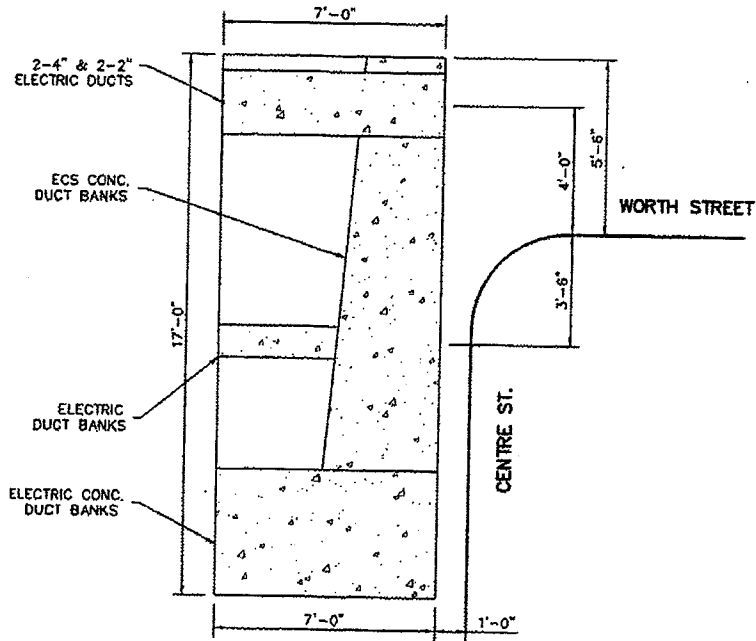
SHEET NO. 22 OF XX

conEdison  
a conEdison, inc. company

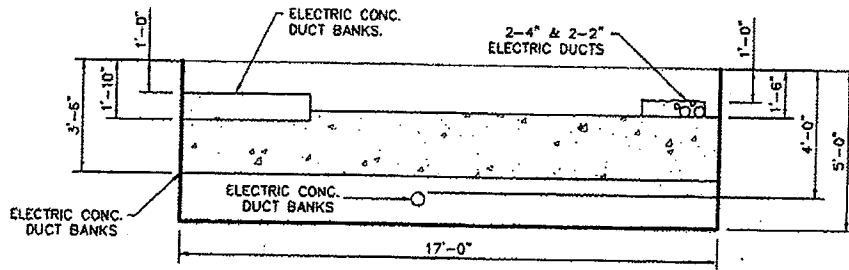
JOB: WORTH STREET PREPARED BY: PM DATE: 05/07/2012  
JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

TEST PIT # 31C LOCATION: WORTH STREET, 1'± W/E/C OF CENTRE STREET  
PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 17'-0"X7'-0"X5'-0"



NOTE:  
1. ALL DRAWINGS SHOWING UTILITY  
SUPPORT AND PROTECT WORK ARE  
FOR REFERENCE ONLY.



LOOKING WEST



Consolidated Edison  
Company of New York, Inc.

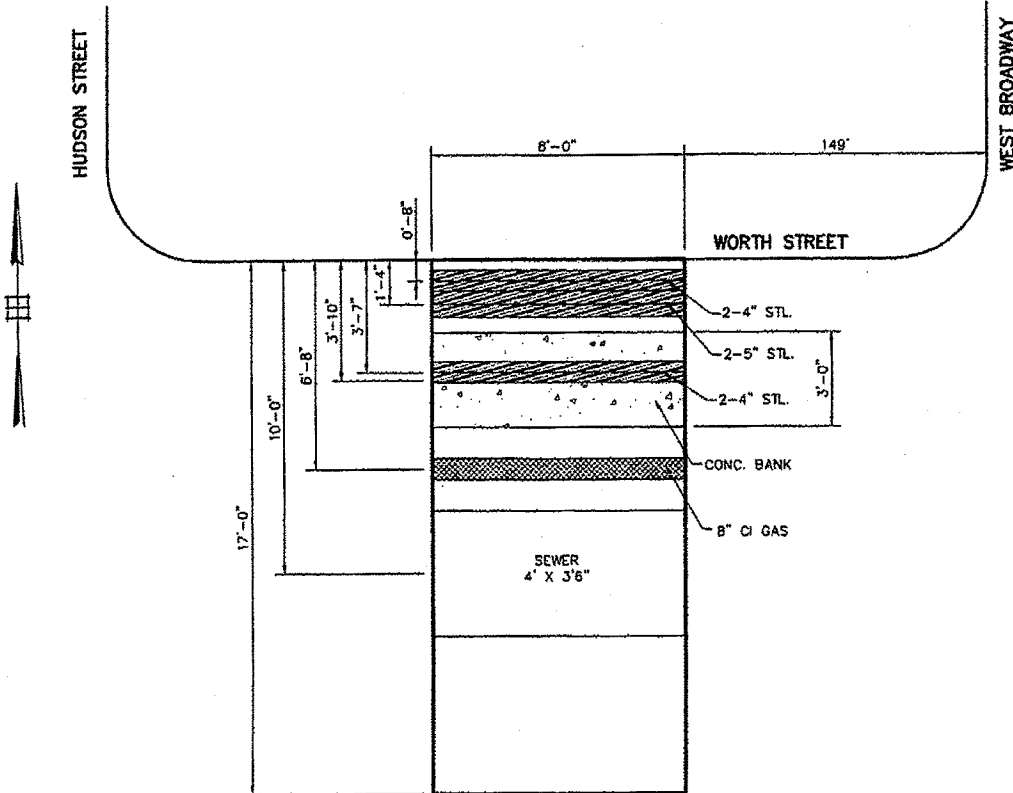
SHEET NO. 23 OF XX

conEdison  
a consolidated Edison company

JOB: WORTH STREET PREPARED BY: CA DATE: 04/20/2012  
 JOB NO: HMMWTCA7E CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

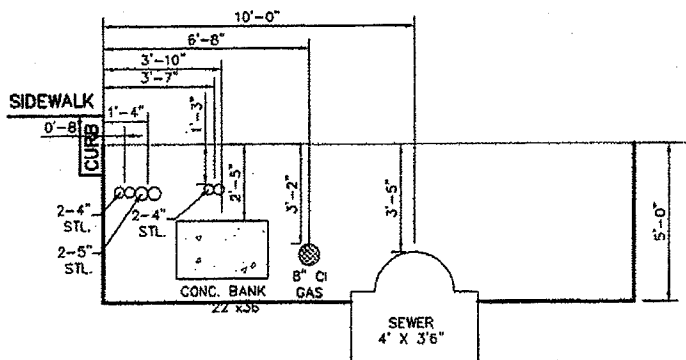
TEST PIT # 49A LOCATION: N/S WORTH STREET, 149'± OF WEST BROADWAY  
 PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 8'-0"X17'-0"X5'-0"



PLAN

NOTE:  
 1. ALL DRAWINGS SHOWING UTILITY  
 SUPPORT AND PROTECT WORK ARE  
 FOR REFERENCE ONLY.



SECTION  
 LOOKING EAST



Consolidated Edison  
Company of New York, Inc.

SHEET NO. 24 OF XX

conEdison  
a Consolidated Edison, Inc. company

JOB: WORTH STREET

PREPARED BY: CA

DATE: 04/20/2012

JOB NO: HMMWTCA7E

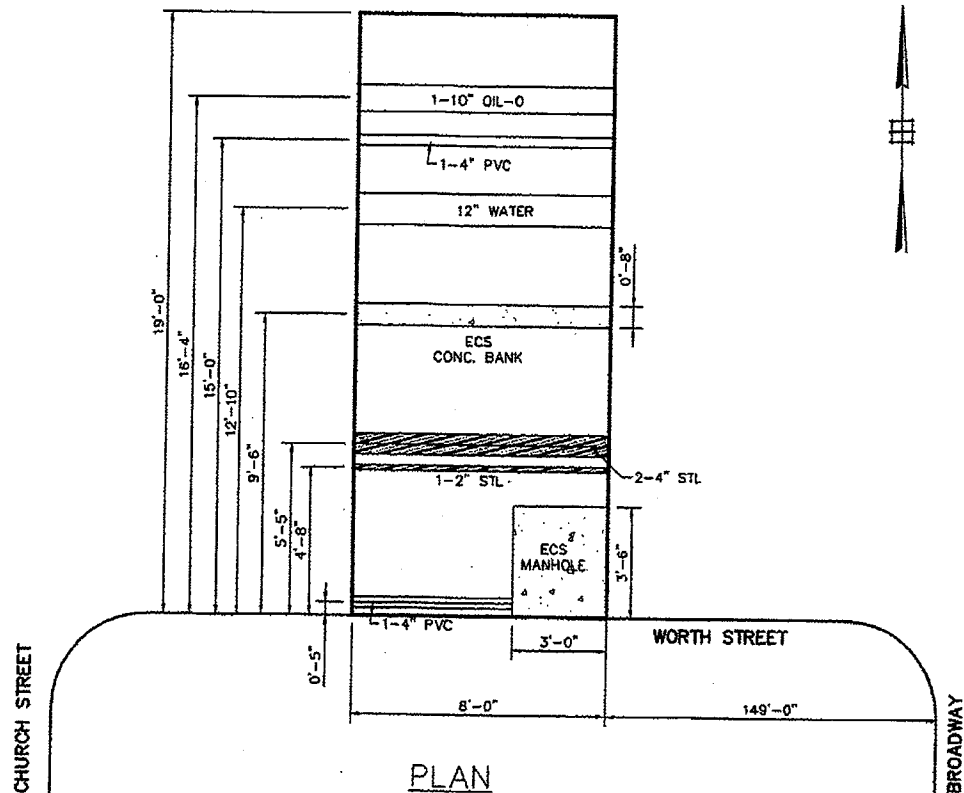
CHECKED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

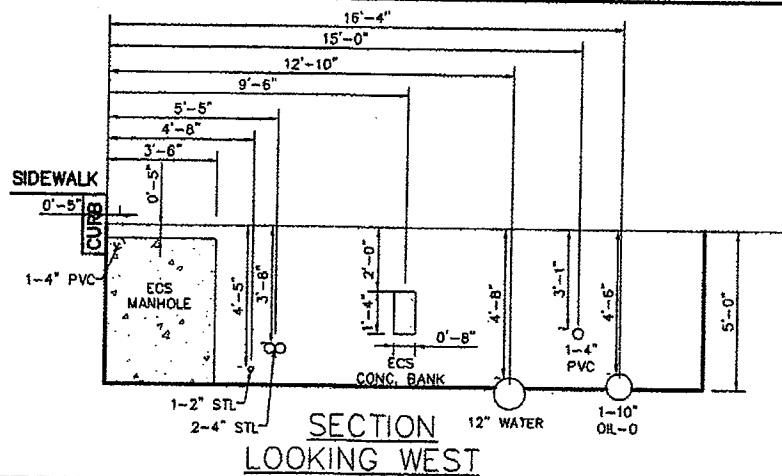
TEST PIT # 49B LOCATION: S/S WORTH STREET, 149'± OF WEST BROADWAY

PURPOSE: LOCATE FACILITIES

TEST PIT DIMENSION 8'-0"X19'-0"X5'-0"



NOTE:  
1. ALL DRAWINGS SHOWING UTILITY  
SUPPORT AND PROTECT WORK ARE  
FOR REFERENCE ONLY.



TEST PIT #: 1  
 TP DATE: 05/19/2012  
 INSPECTOR: ML

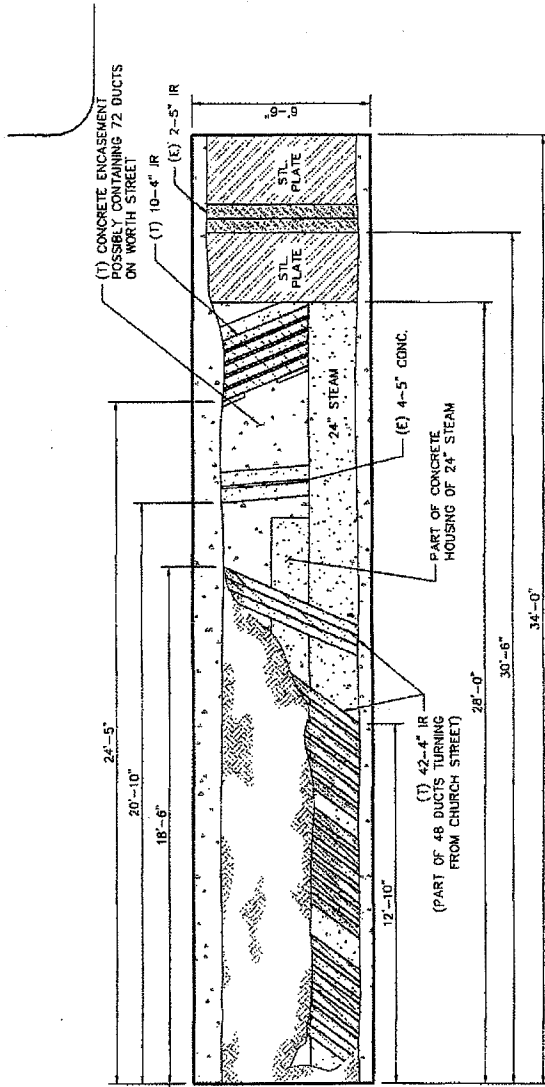
SHEET NO. 1 OF 5

JOB NO.: HMMWTCA7E  
 JOB: RECONSTRUCTION OF WORTH STREET

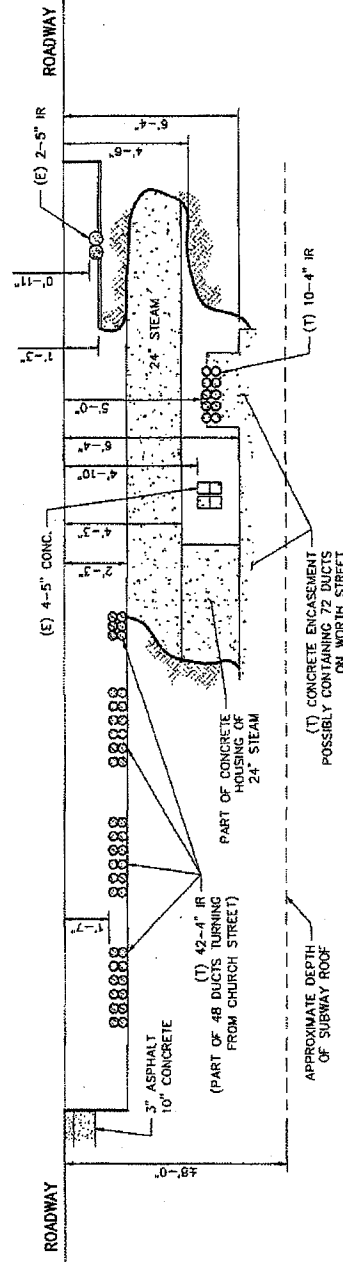
LOCATION: INTERSECTION OF WORTH STREET & CHURCH STREET

PURPOSE: LOCATE FACILITIES

DIMENSION: 34'-0" x 6'-6" x 3'-6" VOLUME: 28.7 C.Y.



PLAN



SECTION LOOKING EAST

NOTE:  
 1. ALL DRAWINGS SHOWING UTILITY SUPPORT AND PROTECT WORK ARE FOR REFERENCE ONLY.



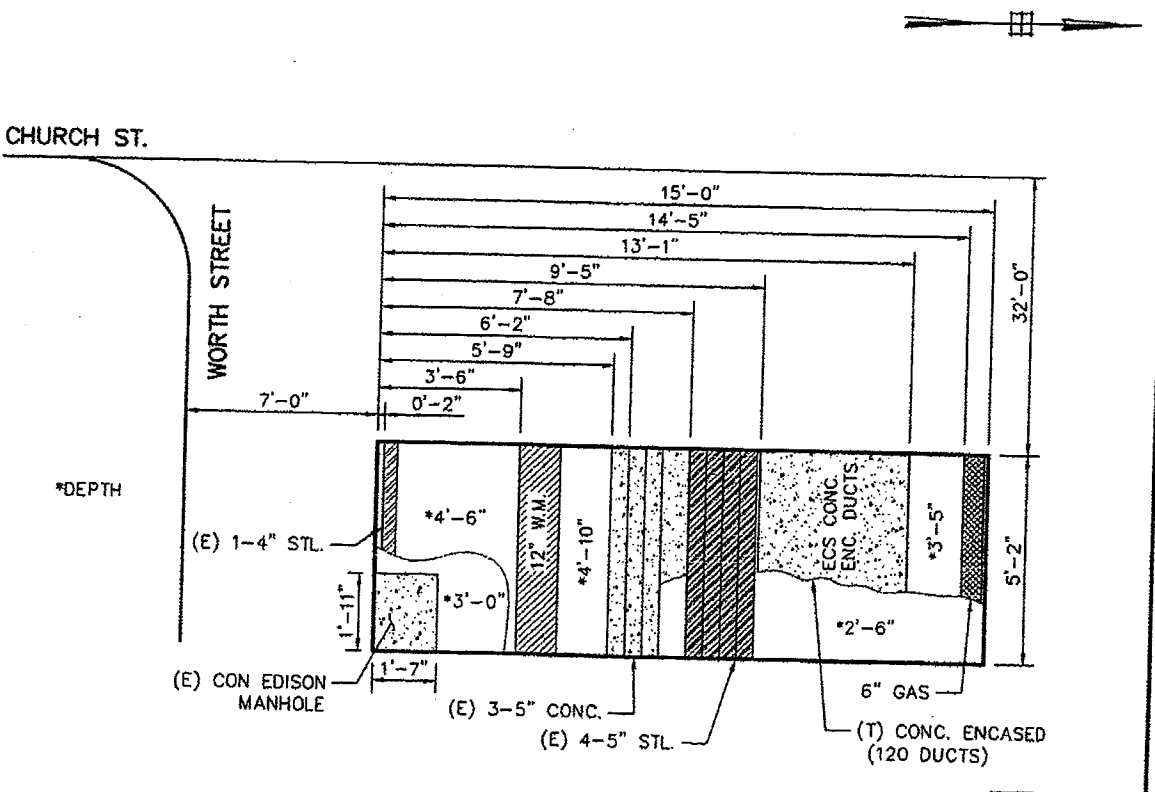
JOB NO.: HMMWTCA7E  
 JOB: RECONSTRUCTION OF  
WORTH STREET

TEST PIT #: 2  
 TP DATE: 05/12/2012  
 INSPECTOR: PM

LOCATION: 7'-0" N/S/C WORTH STREET, 32'-0" E/E/C CHURCH STREET

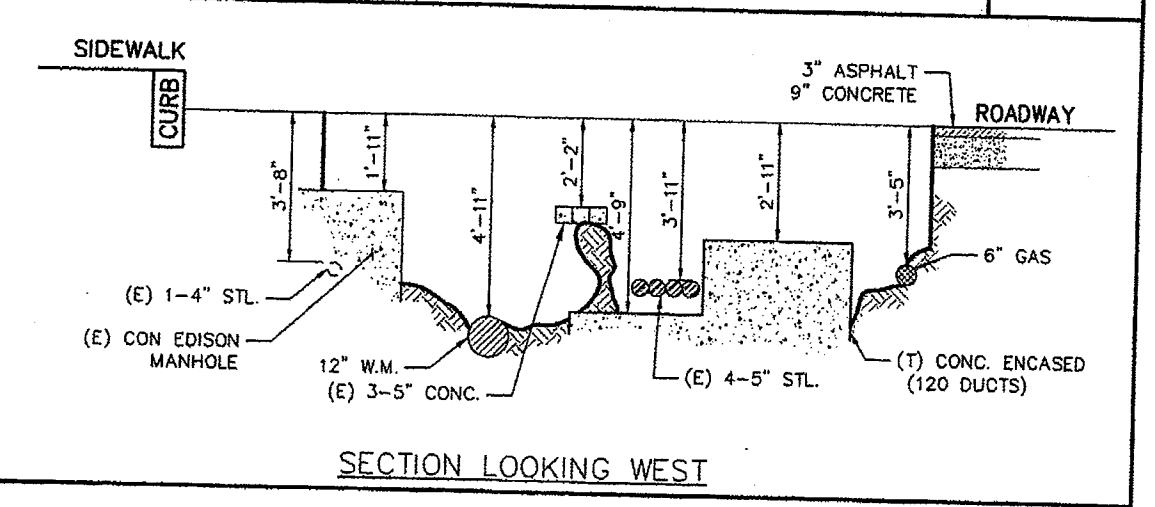
PURPOSE: LOCATE FACILITIES

DIMENSION: 15'-0"x5'-2"x5'-0" VOLUME: 8.6 C.Y. SHEET NO. 2 OF 5



NOTE:  
 1. ALL DRAWINGS SHOWING UTILITY  
 SUPPORT AND PROTECT WORK ARE  
 FOR REFERENCE ONLY.

PLAN



SECTION LOOKING WEST





JOB NO.: HMMWTCA7E  
 JOB: RECONSTRUCTION OF  
WORTH STREET

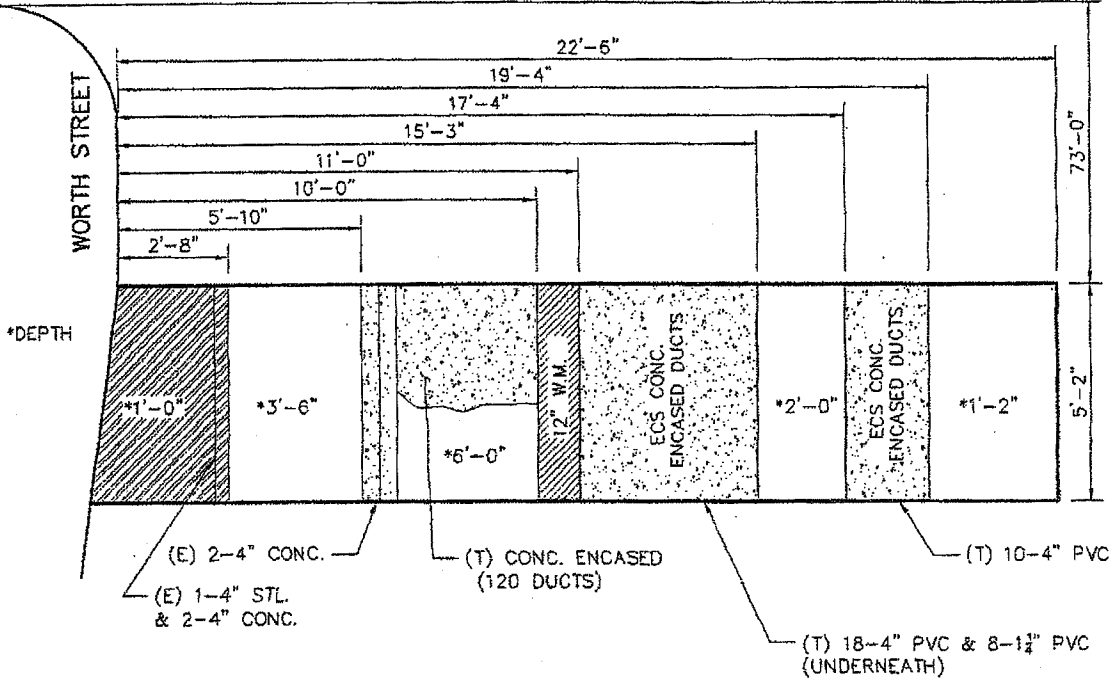
TEST PIT #: 3  
 TP DATE: 05/12/2012  
 INSPECTOR: PM

LOCATION: 0'-0" N/S/C WORTH STREET, 73'-0" E/E/C CHURCH STREET

PURPOSE: LOCATE FACILITIES

DIMENSION: 22'-6" x 5'-2" x 8'-2" VOLUME: 16.3 C.Y. SHEET NO. 3 OF 5

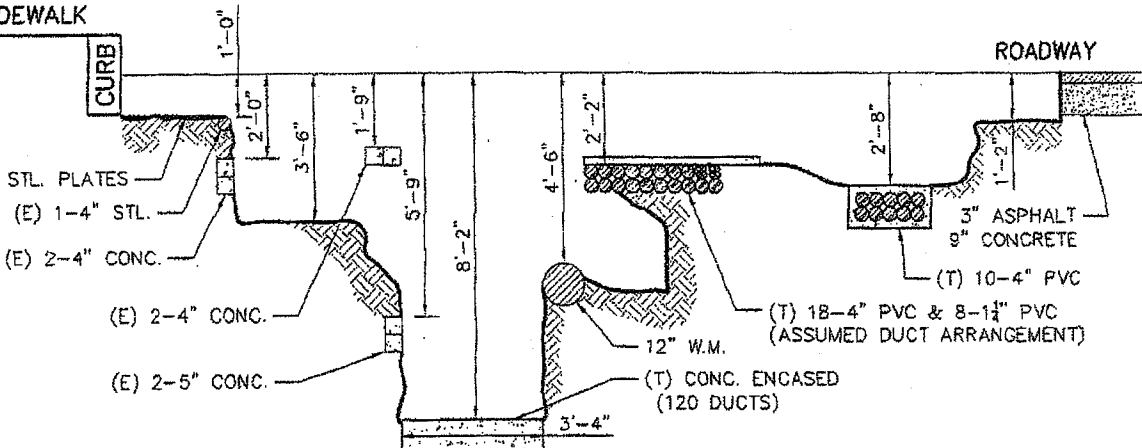
CHURCH ST.



NOTE:  
 1. ALL DRAWINGS SHOWING UTILITY  
 SUPPORT AND PROTECT WORK ARE  
 FOR REFERENCE ONLY.

PLAN

SIDEWALK



SECTION LOOKING WEST



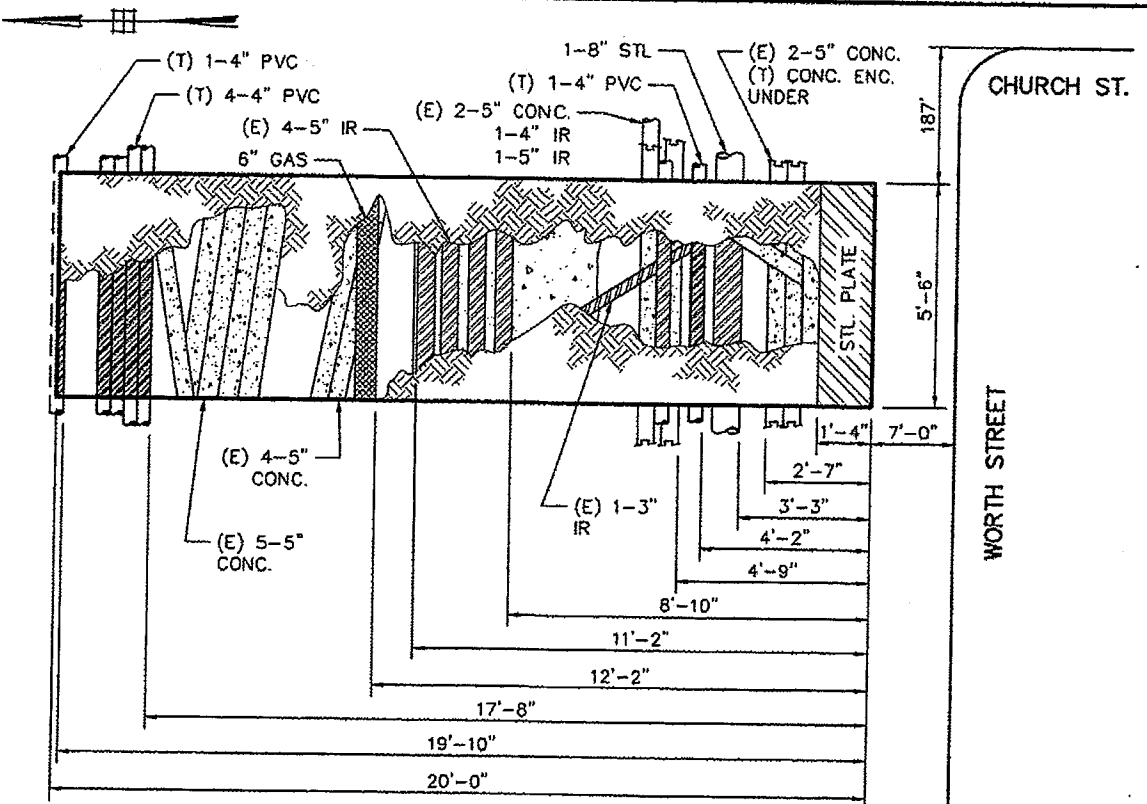
JOB NO.: HMMWTCA7E  
 JOB: RECONSTRUCTION OF  
WORTH STREET

TEST PIT #: 4  
 TP DATE: 05/19/2012  
 INSPECTOR: ML

LOCATION: 7'-0" N/S/C WORTH STREET, 186'-0" W/E/C CHURCH STREET

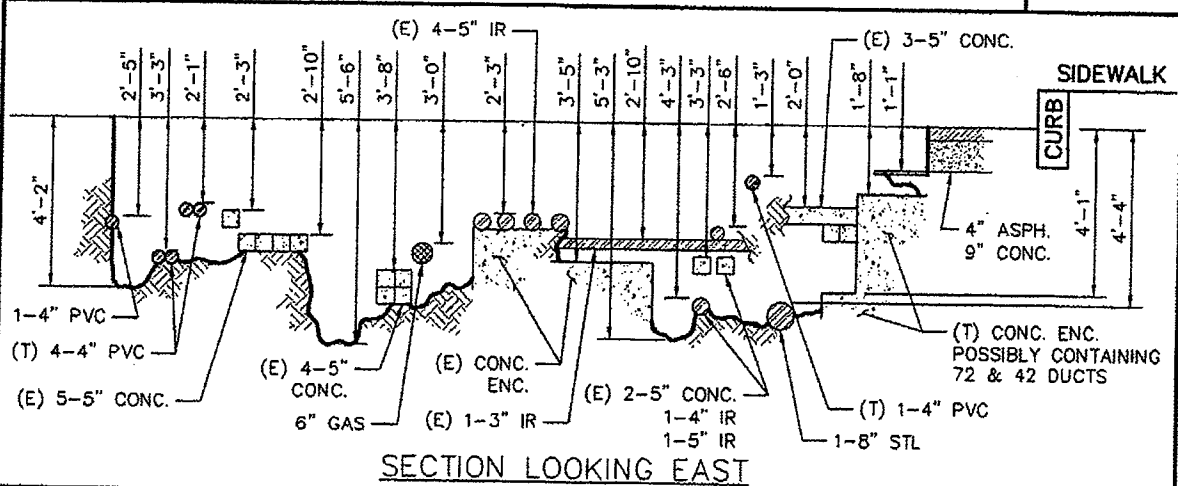
PURPOSE: LOCATE FACILITIES

DIMENSION: 20'-0" x 5'-6" x 4'-0" VOLUME: 16.3 C.Y. SHEET NO. 4 OF 5



NOTE:  
 1. ALL DRAWINGS SHOWING UTILITY  
 SUPPORT AND PROTECT WORK ARE  
 FOR REFERENCE ONLY.

PLAN



SECTION LOOKING EAST



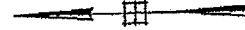
JOB NO.: HMMWTCA7E  
 JOB: RECONSTRUCTION OF  
WORTH STREET

TEST PIT #: 5  
 TP DATE: 05/12/2012  
 INSPECTOR: PM

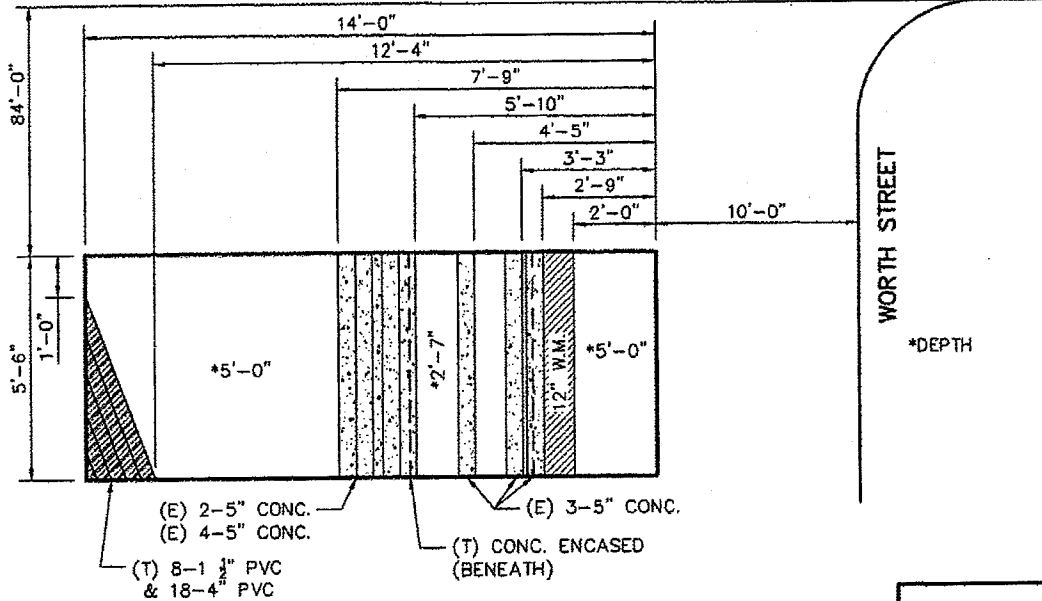
LOCATION: 10'-0" N/S/C WORTH STREET, 84'-0" W/W/C CHURCH STREET

PURPOSE: LOCATE FACILITIES

DIMENSION: 14'-0" x 5'-6" x 5'-0" VOLUME: 4.90 C.Y. SHEET NO. 5 OF 5

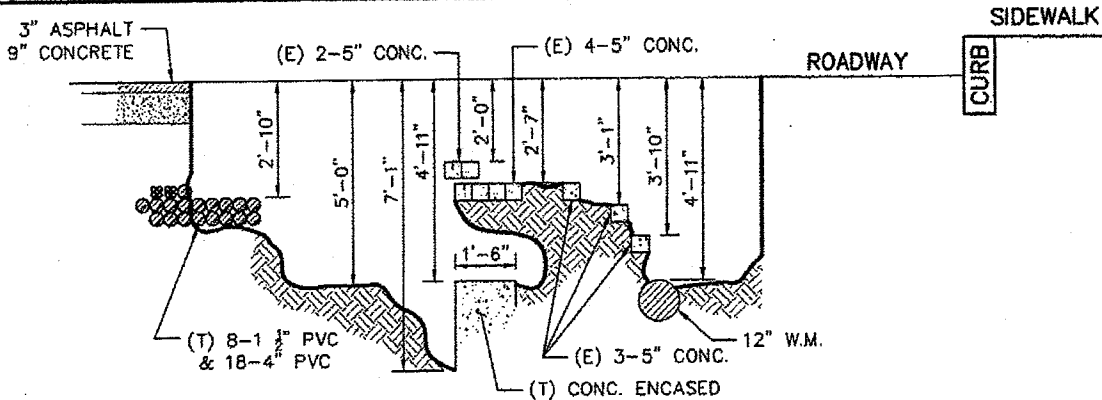


CHURCH ST.



NOTE:  
 1. ALL DRAWINGS SHOWING UTILITY  
 SUPPORT AND PROTECT WORK ARE  
 FOR REFERENCE ONLY.

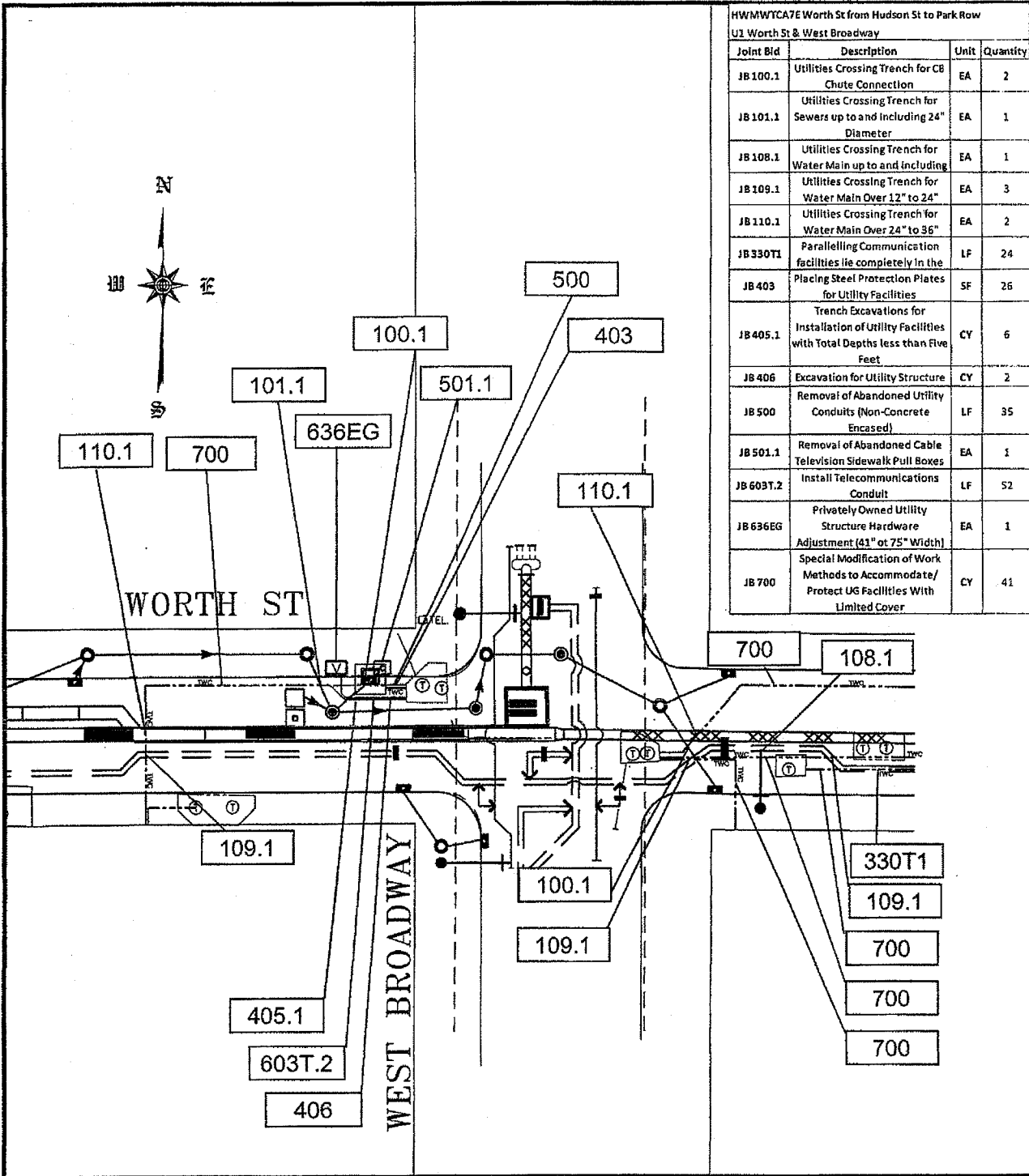
PLAN



SECTION LOOKING EAST

# SKETCHES

(NO TEXT IN THIS SECTION)

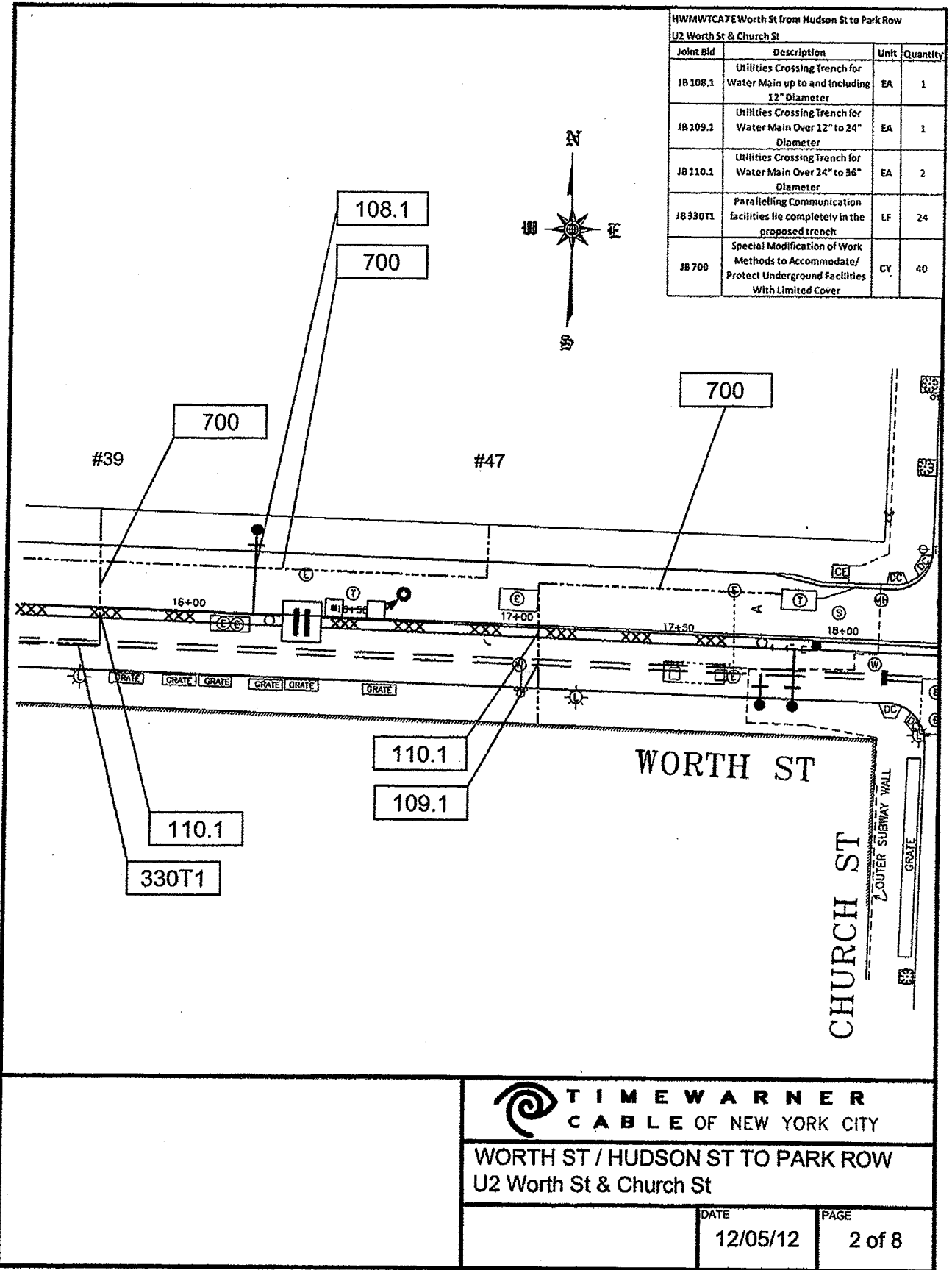


HMMWTCA7E Worth St from Hudson St to Park Row U1 Worth St & West Broadway			
Joint Bid	Description	Unit	Quantity
JB 100.1	Utilities Crossing Trench for CB Chute Connection	EA	2
JB 101.1	Utilities Crossing Trench for Sewers up to and including 24" Diameter	EA	1
JB 108.1	Utilities Crossing Trench for Water Main up to and including	EA	1
JB 109.1	Utilities Crossing Trench for Water Main Over 12" to 24"	EA	3
JB 110.1	Utilities Crossing Trench for Water Main Over 24" to 36"	EA	2
JB 330T1	Paralleling Communication facilities lie completely in the	LF	24
JB 403	Placing Steel Protection Plates for Utility Facilities	SF	26
JB 405.1	Trench Excavations for Installation of Utility Facilities with Total Depths less than Five Feet	CY	6
JB 406	Excavation for Utility Structure	CY	2
JB 500	Removal of Abandoned Utility Conduits (Non-Concrete Encased)	LF	35
JB 501.1	Removal of Abandoned Cable Television Sidewalk Pull Boxes	EA	1
JB 603T.2	Install Telecommunications Conduit	LF	52
JB 636EG	Privately Owned Utility Structure Hardware Adjustment (41" or 75" Width)	EA	1
JB 700	Special Modification of Work Methods to Accommodate/Protect UG Facilities With Limited Cover	CY	41




WORTH ST / HUDSON ST TO PARK ROW  
U1 Worth St & Broadway

DATE	PAGE
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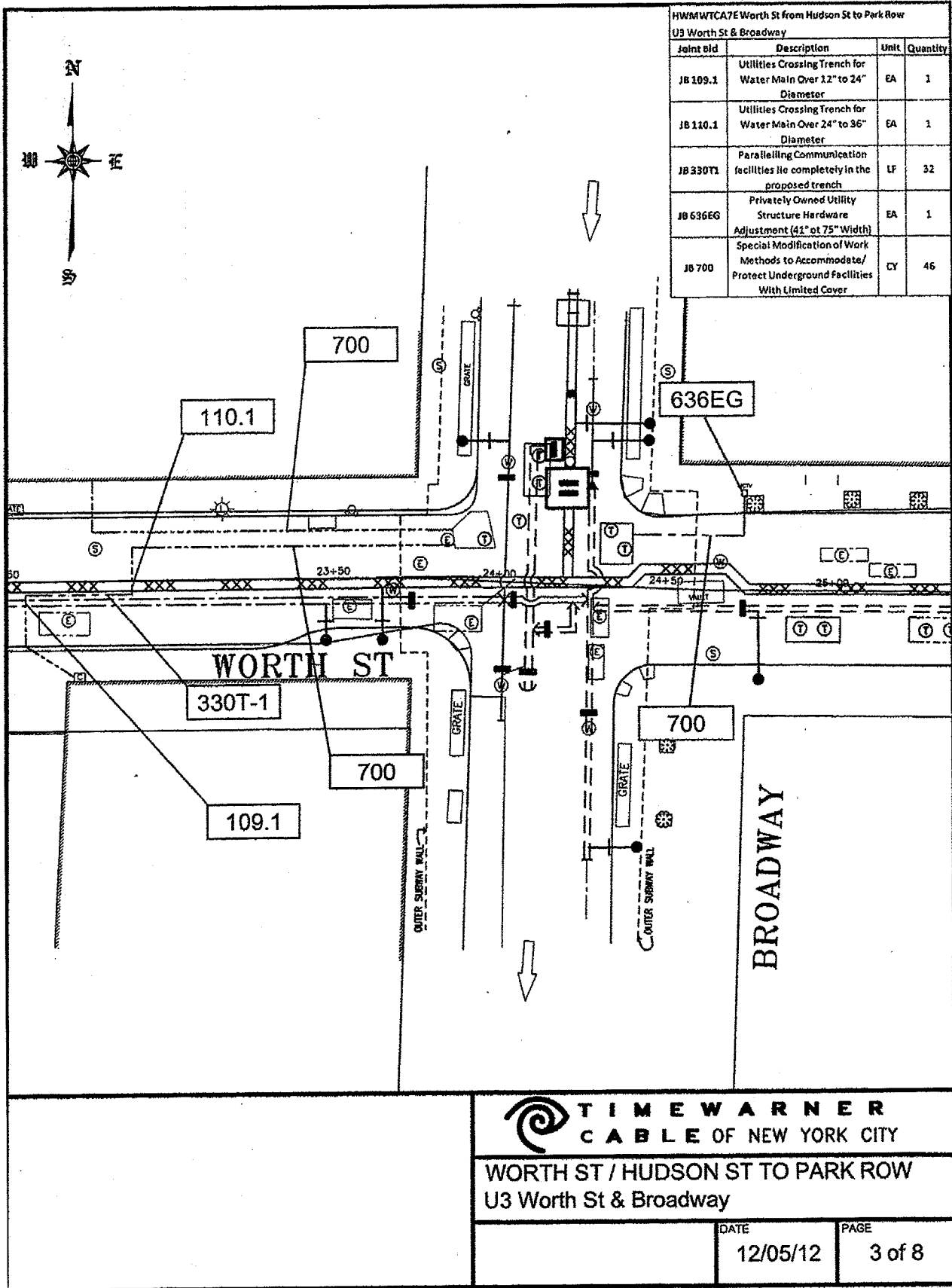


HMMWTCA7E Worth St from Hudson St to Park Row U2 Worth St & Church St			
Joint Bid	Description	Unit	Quantity
JB 108.1	Utilities Crossing Trench for Water Main up to and including 12" Diameter	EA	1
JB 109.1	Utilities Crossing Trench for Water Main Over 12" to 24" Diameter	EA	1
JB 110.1	Utilities Crossing Trench for Water Main Over 24" to 36" Diameter	EA	2
JB 330T1	Paralleling Communication facilities lie completely in the proposed trench	LF	24
JB 700	Special Modification of Work Methods to Accommodate/Protect Underground Facilities With Limited Cover	CY	40

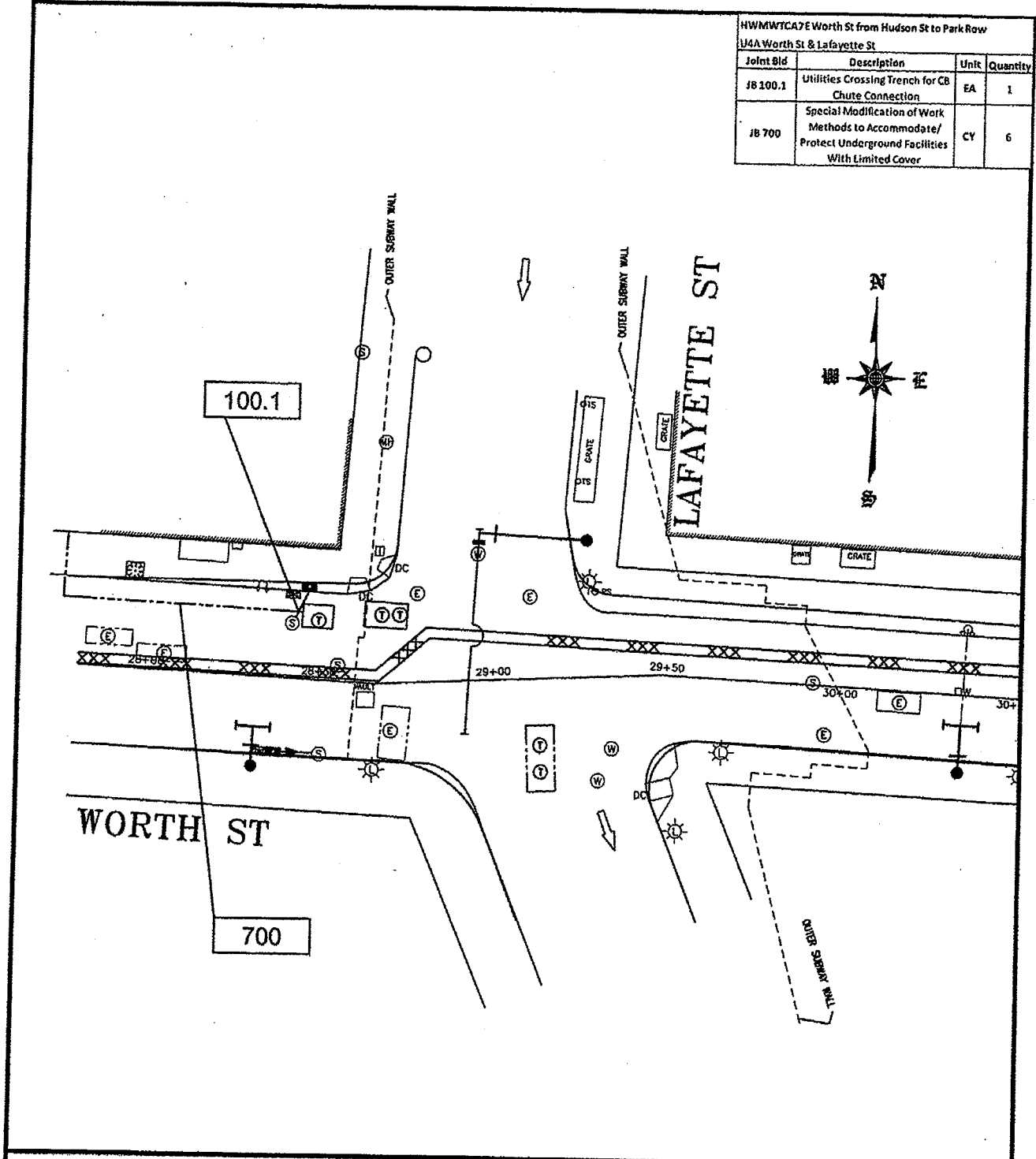

**TIME WARNER**  
**CABLE OF NEW YORK CITY**

**WORTH ST / HUDSON ST TO PARK ROW**  
**U2 Worth St & Church St**

	DATE 12/05/12	PAGE 2 of 8
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HMMWTCA7E Worth St from Hudson St to Park Row			
U4A Worth St & Lafayette St			
Joint Bld	Description	Unit	Quantity
JB 100.1	Utilities Crossing Trench for CB Chute Connection	EA	1
JB 700	Special Modification of Work Methods to Accommodate/Protect Underground Facilities With Limited Cover	CY	6

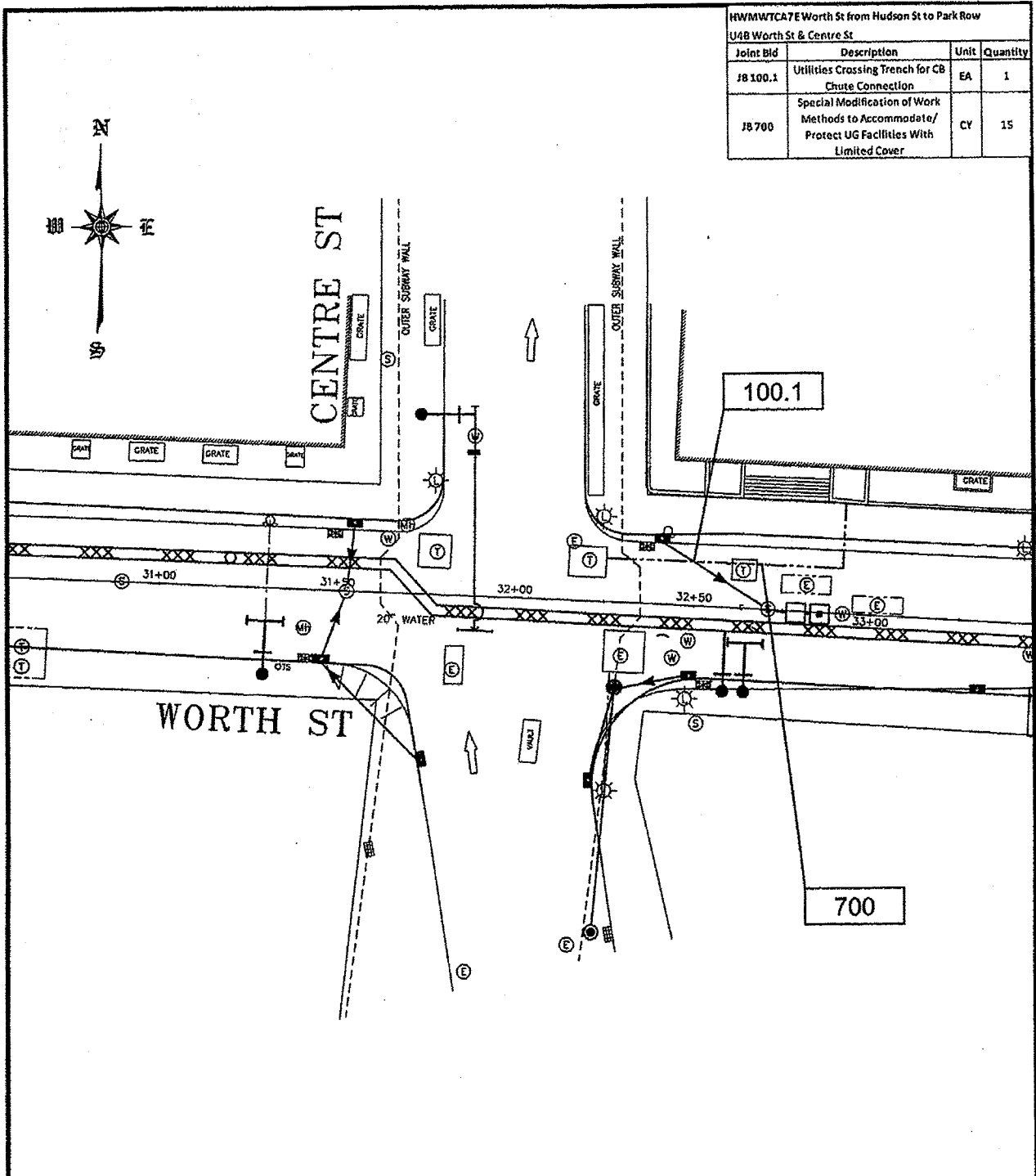


**TIMEWARNER**  
CABLE OF NEW YORK CITY


WORTH ST / HUDSON ST TO PARK ROW  
U4A Worth St & Lafayette St

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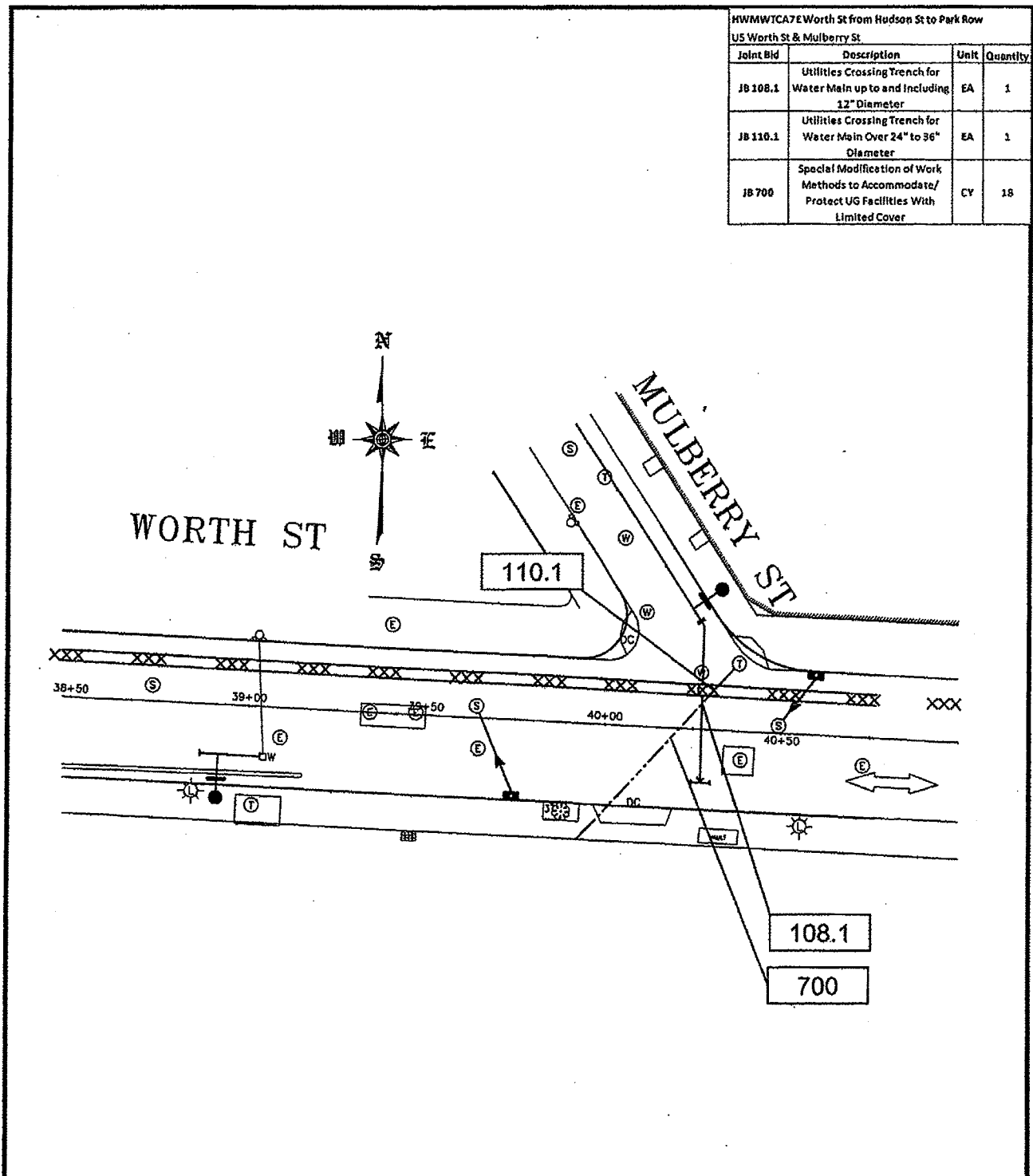




HMMWTCA7E Worth St from Hudson St to Park Row			
U4B Worth St & Centre St			
Joint Bid	Description	Unit	Quantity
J8 100.1	Utilities Crossing Trench for CB Chute Connection	EA	1
J8 700	Special Modification of Work Methods to Accommodate/ Protect UG Facilities With Limited Cover	CY	15

	 <b>TIME WARNER</b> CABLE OF NEW YORK CITY	
	<b>WORTH ST / HUDSON ST TO PARK ROW</b> <b>U4B Worth St &amp; Centre St</b>	
	DATE	PAGE
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HMMWTCA7E Worth St from Hudson St to Park Row U5 Worth St & Mulberry St			
Joint Bid	Description	Unit	Quantity
JB 108.1	Utilities Crossing Trench for Water Main up to and including 12" Diameter	EA	1
JB 110.1	Utilities Crossing Trench for Water Main Over 24" to 36" Diameter	EA	1
JB 700	Special Modification of Work Methods to Accommodate/Protect UG Facilities With Limited Cover	CY	18



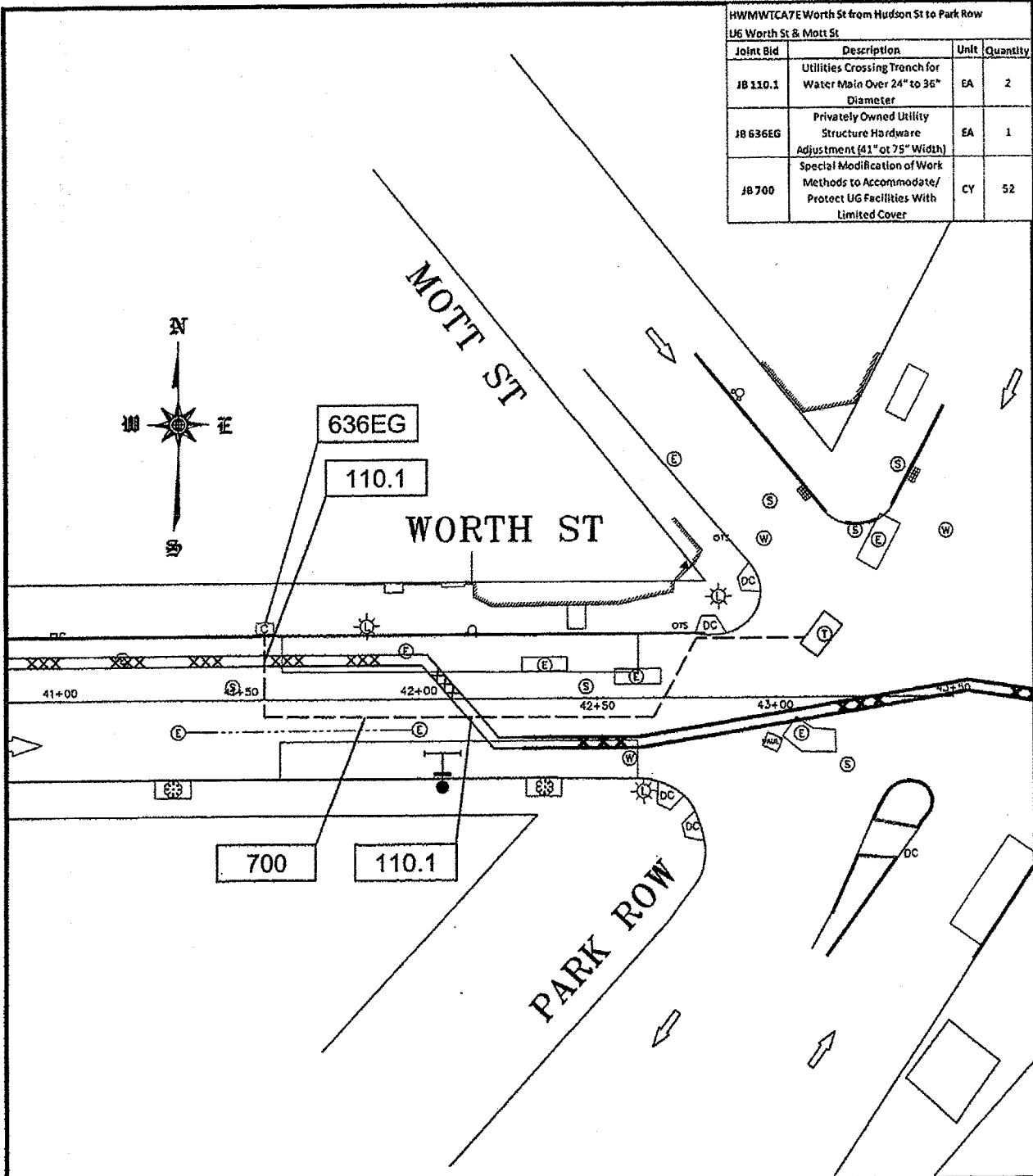
**TIME WARNER**  
CABLE OF NEW YORK CITY

WORTH ST / HUDSON ST TO PARK ROW  
U5 Worth St & Mulberry St

DATE  
12/05/12

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6 of 8

HMMWTCA7E Worth St from Hudson St to Park Row			
U6 Worth St & Mott St			
Joint Bid	Description	Unit	Quantity
JB 110.1	Utilities Crossing Trench for Water Main Over 24" to 36" Diameter	EA	2
JB 636EG	Privately Owned Utility Structure Hardware Adjustment (41" ot 75" Width)	EA	1
JB 700	Special Modification of Work Methods to Accommodate/Protect UG Facilities With Limited Cover	CY	52

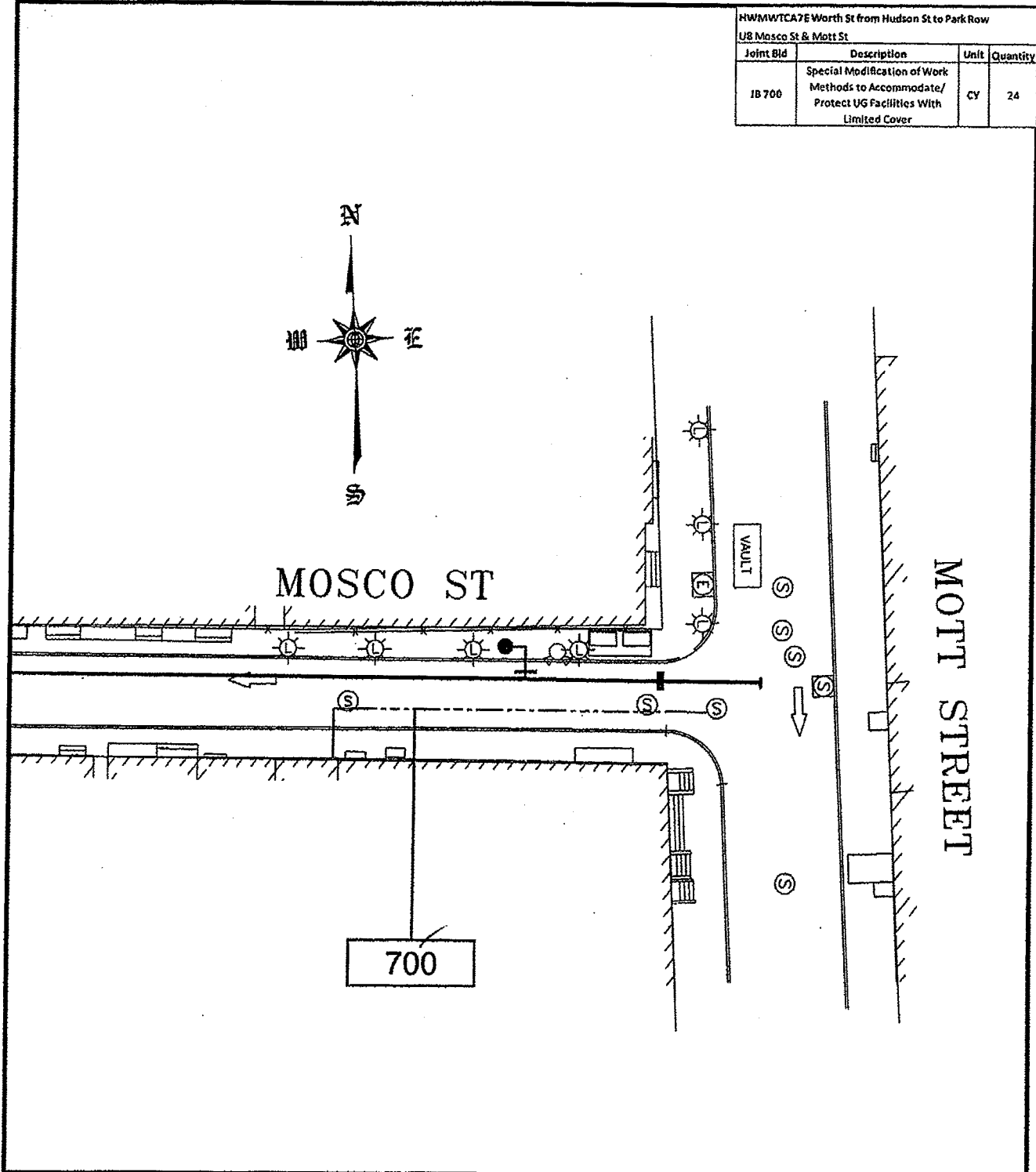



**TIME WARNER**  
CABLE OF NEW YORK CITY

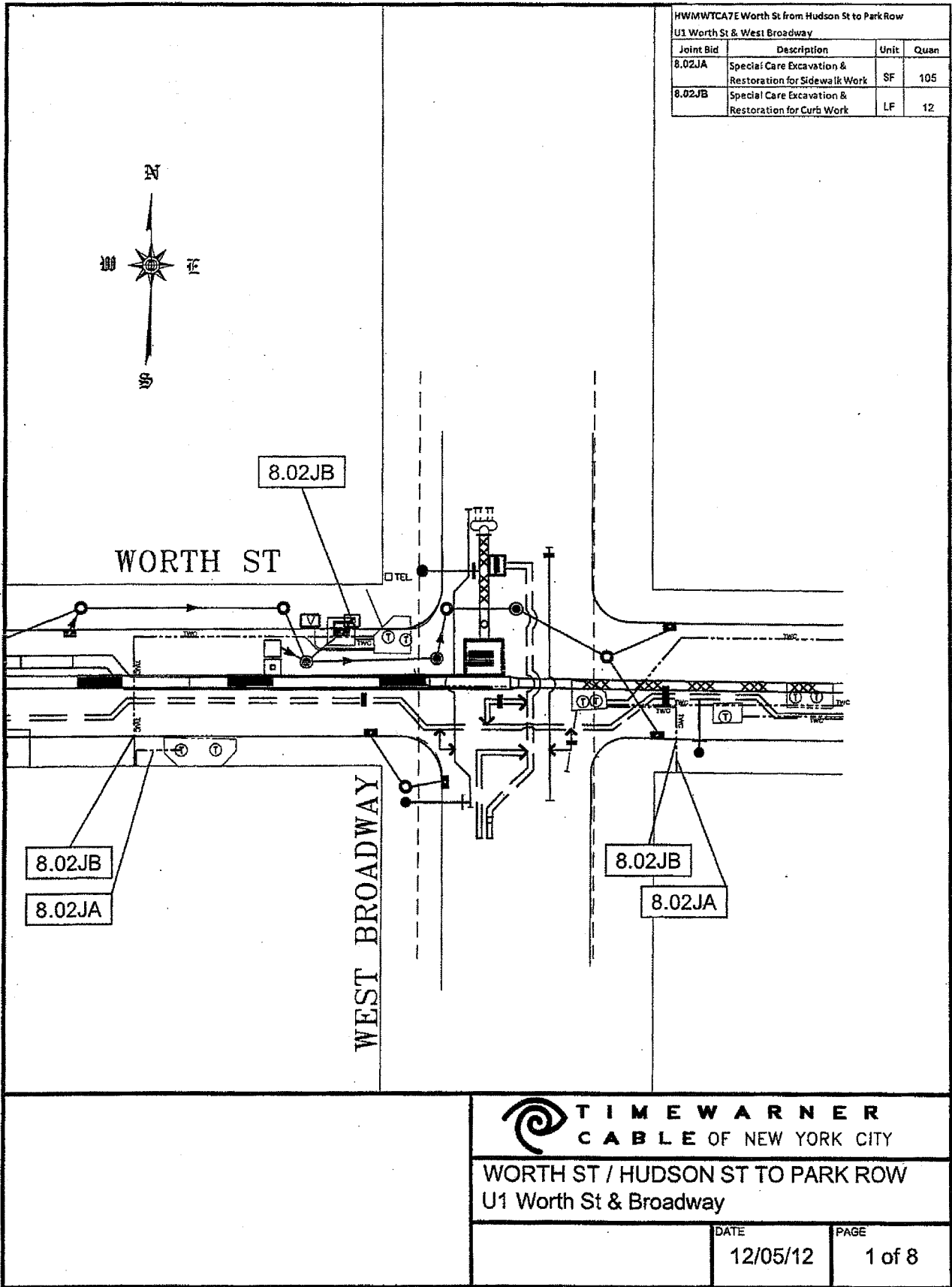
WORTH ST / HUDSON ST TO PARK ROW  
U6 Worth St & Mott St / Park Row

DATE	PAGE
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HMMWTCA7E Worth St from Hudson St to Park Row U8 Mosco St & Mott St			
Joint Bld	Description	Unit	Quantity
1B 700	Special Modification of Work Methods to Accommodate/ Protect UG Facilities With Limited Cover	CY	24



 <b>TIME WARNER</b> CABLE OF NEW YORK CITY	
<b>WORTH ST / HUDSON ST TO PARK ROW</b> <b>U8 Mosco St &amp; Mott St</b>	
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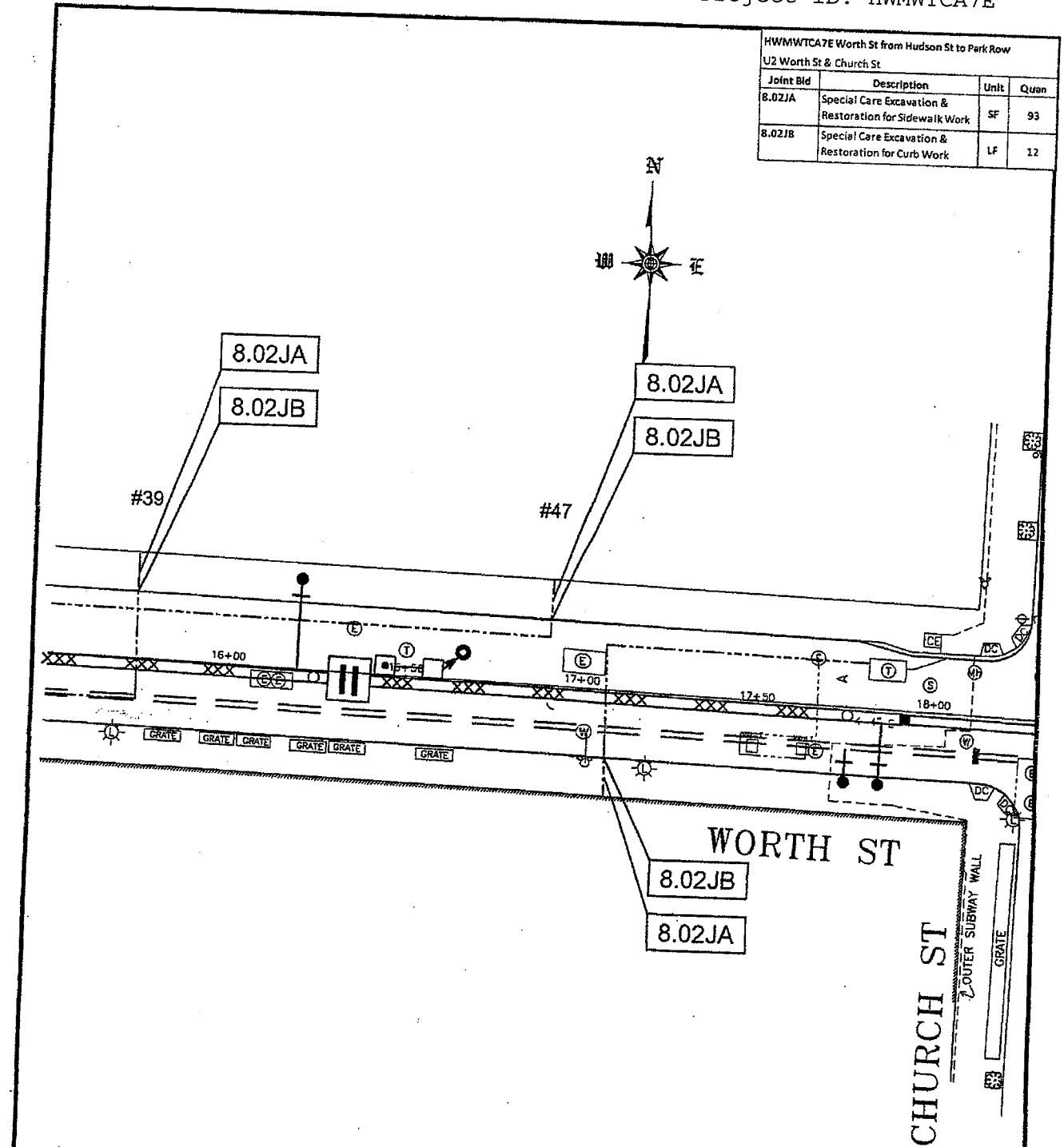
HMMWTCA7E Worth St from Hudson St to Park Row			
U1 Worth St & West Broadway			
Joint Bid	Description	Unit	Quan
8.02JA	Special Care Excavation & Restoration for Sidewalk Work	SF	105
8.02JB	Special Care Excavation & Restoration for Curb Work	LF	12


**TIME WARNER**  
CABLE OF NEW YORK CITY

WORTH ST / HUDSON ST TO PARK ROW  
U1 Worth St & Broadway

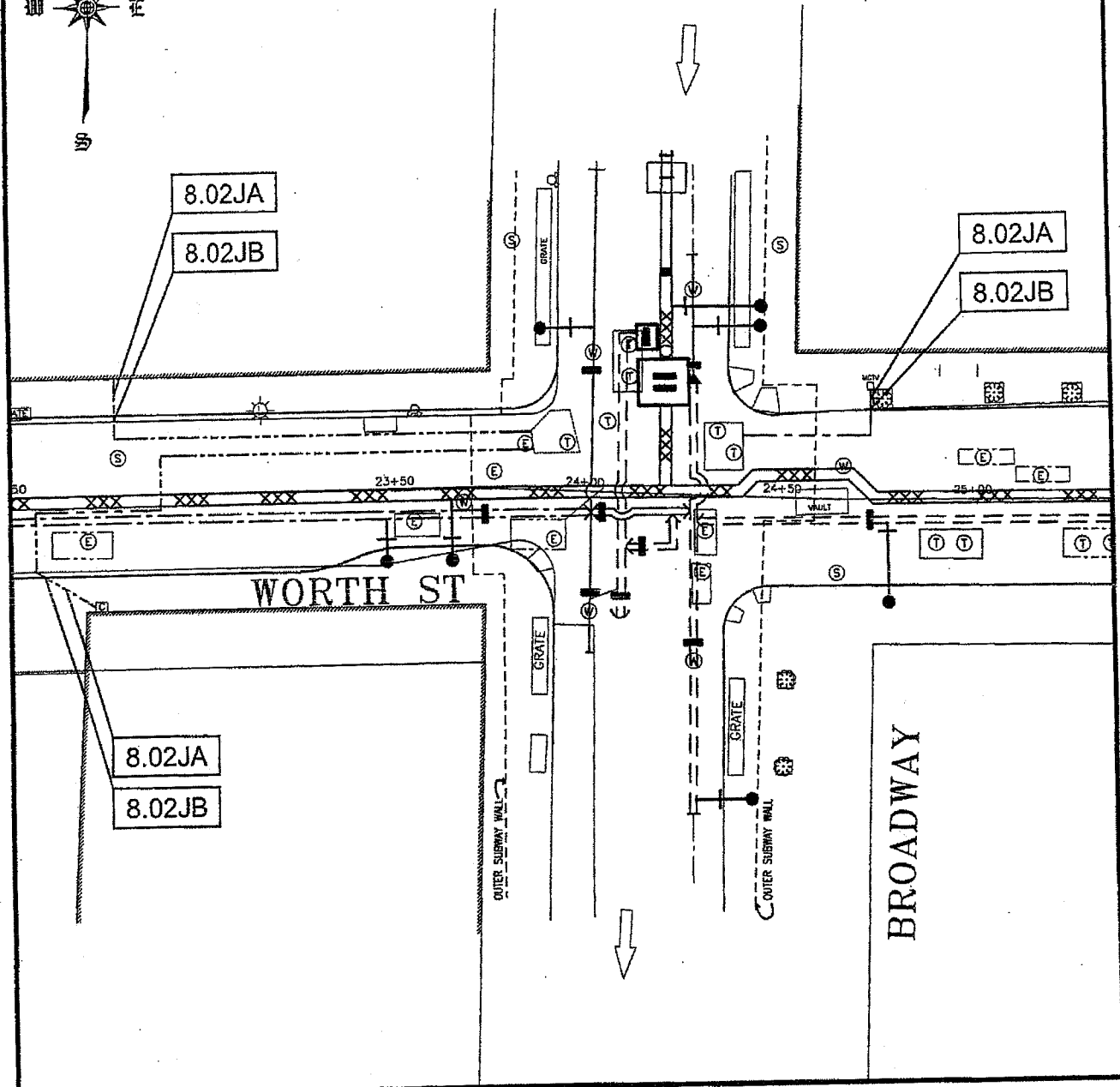
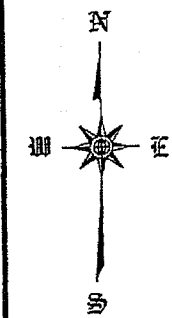
DATE	PAGE
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HMMWTCA7E Worth St from Hudson St to Park Row U2 Worth St & Church St			
Joint Bld	Description	Unit	Quan
8.02JA	Special Care Excavation & Restoration for Sidewalk Work	SF	93
8.02JB	Special Care Excavation & Restoration for Curb Work	LF	12



 <b>TIME WARNER</b> CABLE OF NEW YORK CITY	
<b>WORTH ST / HUDSON ST TO PARK ROW</b> <b>U2 Worth St &amp; Church St</b>	
DATE	PAGE
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HMMWTCA7E Worth St from Hudson St to Park Row			
U3 Worth St & Broadway			
Joint Bid	Description	Unit	Quan
8.02JA	Special Care Excavation & Restoration for Sidewalk Work	SF	57
8.02JB	Special Care Excavation & Restoration for Curb Work	LF	12

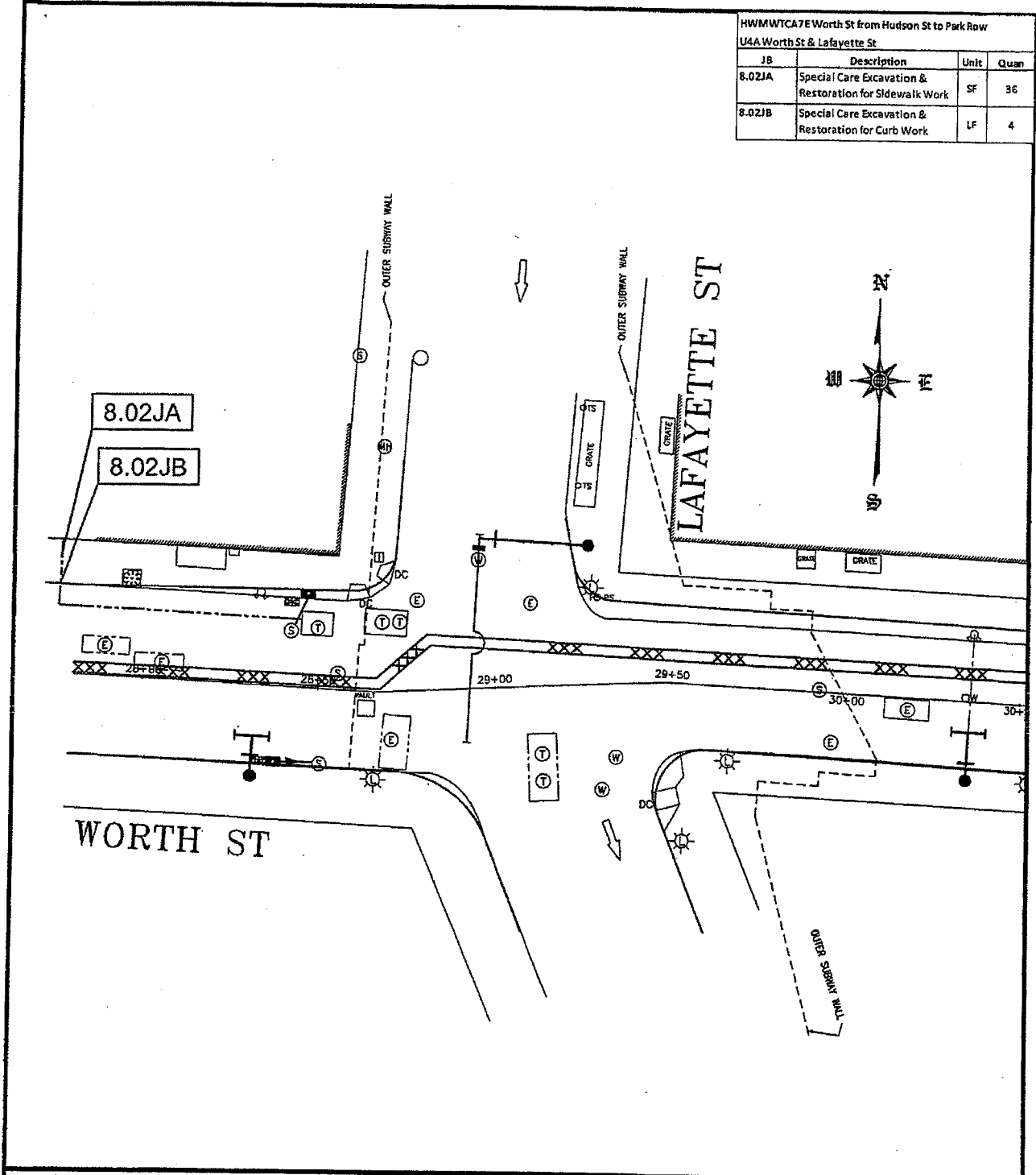



**TIME WARNER**  
CABLE OF NEW YORK CITY

WORTH ST / HUDSON ST TO PARK ROW  
U3 Worth St & Broadway

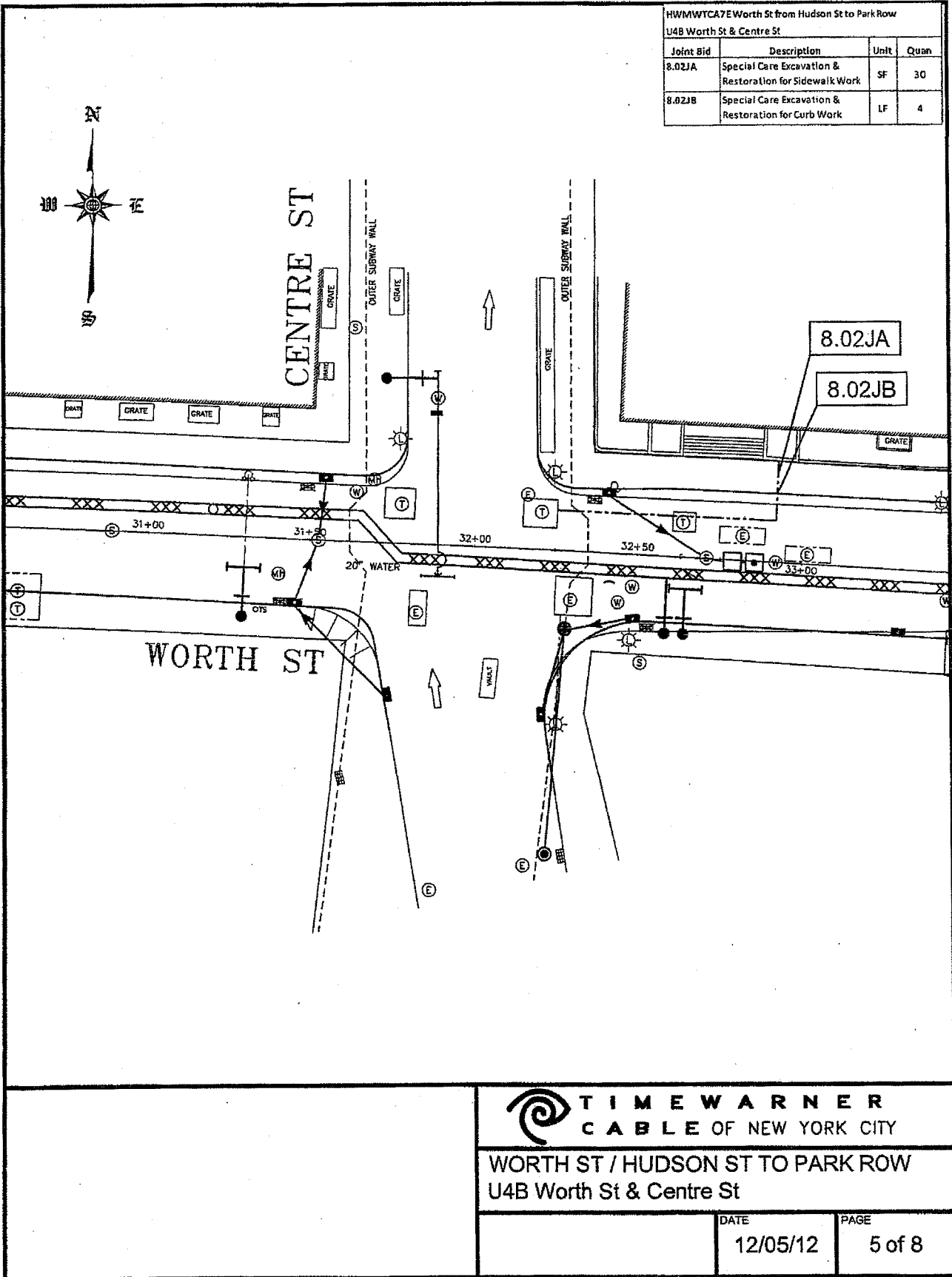
DATE	PAGE
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HMMWTC7E Worth St from Hudson St to Park Row U4A Worth St & Lafayette St			
JB	Description	Unit	Quan
8.02JA	Special Care Excavation & Restoration for Sidewalk Work	SF	36
8.02JB	Special Care Excavation & Restoration for Curb Work	LF	4



 <b>TIME WARNER</b> CABLE OF NEW YORK CITY	
<b>WORTH ST / HUDSON ST TO PARK ROW</b> <b>U4A Worth St &amp; Lafayette St</b>	
DATE	PAGE
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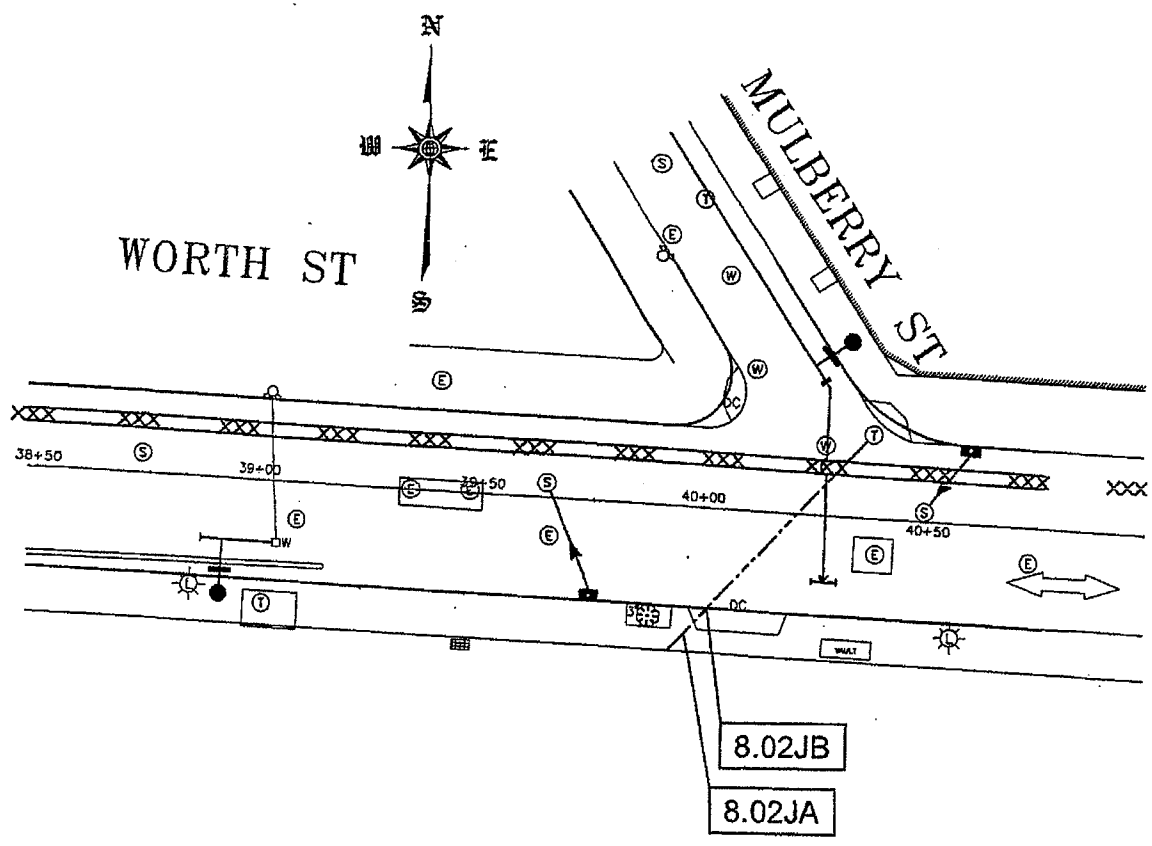
HMMWTCA7E Worth St from Hudson St to Park Row U4B Worth St & Centre St			
Joint Bid	Description	Unit	Quan
8.02JA	Special Care Excavation & Restoration for Sidewalk Work	SF	30
8.02JB	Special Care Excavation & Restoration for Curb Work	LF	4



WORTH ST / HUDSON ST TO PARK ROW  
U4B Worth St & Centre St

DATE	PAGE
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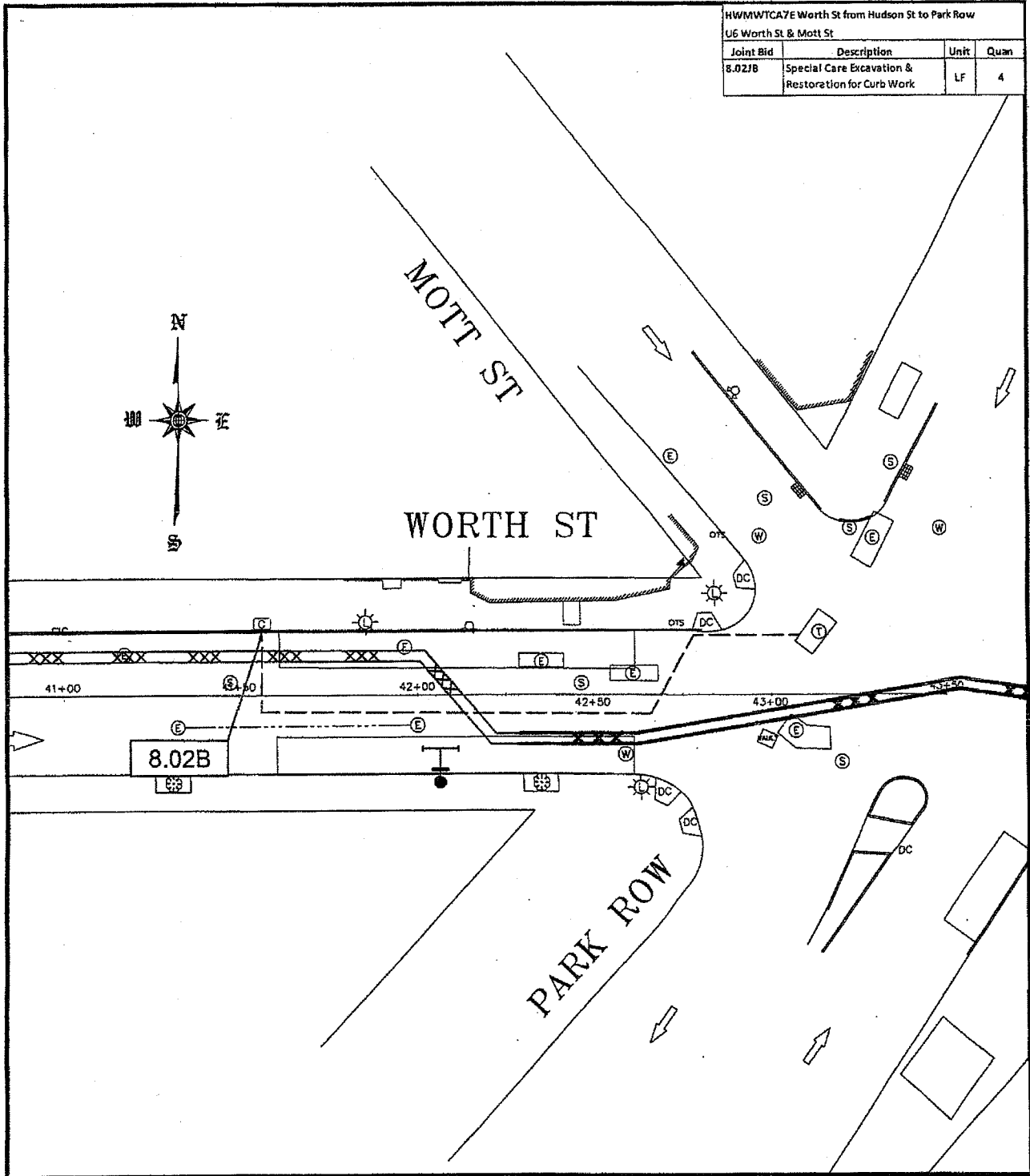
HMMWTCA7E Worth St from Hudson St to Park Row U5 Worth St & Mulberry St			
Joint Bid	Description	Unit	Quan
8.02JA	Special Care Excavation & Restoration for Sidewalk Work	SF	39
8.02JB	Special Care Excavation & Restoration for Curb Work	LF	4




**TIME WARNER**  
CABLE OF NEW YORK CITY

WORTH ST / HUDSON ST TO PARK ROW  
U5 Worth St & Mulberry St

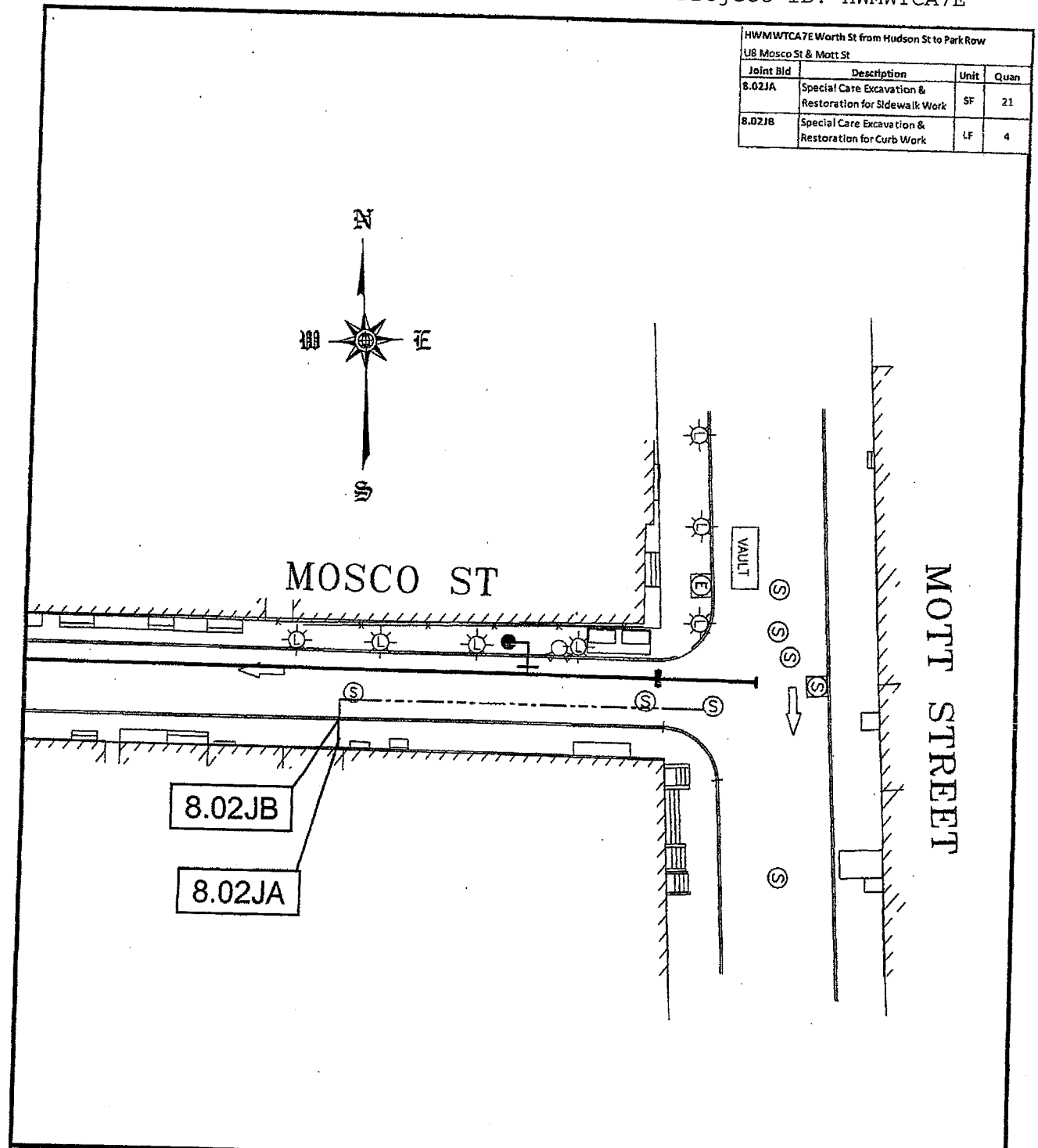
DATE	PAGE
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HMMWTCA7E Worth St from Hudson St to Park Row			
U6 Worth St & Mott St			
Joint Bid	Description	Unit	Quan
8.02/B	Special Care Excavation & Restoration for Curb Work	LF	4

 <b>TIME WARNER CABLE OF NEW YORK CITY</b>	<b>WORTH ST / HUDSON ST TO PARK ROW U6 Worth St &amp; Mott St / Park Row</b>	
	<small>DATE</small> 12/05/12	<small>PAGE</small> 7 of 8

HMMWTCA7E Worth St from Hudson St to Park Row			
U8 Mosco St & Mott St			
Joint Bid	Description	Unit	Quan
8.02JA	Special Care Excavation & Restoration for Sidewalk Work	SF	21
8.02JB	Special Care Excavation & Restoration for Curb Work	LF	4



 <b>TIME WARNER</b> CABLE OF NEW YORK CITY	
<b>WORTH ST / HUDSON ST TO PARK ROW</b> U8 Mosco St & Mott St	
DATE	PAGE
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END OF ADDENDUM NO. 6

This Addendum consists of One Hundred and Sixty-Six (166) pages  
and Twenty-Four (24) Sheets of Contract Drawings.

ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 7

DATED: May 14, 2015

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Attachment 1 - Bid Information on Page A-1; Change the dates shown for Submission of Bids and for Bid Opening from "MAY 22, 2015" to read "MAY 29, 2015".
2. Refer to the Bid and Contract Documents, Volume 1 of 3, CONTINGENCY PAGES contained on pages D - 1 through D-4; Delete the CONTINGENCY PAGES contained on pages D-1 through D-4, in their entirety; Substitute the revised CONTINGENCY PAGES as contained on the attached pages D- 1(R) through D-4 (R).
3. Refer to the Bid and Contract Documents, Volume 3 of 3, SCHEDULE A, page SA-2; Delete page SA-2, in its entirety; Substitute the attached revised page SA-2(R).
4. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 1, pages A1-54 and A1-55; Delete pages A1-54 and A1-55, in their entirety; Substitute the attached revised pages A1-54(R) and A1-55(R).
5. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 1, pages A1-125 and A1-126, Article "Y. VEHICLES"; Delete Article "Y. VEHICLES", in its entirety, and Substitute the the following: "Y. (NO TEXT)".

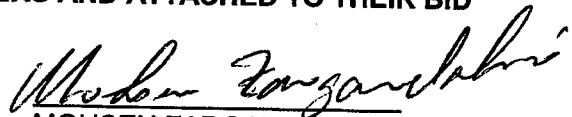


6. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 1, pages A1-125 and A1-126, Article "Y. VEHICLES"; Delete Article "Y. VEHICLES", in its entirety, and Substitute the the following "Y. (NO TEXT)".
7. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 2, pages A2-1 through A2-10; Delete pages A2-1 through A2-10, in their entirety; Substitute the attached revised page A2-1(R) through A2-11(R).
8. Refer to the Contract Drawings, SHEET 31 (U10/U11) UTILITY PLANS AND PROFILES, plan view of the intersection of Worth Street and Centre Street shown in the upper right corner of the Sheet; Substitute the attached Sketch No. 1.
9. See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC for additional information.

**END OF ADDENDUM NO. 7**

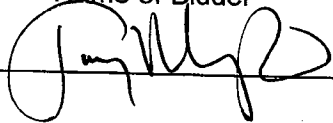
By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of two (2) pages, one(1) Sketch and twenty (20) pages and of attachment.

**THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID**

  
MOHSEN ZARGARELAHI, P.E.  
Assistant Commissioner

MFM CONTRACTING Corp  
Name of Bidder

By: \_\_\_\_\_







ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 8

DATED: May 21, 2015

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Attachment 1 - Bid Information on page A-1;  
Change the dates shown for Submission of Bids and for Bid Opening from "MAY 29, 2015" to read "JUNE 12, 2015".
2. Refer to the Bid and Contract Documents, Volume 1 of 3, Bid Schedule, pages B-3 through B-43;  
Delete the Bid Schedule, as contained on pages B-3 to B-43, in their entirety;  
Substitute the revised Bid Schedule, as contained on attached pages B-3 [REVISION #1] through B-45 [REVISION #1].
3. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 1, pages A1-105 through A1-107;  
Delete pages A1-105 through A1-107, in their entirety;  
Substitute the attached revised pages A1-105(R) through A1-107(R).
4. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 1, page A1-109, Article M, fourth line;  
Change the words "Article N" to "Article L".
5. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 4, pages A4-1 through A4-7;  
Delete pages A4-1 through A4-7, in their entirety;  
Substitute the attached revised pages A4-1(R) through A4-11(R).



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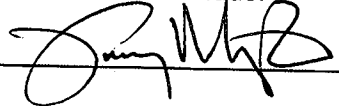
6. Refer to the Contract Drawings, Drawing Nos. 4, 12/C1, 14/C3, 15/C4, 16/C5, 17/C6, 22/U1, 23/U2, 24/U3, 25/U4, 26/U5, 30/U9, 31/U10, and 32/U11;  
Delete Drawing Nos. 4, 12/C1, 14/C3, 15/C4, 16/C5, 17/C6, 22/U1, 23/U2, 24/U3, 25/U4, 26/U5, 30/U9, 31/U10, and 32/U11, in their entirety;  
Substitute the attached revised Drawing Nos. 4R, 12R/C1, 14R/C3, 15R/C4, 16R/C5, 17R/C6, 22R/U1, 23R/U2, 24R/U3, 25R/U4, 26R/U5, 30R/U9, 31R/U10, and 32R/U11.
7. See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC for additional information.

**END OF ADDENDUM NO. 8**

By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of two (2) pages, sixty-two (62) pages of attachment and fourteen (14) sheets of drawings.

**THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID**

  
MOHSEN ZARGARELAHI, P.E.  
Assistant Commissioner

MFM CONTRACTING Coep  
Name of Bidder  
By: 



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ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 9

DATED: May 28, 2015

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, revised BID SCHEDULE, dated 05/21/2015, as amended by Addendum No. 8, page B-12 [REVISION #1], SEQ. NUM. 112, ITEM NO. 60.11R520; Change the Engineer's Estimate of Quantity, under COL. 3, for Item No. 60.11R520 from "5,270.0 L.F." to "3,580.0 L.F."
2. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, revised BID SCHEDULE, dated 05/21/2015, as amended by Addendum No. 8, page B-12 [REVISION #1], SEQ. NUM. 119, ITEM NO. 60.12D20; Change the Engineer's Estimate of Quantity, under COL. 3, for Item No. 60.12D20 from "6,100.0 L.F." to "4,300.0 L.F."
3. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, revised BID SCHEDULE, dated 05/21/2015, as amended by Addendum No. 8, page B-13 [REVISION #1], SEQ. NUM. 126, ITEM NO. 60.21SP3T36; Change the Engineer's Estimate of Quantity, under COL. 3, for Item No. 60.21SP3T36 from "4,775.0 L.F." to "3,595.0 L.F."
4. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, revised BID SCHEDULE, dated 05/21/2015, as amended by Addendum No. 8, page B-13 [REVISION #1], SEQ. NUM. 127, ITEM NO. 60.21SP4T48; Change the Engineer's Estimate of Quantity, under COL. 3, for Item No. 60.21SP4T48 from "620.0 L.F." to "480.0 L.F."
5. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, revised BID SCHEDULE, dated 05/21/2015, as amended by Addendum No. 8, page B-20 [REVISION #1], SEQ. NUM. 205, ITEM NO. 70.31FN; Change the Engineer's Estimate of Quantity, under Col. 3 for Item No. 70.31FN from "76,730.0 L.F." to "17,110.0 L.F."



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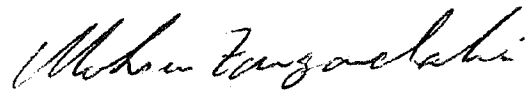


7. Refer to the Contract Drawings, SHEET 12R/C1 HIGHWAY CONSTRUCTION PLAN HUDSON STREET TO CHURCH STREET, as amended by Addendum No. 8, new Catch Basin located at station 12+95;  
Change the label for that new catch basin from  
"NEW CATCH BASIN T.C. 9.10 to "NEW CATCH BASIN T.C. 9.10  
TYPE 1 STA. 12+95" TYPE 2 STA. 12+95".
8. Refer to the Contract Drawings, SHEET 13/C2 HIGHWAY CONSTRUCTION PLAN CHURCH STREET TO LAFAYETTE STREET, new Catch Basin located at station 19+93;  
Change the label for that new catch basin from  
"NEW CATCH BASIN T.C. 25.6 to "NEW CATCH BASIN T.C. 25.6  
TYPE 2 STA. 19+93" TYPE 1 STA. 19+93".
9. Refer to the Contract Drawings, SHEET 18/H1 HIGHWAY PROFILE, new Catch Basin located at station 13+00;  
Change the type of the new Catch Basin from "TYPE 1" to "TYPE 2" and "STA 13+00" to "STA 12+95".
10. Refer to the Contract Drawings, SHEET 22R/U1 UTILITY PLANS AND PROFILES, as amended by Addendum No. 8, detail of 48" X 36" STEEL TIE shown in the middle of the sheet;  
Substitute the attached "DETAIL A".
11. Refer to the Contract Drawings, SHEET 24R/U3 UTILITY PLANS AND PROFILES, as amended by Addendum No. 8, detail of 36" X 36" STEEL TIE (TYP.) shown in the middle-right side of the sheet;  
Substitute the attached "DETAIL C" (which also applies to sheet 28 (U7)).
12. Refer to the Contract Drawings, SHEET 28/U7 UTILITY PLANS AND PROFILES;  
Add the attached "DETAIL B" in the upper left corner of the sheet.
13. See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC for additional information.

**END OF ADDENDUM NO. 9**

**By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of two (2) pages and five (5) pages of attachments.**

**THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID**



**MOHSEN ZARGARELAHI, P.E.**  
Assistant Commissioner

MFM CONTRACTING GRP  
Name of Bidder

By: 





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ATTACH TO CONTRACT DOCUMENTS  
THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET  
FROM HUDSON STREET TO PARK ROW  
INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 10

DATED: June 5, 2015

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to to the Bid and Contract Documents, Volume 3 of 3,  
Addendum No. 6, Page A6-33;  
Change the first Steam Qualified Contractor from "RCI Contracting"  
to "CAC Industries".
2. Refer to to the Bid and Contract Documents, Volume 3 of 3,  
Addendum No. 6, Page A6-33;  
Change the name and address of the first Steam Qualified  
Contractor  

<u>From</u>	<u>To</u>
"Roadway Contracting Inc. 570 Gardner Ave Brooklyn, NY 11222 John Roman # 718-963-3500	CAC Industries 54-08 Vernon Blvd. Long Island City, NY 11101 Lavrov Dmitry # 718-729-3600"
2. See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES  
PROVIDED BY DDC for additional information.

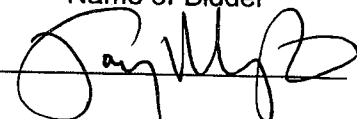
END OF ADDENDUM NO. 10

By signing in the space provided below, the bidder acknowledges receipt of this  
Addendum consisting of one (1) page and one (1) page of attachments.

THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID

  
MOHSEN ZARGARELAHI, P.E.  
Assistant Commissioner

MEM CONTRACTING Corp  
Name of Bidder

By: 



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ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 7

DATED: May 14, 2015

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

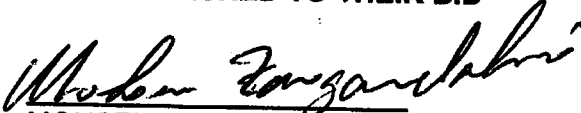
1. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Attachment 1 - Bid Information on Page A-1;  
Change the dates shown for Submission of Bids and for Bid Opening from "MAY 22, 2015" to read "MAY 29, 2015".
2. Refer to the Bid and Contract Documents, Volume 1 of 3, CONTINGENCY PAGES contained on pages D - 1 through D-4;  
Delete the CONTINGENCY PAGES contained on pages D-1 through D-4, in their entirety;  
Substitute the revised CONTINGENCY PAGES as contained on the attached pages D- 1(R) through D-4(R).
3. Refer to the Bid and Contract Documents, Volume 3 of 3, SCHEDULE A, page SA-2;  
Delete page SA-2, in its entirety;  
Substitute the attached revised page SA-2(R).
4. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 1, pages A1-54 and A1-55;  
Delete pages A1-54 and A1-55, in their entirety;  
Substitute the attached revised pages A1-54(R) and A1-55(R).
5. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 1, pages A1-125 and A1-126, Article "Y. VEHICLES";  
Delete Article "Y. VEHICLES", in its entirety, and Substitute the the following: "Y. (NO TEXT)".

- 6. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 1, pages A1-125 and A1-126, Article "Y. VEHICLES"; Delete Article "Y. VEHICLES", in its entirety, and Substitute the the following "Y. (NO TEXT)".
- 7. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 2, pages A2-1 through A2-10; Delete pages A2-1 through A2-10, in their entirety; Substitute the attached revised page A2-1(R) through A2-11(R).
- 8. Refer to the Contract Drawings, SHEET 31 (U10/U11) UTILITY PLANS AND PROFILES, plan view of the intersection of Worth Street and Centre Street shown in the upper right corner of the Sheet; Substitute the attached Sketch No. 1.
- 9. See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC for additional information.

**END OF ADDENDUM NO. 7**

**By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of two (2) pages, one(1) Sketch and twenty (20) pages and of attachment.**

**THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID**

  
**MOHSEN ZARGARELAHI, P.E.**  
 Assistant Commissioner

\_\_\_\_\_  
Name of Bidder

By: \_\_\_\_\_

<p align="center"><b><u>CONTRACT ARTICLE 22.</u></b></p> <p align="center"><b><u>(Per Directions Below)</u></b></p>	<p>See pages SA-4 through SA-10</p>
<p align="center"><b><u>CONTRACT ARTICLE 74.</u></b></p> <p align="center"><b><u>STATEMENT OF WORK</u></b></p> <p>The Contractor shall furnish all labor and materials and perform all Work in strict accordance with the Contract Drawings, Specifications, and all Addenda thereto.</p>	<p>See Contract Article 74</p>
<p align="center"><b><u>CONTRACT ARTICLE 75.</u></b></p> <p align="center"><b><u>COMPENSATION TO BE PAID TO CONTRACTOR</u></b></p> <p>The City shall pay and the Contractor shall accept in full consideration for the performance of the Contract, subject to additions and deductions as provided in Contract Article 75, this said sum being the amount at which the Contract was awarded to the Contractor at a public letting thereof, based upon the Contractor's bid for the Contract.</p>	<p>See Contract Article 75</p>
<p align="center"><b><u>CONTRACT ARTICLE 78.</u></b></p> <p align="center"><b><u>PARTICIPATION BY MINORITY-OWNED AND</u></b></p> <p align="center"><b><u>WOMEN-OWNED BUSINESS ENTERPRISES IN CITY</u></b></p> <p align="center"><b><u>PROCUREMENT</u></b></p>	<p>See M/WBE Utilization Plan in the Bid Booklet</p>

**SECTION 6.52 FED  
Uniformed Flagperson**

**6.52FED.1. INTENT.** This section describes the employment of uniformed flagpersons to direct and detour traffic.

**6.52FED.2. DESCRIPTION.** The Contractor shall furnish an adequate number of flagpersons to control vehicular and pedestrian traffic when it is necessary to maintain alternating one-way traffic in one lane of a two-way roadway, and at all other locations where construction operations, construction vehicles and equipment, and temporary traffic patterns related to the construction operations require positive temporary traffic control for safe, efficient traffic operations.

**6.52FED.3. METHODS.** All flagpersons shall be English speaking and adequately trained in flagging operations by a recognized training program such as that provided by the American Traffic Safety Services Association, the National Safety Council, unions or construction industry associations, or by an individual who holds a current certification as a flagger training instructor from such a program.

All flagpersons, their apparel, hand-signaling devices, active two-way radios, and procedures to be used by them shall be in compliance with the requirements of Chapter 6E. FLAGGER CONTROL, in the Federal "Manual on Uniform Traffic Control Devices for Streets and Highways" 2009 Edition, or later edition.

Prior to the start of flagging operations, the Contractor shall provide to the Engineer a list of certified flagpersons to be used in the contract, identifying the source of flagger training for each individual. When requested by the Engineer, flagpersons shall demonstrate their competency in flagging procedures. Flagpersons not competent in flagging procedures to the satisfaction of the Engineer shall be retrained or replaced at once.

Flagpersons are to be paid not less than the most recent prevailing wages rates established for Laborers as determined by the NYC Comptroller or the US Department of Labor, whichever is higher at the time the work is being performed.

The Contractor will be given a minimum of 12 hours advanced notice by the Engineer as to when to furnish a flagperson.

**6.52FED.4. METHOD OF MEASUREMENT.** The fixed price lump sum shown in the bid proposal for this item shall be considered the price bid, although actual payment will be based on the authorized work performed by the Uniformed Flagpersons. The fixed sum is not to be altered in any manner by the bidder.

It is agreed that the quantity to be measured for payment shall be the number of person-hours of uniformed flagperson service actually performed, as authorized by the Engineer.

Laborers who are not uniformed flagperson will not be measured for payment as flagperson under this item.



**6.52FED.5. BASIS OF PAYMENT.** The Contract price for this item shall be a lump sum price for the work performed under this item and shall be equal to the total sum of the amount of wages paid for all authorized Uniformed Flagpersons performing vehicular and pedestrian traffic management, with a twelve (12%) percent markup 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; plus ten (10%) 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; as described in Article 26 of the Standard Construction Contract.

Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, and all material costs for their apparel, hand-signaling devices, active two-way radios, and any other equipment required, and insurance required by Schedule A of the General Conditions other than Workers' Compensation Insurance.

The hourly rate per person-hour shall be the prevailing wage rate for Laborers in effect at the time of the work to control and detour traffic, as shown on the Contract Drawings or as directed by the Engineer.

The Contactor shall be required to submit to the Engineer satisfactory evidence of payment on a New York State certified payroll report forms. No retainage will be withheld by the Department on such payments made under this section.

The total estimated cost of this item is the "fixed sum" amount shown for this item in the Bid Schedule. No guarantee is given that the actual total cost for this item will in fact be the "fixed sum" amount. The "fixed sum" amount is included in the total bid solely to insure that sufficient monies will be available to pay the Contractor for these services.

The "fixed sum" is for bidding purposes only and shall not be varied in the bid. The Contractor will be paid for the actual amount regardless of the fixed sum, which may be more or less than the fixed sum amount.

The Contractor shall maintain separate books of accounts and shall not charge any portion of the cost of wages for Uniformed Flagpersons to another part of the work. Payment and partial payments under this item shall be treated separately from the rest of the contract items.

The New York State certified payroll report forms shall be submitted to the Engineer on a monthly basis and shall include the signed copies of the daily report.

*Payment will be made under:*

Item No.	Item	Pay Unit
6.52 FED	UNIFORMED FLAGPERSON	FIXED SUM

ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 2 (Revised)

DATED: May 2, 2014

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Any substantial modification of the Contract shall be subject to approval by the State Commissioner of Transportation and the Federal Highway Administration, in addition to the City agencies involved.
2. The Contractor shall be responsible for compliance with all the provisions of the following Schedules of Federal and State requirements which are hereby made a part of the original contract documents and are annexed hereto:

- Attachment "A" - Required Contract Provisions for Federal-Aid Construction Contracts - FHWA 1273
- Attachment "B" - New York State Contract Requirements - including Worker's Compensation and Liability Insurance, Appendix A - Standard Clauses for New York State Contracts, Labor and Employment, Non-Assignment of Agreement, Non-Collusive Bidding Certifications, Debarment History Certification, Appendix C (Disclosure of Lobbying Activities)
- Attachment "C" - Assurance of Non-Discrimination, Subcontracts, Appendix A-1 Supplemental Title VI Provisions (Civil Rights Act)
- Attachment "D" - Provisions Relating to the NYS Labor Law, Prevailing Wages, and the Use of Convict Labor and Materials on Federal & State Contracts
- Attachment "E" - "Buy America" Requirements & Waivers
- Attachment "F" - Equal Employment Opportunity Requirements
- Attachment "G" - NO TEXT
- Attachment "H" - Disadvantaged Business Enterprises Requirements for Federal Aid Contracts
- Attachment "I" - Requirements Regarding Training in Federal Aid Contracts - Training Special Provision
- Attachment "J" - NO TEXT
- Attachment "K" - Changed Conditions and Disputed Work Provisions, Extra Force Account Work, Dispute Compensation and Record Keeping, Differing Site Conditions, Suspensions of Work, Significant Changes in the Character of the Work Provisions
- Attachment "L" - Contractor Initiated Value Engineering Change Proposals (CIVEC)
- Attachment "M" - NO TEXT
- Attachment "N" - Itemized Proposal
- Attachment "O" - US DOT Hotline / NYS Inspector General Hotline
- Attachment "P" - Prompt Payments by the Contractor / Civil Rights Monitoring and Reporting
- Attachment "Q" - Appendix 2 - Iran Divestment Act

In addition to compliance with the above Federal and State requirements, the Contractor shall also be required to comply with all City requirements as depicted in the Information for Bidders and Standard Construction Contract herein. Wherever a conflict may exist, the Federal Regulations shall take precedence.

3. The Contractor shall not pay less than the highest minimum hourly rates as set forth by Federal, State or City laws.
4. The Contractor shall maintain his records in conformity with the current NYSDOT "Manual for Uniform Record Keeping", referred to as MURK, copies of which are available on line at the NYSDOT website www.dot.ny.gov/publications.
5. In accordance with 23 US C315 and Order 1321.1C, FHWA Directives Management, issued January 6, 2010, the construction work performed under this Contract shall be available to be subject to inspection at all times by the New York State Department of Transportation and the Federal Highway Administration.
6. Amendments to Information for Bidders:
  - a) Refer to Page 6, SECTION 20. Low Tie Bids;  
Delete Article 20 in its entirety and substitute the words "20. (NO TEXT)."
  - b) Refer to Pages 6 and 7, Subsection 21.(C), Rejection of All Bids and Negotiation With All Responsible Bidders;  
Delete Sub-Article 21.(C) in its entirety and substitute the words "(C) (NO TEXT)."
  - c) Refer to Pages 8 and 9, SECTION 26. Bid, Performance and Payment Security;  
Add the following:

"(F) Bidders are hereby advised that the apparent low Bidder, as determined at the bid opening or subsequently notified that its firm is the low Bidder, will be required to submit within seven (7) days a complete DBE Pre-Award Utilization Package in compliance with SECTION 102-12H of the NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS using their approved civil rights reporting software called EBO. For EBO software see Attachment 'P', CIVIL RIGHTS MONITORING AND REPORTING. Failure to submit the above documents within the specified seven (7) days after the date of the bids may be cause for a determination of non-responsiveness."
  - d) Refer to Page 9, SECTION 27. Failure to Execute Contract, 6th, 7th and 8th lines;  
Delete the sentence beginning with the words: "No plea of mistake in such..." in its entirety.

- e) Refer to Page 10, SECTION 30. Labor Law Requirements, Sub-Article (A) General:  
Add the following at the end of the Sub-Article (A): "This provision shall apply to subcontractors also."
  - f) Refer to Page 11, Subsection 33.(B), Variations from Engineer's Estimate;  
Delete Subsection 33.(B) in its entirety. See Attachment "K", Page A2-K2 and A2-K3, Significant Changes in the Character of Work, Sub-Article 3.(iv)(B).
  - g) Refer to Pages 12 and 13, SECTION 37. Locally Based Enterprise Requirements (LBE);  
Delete the SECTION, in its entirety. See Attachment "H" Disadvantaged Business Enterprise Utilization Requirements.
7. Amendments to Standard Construction Contract:
- a) Refer to Page 5, Sub-Article 5.2, "Procurement Policy Board Rules";  
Delete the second sentence starting with the words: "In the event of..." and ending with the words "...shall take precedence."
  - b) Refer to Pages 11 and 12, ARTICLE 7. PROTECTION OF WORK AND OF PERSONS AND PROPERTY; NOTICES AND INDEMNIFICATION;  
Add the following:  

"7.6 In addition to the requirements stipulated herein, all work performed under this Contract shall comply with the safety and health standards of the Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor."
  - c) Refer to Page 13, Sub-Article 9.3;  
Delete the first sentence starting with the words: "If the Contractor..." and ending with the words "...progress schedule."
  - d) Refer to Pages 22 and 23, ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION;  
Delete Sub-Article 16.1.4, in its entirety.
  - e) Refer to Pages 23 and 24, ARTICLE 17. SUBCONTRACTS;  
Delete Sub-Article 17.11.1, in its entirety;  
Substitute the following revised Article 17.11.1:  

"17.11.1 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, as are contained in this Contract."

- f) Refer to Page 26, ARTICLE 19. SECURITY DEPOSIT;  
Delete Sub-Article 19.2, in its entirety;  
Substitute the following Sub-Article 19.2:

"19.2 If performance and payment bonds are not required, the bid security shall be retained by the City as security for the Contractor's faithful performance of the Contract. If partial payments are provided, the bid security will be returned to the Contractor subject to the other provisions of this Contract. If partial payments are not provided, the bid security will be released when final payment is certified by the City for payment."

- g) Refer to Page 29, ARTICLE 21. RETAINED PERCENTAGE;  
Delete Article 21, in its entirety;  
Substitute the following:

**"ARTICLE 21. (NO TEXT)"**

- h) Refer to Page 36, ARTICLE 24. MAINTENANCE AND GUARANTY;  
Delete Article 24, in its entirety, except for the last  
Paragraph 24.9;  
Substitute the following:

**"ARTICLE 24. WARRANTIES AND GUARANTEES**

24.1 On any contract which requires the furnishing and/or installing of electrical or mechanical equipment, the Contractor shall provide the following:

- (1) manufacturers' warranties or guarantees on all electrical and mechanical equipment, consistent with those provided as customary trade practice.

24.2 through 24.8 (NO TEXT)"

- i) Refer to Page 37, ARTICLE 25. CHANGES;  
Add the following paragraph:

"25.5 Extra Work: It is anticipated that the preliminary engineering and the preparation of plans, specifications and contract documents have been performed with sufficient thoroughness, accuracy and care, and that changes and extra work during the construction can be held to a minimum and limited almost exclusively to revisions and additions necessitated by conditions that could not reasonably be anticipated before the project was advertised for bids or force account operations commenced."

- j) Refer to Pages 50, 51 and 52, ARTICLE 36. NO DISCRIMINATION;  
Change in Paragraph 36.1.1, 4th line, "citizen of the State of New York"  
to "person";  
Delete Paragraphs 36.1.3, 36.1.4, 36.2.2 and 36.2.4 in their  
entireties;  
Add "or sex or age" to the expression "race, creed, color or national  
origin", and "or sex or age" to the expression "race, color or  
creed", wherever these expressions appear in Article 36.
- k) Refer to Page 59, ARTICLE 43. PROMPT PAYMENT;  
Add the following sentence to the end of Sub-Article 43.5:

"The Contractor shall not hold any retainage, but may deduct an amount necessary to satisfy any claims, liens or judgements against a Subcontractor or materialman which have not been fully discharged."

- l) Refer to Pages 59 and 60, ARTICLE 44. SUBSTANTIAL COMPLETION  
PAYMENT;  
Delete Sub-Articles 44.2 and 44.3, in their entirety;  
Substitute the following:

"44.2 The Commissioner shall issue a voucher calling for payment of any part or all of the balance due for Work performed under the Contract, less any and all deductions authorized to be made by the Commissioner, under this Contract or by Law, and less twice the amount the Commissioner considers necessary to ensure the completion of the balance of the Work by the Contractor. Such a payment shall be considered a Partial and not a Final Payment. No Substantial Completion payment shall be made under this Article 44 where the Contractor 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.

44.3 No further partial payments shall be made to the Contractor after 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. Such waiver shall be in writing."

- m) Refer to Pages 60 and 61, ARTICLE 45. FINAL PAYMENT;  
Delete Sub-Article 45.1, in its entirety;  
Substitute the following:

"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. Such submission shall be within 90 days of the date of the Commissioner's written determination of Final Acceptance, or within such additional time as may be granted by the Commissioner in writing. If the Contractor fails to submit all required certificates and documents within the time allowed, no payment of the balance claimed shall be made to the Contractor and the Contractor shall be deemed to have forfeited its right to payment of any balance claimed. A verified statement similar to that required in connection with applications for partial payments shall also be submitted to the Commissioner."

- n) Refer to Page 67, ARTICLE 59. SERVICE OF NOTICES;  
Delete the words "deposited in a post office box regularly maintained by the United States Postal Service in a properly addressed, postage prepaid envelope".
- o) Refer to Pages 71, 72 and 73, ARTICLE 64. TERMINATION BY THE CITY;  
Delete the text of the 1st paragraph;  
Substitute the following:
- "64.1 In addition to termination pursuant to any other article of this Contract, the Commissioner may, by written notice, terminate the Contract or any portion thereof after determining that for reasons beyond either Department or Contractor control it is not feasible to proceed with or complete the work as originally contracted for, and that termination would therefore be in the public interest. Such reasons for termination may include, but need not be necessarily limited to, executive orders of the President relating to prosecution of war or national defense, national emergency which creates a serious shortage of materials, orders from duly constituted authorities relating to energy conservation, and restraining orders or injunctions obtained by third-party citizen action resulting from national or local laws or regulations, or where the issuance of such order or injunction is primarily caused by acts or omissions of persons or agencies other than the Contractor, or where the orderly progression of a project is interfered with or delayed by acts or omissions of persons or agencies other than the Contractor. The Contractor specifically understands that the issuance of such notice by the Commissioner shall be conclusive as to its necessity. In such event the Contractor shall upon receipt of such notice:"
- p) Refer to Pages 74 and 75, ARTICLE 67. LOCALLY BASED ENTERPRISE PROGRAM;  
Delete Article 67, in its entirety, and Substitute the following "ARTICLE 67. (NO TEXT)". See Attachment "H" Disadvantaged Business Enterprise Utilization Requirements.
- q) Refer to Pages 75, 76 and 77, ARTICLE 69. MacBRIDE PRINCIPLES PROVISIONS;  
Delete Article 69, in its entirety, and Substitute the following "ARTICLE 69. (NO TEXT)"
- r) Refer to Page 78; ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR;  
Delete Article 75, in its entirety and Substitute the following "ARTICLE 75. (NO TEXT)".



- s) Add the following to Pages 92, 93, 94, 95, 96, 97, 98, and 99,  
PERFORMANCE BOND:

"Prior to or at the time of execution of the contract, successful bidder must deliver to the City of New York an executed bond equal to one hundred percent (100%) of the contract price, to secure the faithful performance of the contract, and an executed bond in an amount equal to one hundred percent (100%) of the contract price, as security for the payment of all persons performing labor or furnishing materials in connection with this contract, prepared on the forms of bonds authorized by The City of New York, and made a part of the contract documents, copies of which are annexed hereto, and having as surety thereunder such surety company or companies as are approved by The City of New York and are authorized to do business in the State of New York. Premium of such bonds shall be included in the base bid.

In lieu of a performance and completion bond and labor and material bond, a contractor may deposit with the Comptroller, money or obligations of The City of New York which the Comptroller shall approve as of equal value with the amount of the performance and completion bond required.

Whenever a contractor deposits obligations of The City of New York, in lieu of a performance and completion bond and a labor and material bond, it shall be with the understanding that the Comptroller of the City of New York, or his successors, 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 money is deposited with the Comptroller, the Contractor shall not be entitled to receive interest on such money from The City of New York.

If the bidder to whom the contract is awarded refuses to execute it, or fails to furnish the required security and insurance within ten (10) days after receipt of notice to him of the award, the amount of his deposit, or as much thereof as may be applicable to the amount of the award made to him, shall be forfeited and shall be retained by the City as liquidated damages."

8. Amendments to General Conditions of the Standard Highway Specifications:

- a) Refer to Page 14 of the Standard Highway Specifications,  
Article 1.06.23. Rules, Laws, and Requirements;  
Add the following:

"Certain items of work are to be performed in accordance with the general specifications of the following departments of the City of New York:

Bureau of Traffic Operations  
Police Department  
Fire Department  
Department of Environmental Protection  
Bureau of Water Supply and Sewer Operations  
Street Lighting

Copies of these specifications may be examined at their offices."

- b) Refer to Pages 16 and 17 of the Standard Highway Specifications, Article 1.06.23.(G) Rules Governing Navigation, last paragraph;  
Delete the word "asbestos" wherever it occurs.
- c) Refer to Pages 36, 37 and 38, of the Standard Highway Specifications, Article 1.06.46. Project Sign;  
Delete the Article 1.06.46, in its entirety;  
Substitute the following:  
"1.06.46. Project Sign. No project signs will be required on this project."
- d) Refer to Page 40 of the Standard Highway Specifications, Sub-Article 1.06.48.(C) Access Ramps, 2nd paragraph, 1st line;  
Change the maximum grade from "one (1) vertical on three (3) horizontal" to "one (1) vertical on six (6) horizontal".
9. Amendments to the Standard Highway Specifications:

- a) Refer to Page 83, Subsection 2.18.3(A), 4th paragraph;  
Change "." to "," after "... and Appeals";  
Add the following words: "and the health standards of OSHA of the U.S. Department of Labor."
- b) Refer to Page 187, Subsection 4.06.12;  
Delete the Subsection 4.06.12, in its entirety and substitute the words "**4.06.12. (NO TEXT).**" The use of rubble aggregate will not be permitted.
- c) Refer to Pages 290 through 292, **SECTION 5.05 - Maintenance**;  
Delete Section 5.05, in its entirety, and any references thereto;  
Substitute the following:

**"SECTION 5.05 - Maintenance"**

**(A) CONTRACTOR TO KEEP HIMSELF INFORMED OF CONDITIONS OF PAVEMENT**

The Contractor must keep himself informed of the condition of the trees which are under maintenance, and will be required to make replacements without notice from the Commissioner. In case of failure or neglect on his part to do so, then the Commissioner shall have the right to purchase such plant material as he shall deem necessary, and to employ such person or persons as he shall deem proper, and to undertake and complete said replacements by contract or otherwise and to charge the expense thereof against the Performance Bond or any sum of money retained by The City, as herein provided, and the excess cost to the Contractor, and the Contractor shall pay all such expense to which The City may have been put by reason of the neglect of the Contractor to make such replacements as aforesaid.

(B) CONTRACTOR TO MAKE REPAIRS OR REPLACEMENTS

The Contractor shall remove and replace all trees under maintenance which die or, in the opinion of the Engineer, seem unhealthy, stunted or unable to flourish, within the period of maintenance, except as otherwise provided, and replace said trees with new trees of the same size and species as originally planted, except when such death, unhealthiness, stunting or inability to flourish is due to vandalism or damage resulting from causes over which the Contractor has no control, as certified by the Engineer. However, the Engineer may, at his discretion, direct a substitution of species.

(C) PERIOD OF MAINTENANCE

The period of maintenance for each individual tree planted or transplanted shall begin upon planting or transplanting and shall end twenty-four (24) months thereafter. The Contractor shall obtain the said certificate from the Department of Parks and Recreation, in writing, and file such certificate with the Engineer.

(D) MAINTENANCE NOT TO TERMINATE IN WINTER MONTHS

When the termination date of the period of maintenance for planted or transplanted trees shall fall outside the planting periods specified in **Section 4.16**, hereof, the interval between the said termination date and next planting period thereafter, or such part as the Commissioner may determine, shall not be included in the computation of the period of maintenance during which the replacement of defective trees is to be made by the Contractor, and also, in that case, the payment to be made under the provisions of this contract shall not be made until after the date appearing on the Certificate of Acceptance which the Contractor shall obtain from the Department of Parks and Recreation, and file with the Engineer, for trees planted as replacements for defective trees within the said next planting period thereafter, unless otherwise specifically permitted by the Commissioner.

(E) EXPIRATION OF MAINTENANCE

Unless otherwise permitted or directed, defective trees, as determined by the Commissioner, shall be replaced with new trees by the Contractor.

The furnishing and planting of trees as replacements for defective trees shall comply, in all respects, with the contract requirements.

In the event that The City incurs any expense in pursuance of this section of the contract, the certificate of the Commissioner as to the condition of the trees, the nature and extent of the replacements made, and expense incurred for such replacements shall be binding and conclusive on the Contractor.

(F) CONTRACTOR TO NOTIFY COMMISSIONER BEFORE MAKING REPAIRS

The Contractor shall notify the Commissioner, at least two (2) days before making any replacements of the time and place of beginning such work and shall at all times keep the Commissioner or his representatives informed of the proposed prosecution of the work from day to day."

10. The Contractor is hereby notified that this is a City contract funded through apportionment available under Title 23, U.S. Code, as amended, and that the contract will be awarded by the City of New York, subject to the approval of the Commissioner of the New York State Department of Transportation and the Federal Highway Administration. Furthermore, no extensions in time for completion or other changes affecting the contract work can be granted by the City of New York without concurrence of the State of New York and approval of the Federal Highway Administration.
11. All reference to the delivery of salvageable materials to a designated City-owned yard do not apply to this Contract. All salvageable materials designated by the Engineer shall be stored on site for pick-up by City forces.
12. Wherever references are made within these specifications to "race, creed, color, national origin or sex," they shall be construed to include "sexual orientation and marital status".

NEW YORK CITY  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE – BUREAU OF DESIGN

CONTINGENCY ITEM LIST

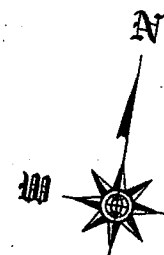
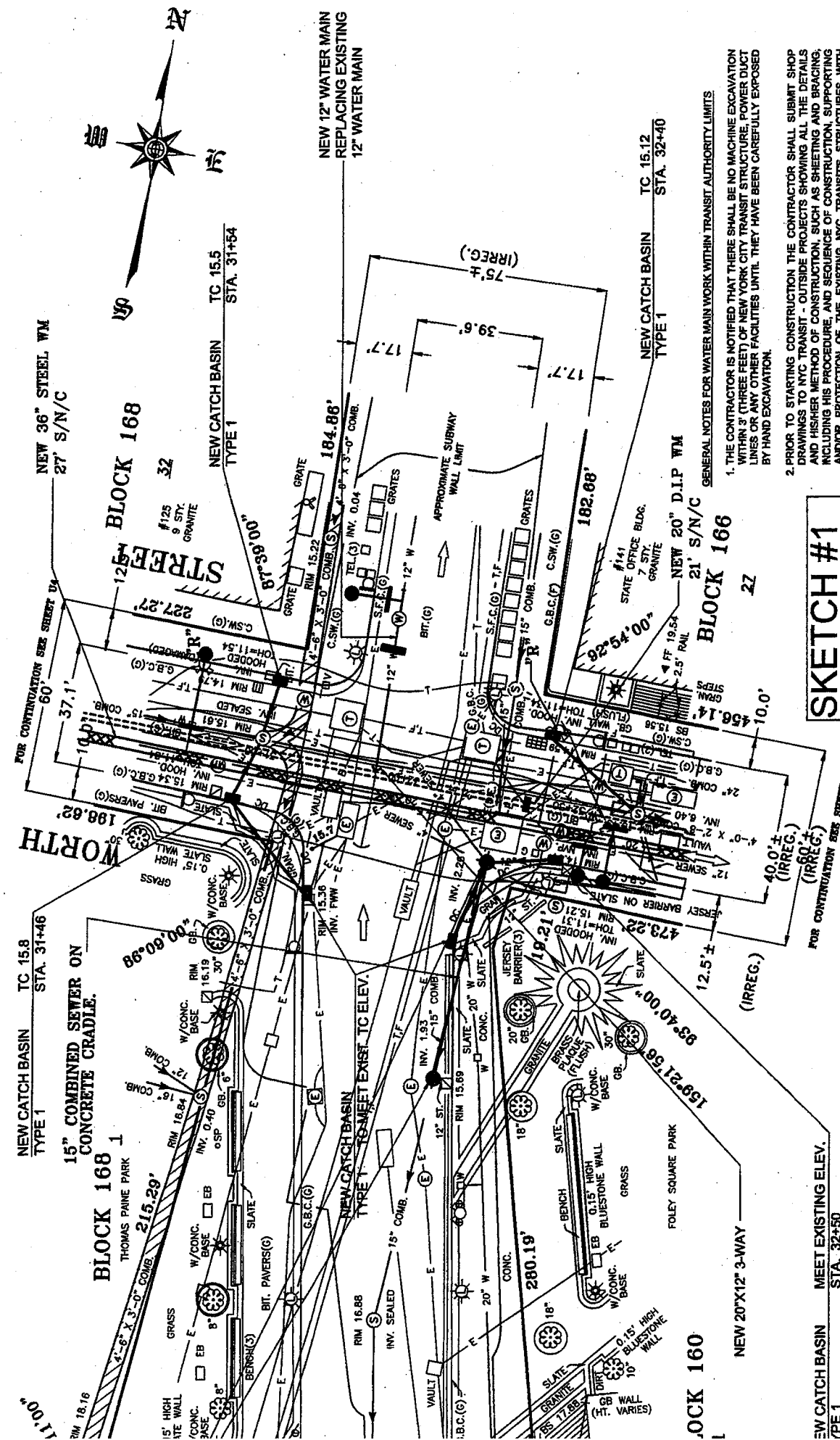
- NOTE:
- (1) The Bid multiplier located on Page C-4 of the BID BOOKLET shall be applied to each of the fixed unit prices in the contingency item list, excluding items with "F.S." ("Fixed Sum") as the unit of measurement and that adjusted unit price shall represent the reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.
  - (2) The following fixed unit prices, in this Percentage Bid Contract, adjusted by the Bid multiplier are to be paid for the actual quantities of the several classes of work in the completed work or structure, and those adjusted unit prices cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.
  - (3) Prospective bidders must examine the Contingency Item List carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Contingency Item List are numbered consecutively, as follows: D-2 (R) through D-4 (R).

COL. 1 ITEM NUMBER	COL. 2 CLASSIFICATION	COL. 3 UNIT	COL. 4 UNIT PRICE
<b>For work to be done under the following items beginning with the prefix "JB-", see applicable sections in the JOINT-BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN booklet issued August 1, 2005</b>			
<b>TIME WARNER CONTINGENCY ITEMS</b>			
JB 102.1(TW)	UTILITIES CROSSING TRENCH FOR SEWERS OVER 24" TO 36" DIAMETER	EA	\$ 3,000.00
JB 103.1(TW)	UTILITIES CROSSING TRENCH FOR SEWERS OVER 36" TO 48" DIAMETER	EA	\$ 3,500.00
JB 104.1(TW)	UTILITIES CROSSING TRENCH FOR SEWERS OVER 48" TO 54" DIAMETER	EA	\$ 4,000.00
JB 105.1(TW)	UTILITIES CROSSING TRENCH FOR SEWERS OVER 54" TO 60" DIAMETER	EA	\$ 4,200.00
JB 106.1(TW)	UTILITIES CROSSING TRENCH FOR SEWERS OVER 60" TO 72" DIAMETER	EA	\$ 4,400.00
JB 107.1(TW)	UTILITIES CROSSING TRENCH FOR SEWERS OVER 72" TO 84" DIAMETER	EA	\$ 4,500.00
JB 111.1(TW)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" TO 48" DIAMETER	EA	\$ 1,500.00
JB 112.1(TW)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 48" TO 54" DIAMETER	EA	\$ 1,600.00
JB 113.1(TW)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 54" TO 60" DIAMETER	EA	\$ 1,800.00
JB 114.1(TW)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 60" TO 72" DIAMETER	EA	\$ 2,000.00
JB 115.1(TW)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 72" TO 84" DIAMETER	EA	\$ 2,200.00
JB 200(TW)	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	L.F.	\$ 150.00
JB 225(TW)	REMOVAL AND INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	\$ 2,800.00
JB 226(TW)	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	\$ 1,400.00
JB 227(TW)	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	\$ 1,400.00
JB 300(TW)	SPECIAL CARE EXCAVATION & BACKFILLING	C.Y.	\$ 150.00
JB 400(TW)	TEST PITS FOR UTILITY FACILITIES	C.Y.	\$ 175.00
JB 401(TW)	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	C.Y.	\$ 200.00
JB 401AC(TW)	SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF CABLE TV FACILITIES CONNECTED TO THE BASE PAVEMENT	C.Y.	\$ 75.00
JB 402.1(TW)	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH OUT CONCRETE ENCASEMENT	L.F.	\$ 35.00
JB 402.1A(TW)	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 45.00
JB 402.2(TW)	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION W/O CONCRETE ENCASEMENT	L.F.	\$ 25.00
JB 402.2A(TW)	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	L.F.	\$ 35.00
JB 405.2(TW)	TRENCH EXCAVATIONS FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET, REQUIRED SHEETING	C.Y.	\$ 200.00
JB 501(TW)	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	C.Y.	\$ 200.00
JB 603T.1(TW)	INSTALL 1 ea. 2", 4" or 1 1/4" QUAD (PVC or STEEL) IN ANY COMBINATION	L.F.	\$ 5.00

COL. 1 ITEM NUMBER	COL. 2 CLASSIFICATION	COL. 3 UNIT	COL. 4 UNIT PRICE
JB 603T.3(TW)	INSTALL 4 ea. 2", 4" or 1 1/4" QUAD (PVC or STEEL) IN ANY COMBINATION	L.F.	\$ 12.00
JB 638N(TW)	INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE	C.Y.	\$ 1,054.00
JB 638R(TW)	BREAKOUT & REMOVE UTILITY STRUCTURE	C.Y.	\$ 350.00
JB 800(TW)	MODIFICATION OF TROLLEY STRUCTURE REMOVAL WHEN CROSSING UTILITY FACILITIES	L.F.	\$ 190.00
JB 801(TW)	MODIFICATION OF TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES	L.F.	\$ 80.00
<b>EMPIRE CITY SUBWAY CONTINGENCY ITEMS</b>			
JB 100.4(ECS)	UTILITIES CROSSING TRENCH FOR CB CHUTE CONNECTION &/OR TEST PITS (TYPE 4)	EA	\$ 1,413.00
JB 100.5(ECS)	UTILITIES CROSSING TRENCH FOR CB CHUTE CONNECTION &/OR TEST PITS (TYPE 5)	EA	\$ 1,697.00
JB 100.6(ECS)	UTILITIES CROSSING TRENCH FOR CB CHUTE CONNECTION &/OR TEST PITS (TYPE 6)	EA	\$ 1,707.00
JB 101.4(ECS)	UTILITIES CROSSING TRENCH FOR SEWER 12" TO 24" DIAMETER (TYPE 4)	EA	\$ 3,630.00
JB 101.5(ECS)	UTILITIES CROSSING TRENCH FOR SEWER 12" TO 24" DIAMETER (TYPE 5)	EA	\$ 4,302.00
JB 101.6(ECS)	UTILITIES CROSSING TRENCH FOR SEWER 12" TO 24" DIAMETER (TYPE 6)	EA	\$ 4,784.00
JB 108.5(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO & INCL. 12" DIAMETER (TYPE 5)	EA	\$ 1,983.00
JB 108.6(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO & INCL. 12" DIAMETER (TYPE 6)	EA	\$ 2,313.00
JB 109.5(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" TO 24" DIAMETER (TYPE 5)	EA	\$ 2,508.00
JB 109.6(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" TO 24" DIAMETER (TYPE 6)	EA	\$ 3,010.00
JB 110.5(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" TO 36" DIAMETER (TYPE 5)	EA	\$ 2,508.00
JB 110.6(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" TO 36" DIAMETER (TYPE 6)	EA	\$ 3,010.00
JB 111.1(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" TO 48" DIAMETER (TYPE 1)	EA	\$ 1,505.00
JB 111.4(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" TO 48" DIAMETER (TYPE 4)	EA	\$ 2,508.00
JB 111.5(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" TO 48" DIAMETER (TYPE 5)	EA	\$ 3,010.00
JB 111.6(ECS)	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" TO 48" DIAMETER (TYPE 6)	EA	\$ 3,512.00
JB 200(ECS)	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	L.F.	\$ 170.00
JB 225(ECS)	INSTALLATION & REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	EA	\$ 2,925.00
JB 303(ECS)	FURNISH, DELIVER & INSTALL TYPE 3/8 CLEAN SAND BACKFILL	C.Y.	\$ 43.00
JB 330T2.1(ECS)	COMMUNICATION FACILITY OPERATOR(S) REQUESTS TRENCH TO BE WIDENED	L.F.	\$ 232.00
JB 330T2.2(ECS)	COMMUNICATION FACILITY OPERATOR(S) REQUESTS TRENCH OR SHEETING BE MOD.	L.F.	\$ 326.00
JB 401AT(ECS)	SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF TELECOMMUNICATIONS FACILITEIS CONNCETED TO OR NEAR THE BASE PAVEMENT	C.Y.	\$ 76.00
JB 402T.2A(ECS)	EXIST. NON-CONC. ENC. TELECOMMUNICATION CONDUITS PLACED IN FINAL POS. W/CONC.	L.F.	\$ 44.00

COL. 1 ITEM NUMBER	COL. 2 CLASSIFICATION	COL. 3 UNIT	COL. 4 UNIT PRICE
JB 405.1(ECS)	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN 5 FEET	C.Y.	\$ 346.00
JB 405.2(ECS)	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN 5 FEET, REQUIRING SHEETING	C.Y.	\$ 865.00
JB 406(ECS)	EXCAVATION FOR INSTALLATION OF UTILITY STRUCTURES	C.Y.	\$ 334.00
JB 410.1(ECS)	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME UP TO AND INCLUDING 20% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, LESS THAN 5 FEET	C.Y.	\$ 294.00
JB 410.2(ECS)	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% UP TO & INCL. 40%	C.Y.	\$ 333.00
JB 410.3(ECS)	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME OVER 40%, UP TO AND INCLUDING 60% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, LESS THAN 5 FEET	C.Y.	\$ 377.00
JB 410.4(ECS)	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME OVER 40%, UP TO AND INCLUDING 60% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, LESS THAN 5 FEET	C.Y.	\$ 486.00
JB 410.5(ECS)	MASS EXCAVATION WITH AN AVERAGE AREA OCCUPIED BY UTILITIES HAVING A VOLUME OVER 60%, UP TO AND INCLUDING 80% OF THE TOTAL EXCAVATED VOLUME, WITH MAXIMUM DEPTHS, MEASURED FROM THE TOP OF ROADWAY, LESS THAN 5 FEET	C.Y.	\$ 163.00
JB 500(ECS)	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	L.F.	\$ 4.00
JB 603T.1(ECS)	INSTALL 1-EA. 2", 4" OR 1-1/4" QUAD CONDUIT (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 5.00
JB 603T.2(ECS)	INSTALL 2-EA. 2", 4" OR 1-1/4" QUAD CONDUIT (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 11.00
JB 603T.3(ECS)	INSTALL 4-EA. 4" OR 1-1/4" QUAD CONDUIT (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 22.00
JB 603T.4(ECS)	INSTALL 6-EA. 4" OR 1-1/4" QUAD CONDUIT (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 33.00
JB 603T.5(ECS)	INSTALL 8-EA. 4" OR 1-1/4" QUAD CONDUIT (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 44.00
JB 603T.6(ECS)	INSTALL 12-EA. 4" OR 1-1/4" QUAD CONDUIT (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 66.00
JB 603T.7(ECS)	INSTALL 15-EA. 4" OR 1-1/4" QUAD CONDUIT (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 82.00
JB 603T.8(ECS)	INSTALL 24-EA. 4" OR 1-1/4" QUAD CONDUIT (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 132.00
JB 603T.9(ECS)	INSTALL 30-EA. 4" OR 1-1/4" QUAD CONDUIT (PVC OR STEEL) IN ANY COMBINATION	L.F.	\$ 154.00
JB 636EG(ECS)	ADJUSTMENT OF UTILITY HARDWARE (41" TO UNDER 75")	EA	\$ 540.00
JB 800(ECS)	MODIFICATIONS OF TROLLEY STRUCTURE REMOVAL WHEN CROSSING UTILITY FACILITIES	L.F.	\$ 241.00
JB 801(ECS)	MODIFICATIONS OF TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES	L.F.	\$ 76.00





**SKETCH #1**

GENERAL NOTES FOR WATER MAIN WORK WITHIN TRANSIT AUTHORITY LIMITS

1. THE CONTRACTOR IS NOTIFIED THAT THERE SHALL BE NO MACHINE EXCAVATION WITHIN 3' (THREE FEET) OF NEW YORK CITY TRANSIT STRUCTURE, POWER DUCT LINES OR ANY OTHER FACILITIES UNTIL THEY HAVE BEEN CAREFULLY EXPOSED BY HAND EXCAVATION.
2. PRIOR TO STARTING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO NYC TRANSIT - OUTSIDE PROJECTS SHOWING ALL THE DETAILS AND HISHER METHOD OF CONSTRUCTION, SUCH AS SHEETING AND BRACING, INCLUDING HIS PROCEDURE, AND SEQUENCE OF CONSTRUCTION, SUPPORTING AND PROTECTION OF THE EXISTING NYC TRANSITS STRUCTURES WITH NECESSARY DESIGN CALCULATIONS FOR APPROVAL. THE DESIGN SHALL BE

NEW CATCH BASIN MEET EXISTING ELEV. TYPE 1

NEW CATCH BASIN TYPE 1

NEW 20'x12' 3-WAY

NEW CATCH BASIN TYPE 1

15" COMBINED SEWER ON CONCRETE CRADLE.

NEW CATCH BASIN TYPE 1 - TO MEET EXIST. TC ELEV.

NEW CATCH BASIN TYPE 1

NEW 20" D.I.P WM

NEW 36" STEEL WM

BLOCK 168

BLOCK 166

BLOCK 160

WORTH

STREETS

STATE OFFICE BLDG.

NEW 20" D.I.P WM

NEW CATCH BASIN TYPE 1

15" COMBINED SEWER ON CONCRETE CRADLE.

NEW CATCH BASIN TYPE 1 - TO MEET EXIST. TC ELEV.

NEW CATCH BASIN TYPE 1

NEW 20" D.I.P WM

NEW 36" STEEL WM

BLOCK 168

BLOCK 166

BLOCK 160

WORTH

STREETS

STATE OFFICE BLDG.

NEW 20" D.I.P WM

NEW CATCH BASIN TYPE 1

15" COMBINED SEWER ON CONCRETE CRADLE.

NEW CATCH BASIN TYPE 1 - TO MEET EXIST. TC ELEV.

NEW CATCH BASIN TYPE 1

NEW 20" D.I.P WM

NEW 36" STEEL WM

BLOCK 168

BLOCK 166

BLOCK 160

WORTH

STREETS

STATE OFFICE BLDG.

NEW 20" D.I.P WM

Questions Submitted by Bidders and DDC's Responses

**QUESTION # 1:** Can you please confirm that the award value will be the "A" portion only of the bid.

**DDC'S RESPONSE:** Yes.

**QUESTION # 2:** For the DBE goal calculation, are the Fixed Sum (F.S.) values to be included, i.e. item 6.85A, Traffic Enforcement Agents? The Value of all the Fixed Sum (F.S.) items are over \$22.5 Million dollars and could have a significant effect on obtaining DBE participation goal. At 13% this is just under \$3 Million dollars. Can the Fixed Sum (F.S.) values be excluded from the Total contract award value of the "A" portion to calculate the DBE goal?

**DDC'S RESPONSE:** No.

**QUESTION # 3:** For the payment of the mobilization can the Fixed Sum (F.S.) values be excluded from the percent complete calculation as these tend to be extended towards the end of the contract?

**DDC'S RESPONSE:** No.

**QUESTION # 4:** Bid Items 7.88AB, Rodent Bait Stations and 7.88AC Baiting of Rodent Bait Stations have the same quantity of 11,976 ea. Please confirm if this is correct as the baiting is usually done monthly per station once the station is set up.

**DDC'S RESPONSE:** The estimate is correct.

**QUESTION # 5:** The Uniformed Flaggers in section 6.52FED under paragraph 6.52FED.5, can you confirm that the 12% markup is on the certified payroll amount only and is for overhead and profit, not just overhead.

**DDC'S RESPONSE:** See addendum No. 7 for revised Section 6.52 FED TEXT.

**QUESTION # 6:** Schedule A states that there is zero retainage to be held but Article 21 states that 5% retainage is to be held. Can you clarify the retainage requirements of this contract.

**DDC'S RESPONSE:** See addendum No. 2, article 7.g) which delete Article 21.

**QUESTION # 7:** The drawings show 6" Blow-offs on the steel water main. There does not appear to be any pay items for this item, can you clarify this pay item?

**DDC'S RESPONSE:** 6" Blow-offs shall be covered in various appropriate bid items as per standard specifications.

**QUESTION # 8:** In regards to item 4.02 AF-R, Asphalt concrete wearing course 2" thick and Item 4.02 I4-3, Asphalt concrete wearing course, Type I-4 Mix, 3" thick, is the same asphalt mix design, I-4, to be used for both items and if not what mix design is to be used for item 4.02 AF-R?

**DDC'S RESPONSE:** Item 4.02 AF-R, Asphaltic concrete wearing course 2" thick, is used in resurfacing areas as noted on contract plans. Item 4.02 I4-3, Asphaltic concrete wearing course, Type I-4 Mix, 3" thick, is used in roadway reconstruction as per typical cross-section detail shown on contract plans.

**QUESTION # 9:** In the fixed unit price bid items under the "JB" items there seems to be no pay item for ECS Mass Trench Excavation for depths less than 5'. In addition there is also no contingency item in the "D" pages for ECS Mass Trench Excavation for depths less than 5'. If this is encountered how is the contractor to be paid?

**DDC'S RESPONSE:** See addendum No. 7 for revised Contingency Item list.

**QUESTION # 10:** Due to the size and complexity of the project, we are requesting a 3 week postponement in order to properly evaluate and estimate the project. Can you advise if a postponement will be granted.

**DDC'S RESPONSE:** One (1) week postponement.

**QUESTION # 11:** In going through the bid items and there is item 53.11DR, Television Inspection and Digital Audio-Visual Recording of Sewers, there is no bid item for the cleaning of sewers which is required in order to do the video inspection. How is the cleaning to be paid for prior to doing the video inspection?

**DDC'S RESPONSE:** Item, 53.11DR - Television Inspection and Digital Audio-Visual Recording of Sewers, is for proposed new sewer work only. Therefore, cleaning of sewers is not required on new sewer pipes.

**QUESTION # 12:** Plan sheet's 25 and 31 depict the 36" dia. Steel Trunk Water Main completely different from each other at the Worth Street and Centre Street Intersection. Which plan sheet is correct?

**DDC'S RESPONSE:** See addendum No. 7, Article 8.

**QUESTION # 13:** On the same sets of Plan Sheets, Plan Sheet 25 depicts a 20" dia. Distribution Main running through the Worth Street/Centre Street Intersection while Plan Sheet 31 does not. Which plan sheet is correct?

**DDC'S RESPONSE:** See addendum No. 7, Article 8.

**QUESTION # 14:** Based on the two paragraphs on Page A3-3; II - General Provisions, 1 General, it appears that gas accommodation work will be paid up to the Bid Quantities under appropriate Bid Prices. Over and above those quantities, Fix Sum Item UTL-GCS-2WS-Gas Interferences and Accommodations will be used. All gas accommodations work will be paid as part of this Contract. Is that correct?

**DDC'S RESPONSE:** This is a contingency item to pay any unforeseen item or quantity due to actual field condition for gas accommodation.



ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 8

DATED: May 21, 2015

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

1. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, Attachment 1 - Bid Information on page A-1; Change the dates shown for Submission of Bids and for Bid Opening from "MAY 29, 2015" to read "JUNE 12, 2015".
2. Refer to the Bid and Contract Documents, Volume 1 of 3, Bid Schedule, pages B-3 through B-43; Delete the Bid Schedule, as contained on pages B-3 to B-43, in their entirety; Substitute the revised Bid Schedule, as contained on attached pages B-3 [REVISION #1] through B-45 [REVISION #1].
3. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 1, pages A1-105 through A1-107; Delete pages A1-105 through A1-107, in their entirety; Substitute the attached revised pages A1-105(R) through A1-107(R).
4. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 1, page A1-109, Article M, fourth line; Change the words "Article N" to "Article L".
5. Refer to the Bid and Contract Documents, Volume 3 of 3, Addendum No. 4, pages A4-1 through A4-7; Delete pages A4-1 through A4-7, in their entirety; Substitute the attached revised pages A4-1(R) through A4-11(R).

6. Refer to the Contract Drawings, Drawing Nos. 4, 12/C1, 14/C3, 15/C4, 16/C5, 17/C6, 22/U1, 23/U2, 24/U3, 25/U4, 26/U5, 30/U9, 31/U10, and 32/U11;  
Delete Drawing Nos. 4, 12/C1, 14/C3, 15/C4, 16/C5, 17/C6, 22/U1, 23/U2, 24/U3, 25/U4, 26/U5, 30/U9, 31/U10, and 32/U11, in their entirety;  
Substitute the attached revised Drawing Nos. 4R, 12R/C1, 14R/C3, 15R/C4, 16R/C5, 17R/C6, 22R/U1, 23R/U2, 24R/U3, 25R/U4, 26R/U5, 30R/U9, 31R/U10, and 32R/U11.
7. See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC for additional information.

**END OF ADDENDUM NO. 8**

**By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of two (2) pages, sixty-two (62) pages of attachment and fourteen (14) sheets of drawings.**

**THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID**

  
MOHSEN ZARGARELAHI, P.E.  
Assistant Commissioner

\_\_\_\_\_  
Name of Bidder

By: \_\_\_\_\_

05/21/2015  
BID PAGES

Contract PIN 8502015HW0028C  
Project ID HWMWTC7E

NEW YORK CITY  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
DIVISION OF INFRASTRUCTURE – BUREAU OF DESIGN

BID SCHEDULE

- NOTE:
- (1) The Bid multiplier located on Page C-4 of the BID BOOKLET shall be applied to each of the fixed unit prices in the bid schedule, excluding items with "F.S." ("Fixed Sum") as the unit of measurement and that adjusted unit price shall represent the reasonable actual costs plus a reasonable proportionate share of the Bidder's anticipated profit, overhead costs, and other indirect costs, anticipated for the performance of the items in question.
  - (2) The following fixed unit prices, in this Percentage Bid Contract, adjusted by the Bid multiplier are to be paid for the actual quantities of the several classes of work in the completed work or structure, and those adjusted unit prices cover the cost of all work, labor, material, tools, plant and appliances of every description necessary to complete the entire work, as specified, and the removal of all debris, temporary work and appliances.
  - (3) PLEASE BE SURE A LIGIBLE BID MULTIPLIER IS ENTERED, IN INK, ON PAGE C-4 OF THE BID BOOKLET. Alterations must be initiated in ink by the Bidder.
  - (4) Prospective bidders must examine the Bid Schedule carefully and, before bidding, must advise the Commissioner, in writing, if any pages are missing, and must request that such missing pages be furnished them. The pages of this Bid Schedule are numbered consecutively, as follows:  
B- 3 [REVISION #1] through B-45 [REVISION #1].

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 BID PAGES

NEW YORK CITY  
 DEPARTMENT OF DESIGN AND CONSTRUCTION

Contract PIN 8502015HW0028C  
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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
1	4.02 AF-R	4,900.0 S.Y.	ASPHALTIC CONCRETE WEARING COURSE, 2" THICK	\$ 20.00
2	4.02 CB	3,816.0 TONS	ASPHALTIC CONCRETE MIXTURE	\$ 125.00
3	4.02 I4-3	19,974.0 S.Y.	ASPHALTIC CONCRETE WEARING COURSE, TYPE I-4 MIX, 3" THICK	\$ 20.00
4	4.04 HD	4,682.0 C.Y.	CONCRETE BASE FOR PAVEMENT, 9" THICK (HIGH-EARLY STRENGTH)	\$ 220.00
5	4.05 AX	240.0 C.Y.	HIGH-EARLY STRENGTH REINFORCED CONCRETE PAVEMENT (BUS STOPS)	\$ 350.00
6	4.07 AB	380.0 L.F.	RESET BLUESTONE CURB	\$ 50.00
7	4.07 CB	630.0 L.F.	NEW GRANITE CURB, STRAIGHT	\$ 70.00
8	4.07 CC	60.0 L.F.	NEW GRANITE CURB, CORNER	\$ 150.00
9	4.07 CD	150.0 L.F.	NEW STRAIGHT GRANITE CURB, DEPRESSED AND TRANSITION	\$ 175.00
10	4.07 DB	30.0 L.F.	NEW GRANITE CURB, STRAIGHT (1'-0" WIDE)	\$ 145.00
11	4.09 ADB	130.0 L.F.	STRAIGHT STEEL FACED CONCRETE CURB (20" DEEP)	\$ 53.00
12	4.09 AF	6,440.0 L.F.	STRAIGHT STEEL FACED CONCRETE CURB (27" DEEP)	\$ 75.00
13	4.09 BF	180.0 L.F.	DEPRESSED STEEL FACED CONCRETE CURB (27" DEEP)	\$ 80.00



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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
14	4.09 CF	960.0 L.F.	CORNER STEEL FACED CONCRETE CURB (27" DEEP)	\$ 73.00
15	4.11 CA	2,599.0 C.Y.	FILL, PLACE MEASUREMENT	\$ 35.00
16	4.13 ABX	2,970.0 S.F.	4" CONCRETE SIDEWALK WITH SPECIAL SCORING (PIGMENTED)	\$ 7.00
17	4.13 CABS	65,450.0 S.F.	4" CONCRETE SIDEWALK (PIGMENTED) (SAW CUT TYPE JOINTS)	\$ 8.25
18	4.13 CABST	13,890.0 S.F.	4" CONCRETE SIDEWALK ON EXISTING FOUNDATION (PIGMENTED) (SAW CUT TYPE JOINTS)	\$ 6.75
19	4.13 CBBS	10,760.0 S.F.	7" CONCRETE SIDEWALK (PIGMENTED) (SAW CUT TYPE JOINTS)	\$ 11.75
20	4.13 CBBST	600.0 S.F.	7" CONCRETE SIDEWALK ON EXISTING FOUNDATION (PIGMENTED) (SAW CUT TYPE JOINTS)	\$ 10.25
21	4.13 DE	640.0 S.F.	EMBEDDED PREFORMED DETECTABLE WARNING UNITS	\$ 12.50
22	4.14	1,000.0 LBS.	STEEL REINFORCEMENT BARS	\$ 2.00
23	4.14 W	1,000.0 LBS.	WELDED STEEL WIRE FABRIC	\$ 1.75
24	4.16 AA	3.0 EACH	TREES REMOVED (4" TO UNDER 12" CALIPER)	\$ 450.00
25	4.16 BA510	11.0 EACH	TREES PLANTED, 2-1/2" TO 3" CALIPER, ALL TYPES, IN 5' X 10' TREE PITS	\$ 900.00
26	4.16 STUMP	10.0 UNITS	STUMP REMOVAL	\$ 300.00

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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
27	4.18 A	50.0 EACH	MAINTENANCE TREE PRUNING (UNDER 12" CAL.)	\$ 175.00
28	4.18 B	6.0 EACH	MAINTENANCE TREE PRUNING (12" TO UNDER 18" CAL.)	\$ 240.00
29	4.18 C	6.0 EACH	MAINTENANCE TREE PRUNING (18" TO UNDER 24" CAL.)	\$ 292.00
30	4.18 D	3.0 EACH	MAINTENANCE TREE PRUNING (24" CAL. AND OVER)	\$ 350.00
31	4.21	650.0 P/HR	TREE CONSULTANT	\$ 65.00
32	50.31CC15	70.0 L.F.	15" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	\$ 450.00
33	50.31CC18	40.0 L.F.	18" E.S.V.P. COMBINED SEWER, ON CONCRETE CRADLE	\$ 600.00
34	50.41C6C24	230.0 L.F.	24" D.I.P. CLASS 56 COMBINED SEWER, ON CONCRETE CRADLE	\$ 800.00
35	50.41C6E24	30.0 L.F.	24" D.I.P. CLASS 56 COMBINED SEWER, ENCASED IN CONCRETE	\$ 900.00
36	51.11P004	7.0 EACH	STANDARD 4'-0" DIAMETER PRECAST MANHOLE	\$ 6,000.00
37	51.11P005	3.0 EACH	STANDARD 5'-0" DIAMETER PRECAST MANHOLE	\$ 7,000.00
38	51.11P006	2.0 EACH	STANDARD 6'-0" DIAMETER PRECAST MANHOLE	\$ 8,000.00
39	51.21S0A1000E	1.0 EACH	STANDARD MANHOLE TYPE A-1 ON EXISTING SEWER	\$ 6,500.00

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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
40	51.21SA2000	2.0 EACH	STANDARD MANHOLE TYPE A-2	\$ 7,000.00
41	51.23RF	60.0 EACH	REPLACEMENT OF EXISTING MANHOLE FRAME AND COVER	\$ 800.00
42	51.41P000	1.0 EACH	SPECIAL CATCH BASIN	\$ 8,500.00
43	51.41S001	23.0 EACH	STANDARD CATCH BASIN, TYPE 1	\$ 6,000.00
44	51.41S002	1.0 EACH	STANDARD CATCH BASIN, TYPE 2	\$ 6,200.00
45	51.42B1W	4.0 EACH	INCREMENTAL COST OF TYPE 3 CATCH BASIN WITH CURB PIECE IN LIEU OF TYPE 1 CATCH BASIN	\$ 3,500.00
46	51.42B1X	1.0 EACH	INCREMENTAL COST OF TYPE 3 CATCH BASIN WITHOUT CURB PIECE IN LIEU OF TYPE 1 CATCH BASIN	\$ 3,500.00
47	52.11D12	580.0 L.F.	12" DUCTILE IRON PIPE BASIN CONNECTION	\$ 112.50
48	52.41D06R	100.0 L.F.	6" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	\$ 75.00
49	52.41D08R	100.0 L.F.	8" D.I.P. HOUSE CONNECTION DRAIN ON CONCRETE CRADLE (RECONNECTION)	\$ 80.00
50	53.11DR	525.0 L.F.	TELEVISION INSPECTION AND DIGITAL AUDIO-VISUAL RECORDING OF SEWERS	\$ 3.50
51	6.02 AAN	12,570.0 C.Y.	UNCLASSIFIED EXCAVATION	\$ 60.00
52	6.02 XHEC	2,085.0 C.Y.	INCREMENTAL COST FOR MODIFYING WORK METHODS NEAR (WITHIN 3 FEET OF) TRANSIT FACILITIES AND BUILDING VAULTS	\$ 125.00

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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
53	6.02 XSCW	6,265.0 C.Y.	INCREMENTAL COST FOR USING SPECIAL CARE WORK METHODS NEAR (FROM 3 FEET TO 50 FEET) TRANSIT FACILITIES	\$ 40.00
54	6.06 AB	170.0 S.Y.	GRANITE BLOCK SIDEWALK (GROUTED JOINTS) (FURNISH BLOCK)	\$ 250.00
55	6.07 AA	300.0 S.F.	EXISTING BLUESTONE FLAGS RELAID	\$ 9.50
56	6.07 AB	300.0 S.F.	NEW BLUESTONE FLAGS, FURNISHED AND LAID	\$ 30.00
57	6.22 F	14,960.0 LBS.	ADDITIONAL HARDWARE	\$ 1.25
58	6.23 AB	1.0 EACH	REMOVE EXISTING FIRE ALARM POST	\$ 470.00
59	6.23 BA	3.0 EACH	FURNISH AND INSTALL FIRE ALARM POST AND SUBBASE IN ACCORDANCE WITH F.D. STD. DWG. #141	\$ 1,900.00
60	6.23 BD	132.0 L.F.	FURNISH AND INSTALL 4-PAIR FIRE ALARM CABLE	\$ 12.00
61	6.23 BFC	2.0 EACH	FURNISH AND INSTALL FIRE DEPARTMENT 12 WIRE TERMINAL BOX AND TERMINATE FIRE ALARM CABLES	\$ 1,900.00
62	6.23 BGSE	112.0 L.F.	FURNISH AND INSTALL 4" P.V.C. CONDUIT, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION)	\$ 50.00
63	6.23 BHE	2.0 EACH	FURNISH AND INSTALL 4" 90-DEGREE P.V.C. WIDE BEND, SCHEDULE 40, U.L. 651 (WITH PAVEMENT EXCAVATION) IN ACCORDANCE WITH F.D. STD. DWG. #141 OR #145AA	\$ 230.00
64	6.23 BP	3.0 SETS	FURNISH AND INSTALL FIRE ALARM PEDESTAL BUMPERS (2 REQUIRED PER SET) IN ACCORDANCE WITH F.D. STD. DWG. #168	\$ 750.00

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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
65	6.23 CBE	1.0 EACH	FURNISH AND INSTALL 2 - 3" 90-DEGREE P.V.C. WIDE BENDS, SCHEDULE 40, U.L. 651 IN ONE TRENCH (WITH PAVEMENT EXCAVATION) IN ACCORDANCE WITH F.D. STD. DWG. #141	\$ 400.00
66	6.23 CCE	20.0 L.F.	FURNISH AND INSTALL 2 - 3" P.V.C. CONDUITS, SCHEDULE 40, U.L. 651 IN ONE TRENCH (WITH PAVEMENT EXCAVATION, ONE ON TOP OF THE OTHER)	\$ 45.00
67	6.23 DC	50.0 L.F.	FURNISH AND INSTALL 10 PAIR FIRE ALARM CABLE	\$ 16.00
68	6.23 DDB	50.0 L.F.	FURNISH AND INSTALL 20 PAIR FIRE ALARM CABLE	\$ 20.00
69	6.25 RS	2,156.0 S.F.	TEMPORARY SIGNS	\$ 15.00
70	6.26	63,152.0 L.F.	TIMBER CURB	\$ 3.00
71	6.28 AA	1,022.0 L.F.	LIGHTED TIMBER BARRICADES	\$ 8.00
72	6.28 ME	2,814.0 L.F.	LIGHTED TIMBER FENCING FOR USE IN LOWER MANHATTAN PROJECTS	\$ 7.00
73	6.34 ACTP	53,490.0 L.F.	TEMPORARY CHAIN LINK FENCE, 6'-0" HIGH (WITH TOP AND BOTTOM RAILS AND POSTS MOUNTED ON STEEL PLATES)	\$ 60.00
74	6.39 A	1.0 L.S.	MOBILIZATION	\$ 1,862,759.00
75	6.40 DUC	66.0 MONTH	ENGINEER'S FIELD OFFICE WITH CONFERENCE ROOM (JOINT USE)	\$ 13,000.00
76	6.43	4,000.0 SETS	PHOTOGRAPHS	\$ 15.00

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NEW YORK CITY  
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Contract PIN 8502015HW0028C  
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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
77	6.44	24,090.0 L.F.	THERMOPLASTIC REFLECTORIZED PAVEMENT MARKINGS (4" WIDE)	\$ 1.00
78	6.49	29,220.0 L.F.	TEMPORARY PAVEMENT MARKINGS (4" WIDE)	\$ 0.75
79	6.50	15.0 EACH	CLEANING OF DRAINAGE STRUCTURES	\$ 375.00
80	6.52 FED	1.0 F.S.	UNIFORMED FLAGPERSON	\$ 4,381,500.00
86	6.53	29,220.0 L.F.	REMOVE EXISTING LANE MARKINGS (4" WIDE)	\$ 0.90
87	6.55	4,616.0 L.F.	SAWCUTTING EXISTING PAVEMENT	\$ 4.00
88	6.59 PF	6,310.0 L.F.	TEMPORARY CONCRETE BARRIER WITH FENCE	\$ 85.00
89	6.60 B	280.0 S.Y.	FURNISH AND INSTALL ASPHALT BLOCK PAVERS	\$ 300.00
90	6.67	3,850.0 C.Y.	SUBBASE COURSE, SELECT GRANULAR MATERIAL	\$ 115.00
91	6.68	21,340.0 S.Y.	PLASTIC FILTER FABRIC	\$ 1.50
92	6.75	885.0 C.Y.	GRINDING EXISTING ASPHALTIC CONCRETE WEARING COURSE	\$ 90.00
93	6.82 A	560.0 S.F.	REMOVING EXISTING TRAFFIC AND STREET NAME SIGNS	\$ 4.00
94	6.82 B	615.0 L.F.	REMOVING EXISTING TRAFFIC AND STREET NAME SIGN POSTS	\$ 3.00

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NEW YORK CITY  
 DEPARTMENT OF DESIGN AND CONSTRUCTION

Contract PIN 8502015HW0028C  
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COL. 1 SEQ. NUM.	COL. 2 ITEM NUMBER	COL. 3 ENGINEER'S ESTIMATE OF QUAN TITIES	COL. 4 CLASSIFICATIONS	COL. 5 UNIT PRICES (IN FIGURES)
95	6.83 AA	220.0 S.F.	FURNISHING NEW NON-REFLECTORIZED TRAFFIC SIGNS	\$ 15.00
96	6.83 AB	600.0 L.F.	FURNISHING NEW TRAFFIC SIGN POSTS	\$ 4.00
97	6.83 AR	140.0 S.F.	FURNISHING NEW REFLECTORIZED TRAFFIC SIGNS	\$ 13.00
98	6.83 BA	360.0 S.F.	INSTALLING TRAFFIC SIGNS	\$ 10.00
99	6.83 BB	600.0 L.F.	INSTALLING TRAFFIC SIGN POSTS	\$ 10.00
100	6.84 B	1.0 F.S.	LOLLIPOP TYPE BUS STOP SIGNS	\$ 35,000.00
101	6.85 A	1.0 F.S.	TRAFFIC ENFORCEMENT AGENTS	\$ 8,527,992.39
102	6.86 AA	100.0 S.F.	FURNISHING NEW STREET NAME SIGNS	\$ 20.00
103	6.86 AB	28.0 L.F.	FURNISHING NEW STREET NAME SIGN POSTS	\$ 6.00
104	6.86 BA	100.0 S.F.	INSTALLING STREET NAME SIGNS	\$ 10.00
105	6.86 BB	28.0 L.F.	INSTALLING STREET NAME SIGN POSTS	\$ 7.00
106	6.86 LA	100.0 S.F.	FURNISHING NEW STREET NAME SIGNS (LARGE SIZE)	\$ 35.00
107	6.86 LB	100.0 S.F.	INSTALLING STREET NAME SIGNS (LARGE SIZE)	\$ 25.00

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108	6.87	1,945.0 EACH	PLASTIC BARRELS	\$ 12.00
109	6.91	11,435.0 L.F.	REFLECTIVE CRACKING MEMBRANE (18" WIDE)	\$ 2.63
110	6.97 A	200.0 C.Y.	EXTRA-HIGH-EARLY STRENGTH CONCRETE	\$ 275.00
111	6.99	1.0 L.S.	AUDIO AND VIDEO DOCUMENTATION SURVEY	\$ 10,000.00
112	60.11R520	5,270.0 L.F.	FURNISHING AND DELIVERING 20-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	\$ 125.00
113	60.11R524	305.0 L.F.	FURNISHING AND DELIVERING 24-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	\$ 160.00
114	60.11R530	20.0 L.F.	FURNISHING AND DELIVERING 30-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 55)	\$ 220.00
115	60.11R606	975.0 L.F.	FURNISHING AND DELIVERING 6-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	\$ 50.00
116	60.11R612	1,445.0 L.F.	FURNISHING AND DELIVERING 12-INCH DUCTILE IRON RESTRAINED JOINT PIPE (CLASS 56)	\$ 75.00
117	60.12D06	1,220.0 L.F.	LAYING 6-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 100.00
118	60.12D12	1,760.0 L.F.	LAYING 12-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 150.00
119	60.12D20	6,100.0 L.F.	LAYING 20-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 200.00
120	60.12D24	430.0 L.F.	LAYING 24-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 250.00



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121	60.12D30	30.0 L.F.	LAYING 30-INCH DUCTILE IRON PIPE AND FITTINGS	\$ 500.00
122	60.13M0A24	90.0 TONS	FURNISHING AND DELIVERING DUCTILE IRON MECHANICAL JOINT 24-INCH DIAMETER AND SMALLER FITTINGS, INCLUDING WEDGE TYPE RETAINER GLANDS	\$ 6,500.00
123	60.13M5S30	1.0 EACH	FURNISHING AND DELIVERING 30-INCH DUCTILE IRON MECHANICAL JOINT SLEEVES (CLASS 55)	\$ 8,000.00
124	60.18BJC20EL	20.0 EACH	FURNISH, DELIVER AND INSTALL BELL JOINT CLAMPS, COMPLETE FOR 20-INCH PIPE AND LESS	\$ 1,000.00
125	60.21SP3T30	355.0 L.F.	FURNISHING, DELIVERING AND LAYING 30-INCH STRAIGHT STEEL PIPE, 3/8-INCH WALL THICKNESS	\$ 1,500.00
126	60.21SP3T36	4,775.0 L.F.	FURNISHING, DELIVERING AND LAYING 36-INCH STRAIGHT STEEL PIPE, 3/8-INCH WALL THICKNESS	\$ 1,800.00
127	60.21SP4T48	620.0 L.F.	FURNISHING, DELIVERING AND LAYING 48-INCH STRAIGHT STEEL PIPE, 1/2-INCH WALL THICKNESS	\$ 2,000.00
128	60.22BR3T30	30.0 L.F.	FURNISHING, DELIVERING AND LAYING 30-INCH STEEL BENDS AND REDUCERS, 3/8-INCH WALL THICKNESS	\$ 1,500.00
129	60.22BR3T36	300.0 L.F.	FURNISHING, DELIVERING AND LAYING 36-INCH STEEL BENDS AND REDUCERS, 3/8-INCH WALL THICKNESS	\$ 1,800.00
130	60.22BR4T48	100.0 L.F.	FURNISHING, DELIVERING AND LAYING 48-INCH STEEL BENDS AND REDUCERS, 1/2-INCH WALL THICKNESS	\$ 2,400.00
131	60.23ST36T36	3.0 EACH	FURNISHING, DELIVERING AND INSTALLING 36-INCH X 36-INCH STEEL TEE	\$ 50,000.00
132	60.23ST36T48	1.0 EACH	FURNISHING, DELIVERING AND INSTALLING 48-INCH X 36-INCH STEEL TEE	\$ 60,000.00
133	60.24SB36	1.0 EACH	FURNISHING, DELIVERING AND INSTALLING 36-INCH DIAMETER STEEL BULKHEAD	\$ 10,000.00

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134	60.25PSO	13,000.0 LBS.	FURNISHING, DELIVERING AND INSTALLING PLATE STEEL OUTLETS ON STEEL PIPE, ACCESS MANHOLE OUTLETS WITH COVERS, AND NUTS AND BOLTS COMPLETE	\$ 25.00
135	60.26M48GA	1.0 EACH	FURNISHING, DELIVERING AND INSTALLING STEEL MANIFOLD WITH 48-INCH STRAIGHT HEADER 3/4-INCH THICKNESS, ONE 36-INCH OUTLET 5/8-INCH THICKNESS, TWO 20-INCH OUTLETS 1/2-INCH THICKNESS AND TWO 48-INCH BULKHEADS 3/4-INCH THICKNESS, ETC, COMPLETE	\$ 80,000.00
136	60.27RSC36	5.0 EACH	FURNISHING, DELIVERING AND INSTALLING 36-INCH DIAMETER BOLTED, SPLIT SLEEVE-TYPE RESTRAINED COUPLING	\$ 25,000.00
137	60.29CP	1.0 L.S.	FURNISHING, INSTALLING AND TESTING CORROSION CONTROL AND/OR CATHODIC PROTECTION SYSTEM	\$ 100,000.00
138	61.11DFM06	7.0 EACH	FURNISHING AND DELIVERING 6-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	\$ 2,200.00
139	61.11DFM20	4.0 EACH	FURNISHING AND DELIVERING 20-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	\$ 20,000.00
140	61.11DMM06	34.0 EACH	FURNISHING AND DELIVERING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 950.00
141	61.11DMM12	16.0 EACH	FURNISHING AND DELIVERING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 2,500.00
142	61.11DMM20	14.0 EACH	FURNISHING AND DELIVERING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 10,000.00

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143	61.11TWC03	25.0 EACH	FURNISHING AND DELIVERING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 600.00
144	61.11TWC04	10.0 EACH	FURNISHING AND DELIVERING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 650.00
145	61.11TWC06	8.0 EACH	FURNISHING AND DELIVERING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 750.00
146	61.11TWC08	5.0 EACH	FURNISHING AND DELIVERING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 900.00
147	61.12DFM06	7.0 EACH	SETTING 6-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	\$ 1,000.00
148	61.12DFM20	4.0 EACH	SETTING 20-INCH FLANGED-MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLAND	\$ 5,000.00
149	61.12DMM06	34.0 EACH	SETTING 6-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 500.00
150	61.12DMM12	16.0 EACH	SETTING 12-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 1,200.00
151	61.12DMM20	14.0 EACH	SETTING 20-INCH MECHANICAL JOINT DUCTILE IRON GATE VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 5,000.00
152	61.12TWC03	25.0 EACH	SETTING 3-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 300.00
153	61.12TWC04	10.0 EACH	SETTING 4-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 325.00

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154	61.12TWC06	8.0 EACH	SETTING 6-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 375.00
155	61.12TWC08	5.0 EACH	SETTING 8-INCH WET CONNECTION TAPPING VALVE COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 450.00
156	61.21BVB36	5.0 EACH	FURNISHING, DELIVERING AND INSTALLING 36-INCH BUTTERFLY VALVE WITH BY-PASS ARRANGEMENT AND OUTLET, COMPLETE	\$ 200,000.00
157	61.21BVO24	2.0 EACH	FURNISHING, DELIVERING AND INSTALLING 24-INCH BUTTERFLY VALVE, COMPLETE	\$ 100,000.00
158	62.11SD	30.0 EACH	FURNISHING AND DELIVERING HYDRANTS	\$ 2,500.00
159	62.11SS	9.0 EACH	FURNISHING AND DELIVERING HYDRANTS - SMITH TYPE (S-2-LP)	\$ 2,600.00
160	62.12SG	39.0 EACH	SETTING HYDRANTS COMPLETE WITH WEDGE TYPE RETAINER GLANDS	\$ 1,500.00
161	62.13RH	27.0 EACH	REMOVING HYDRANTS	\$ 500.00
162	62.14FD	18.0 EACH	FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS WITH DECORATIVE CAPS (BLACK)	\$ 300.00
163	62.14FS	60.0 EACH	FURNISHING, DELIVERING AND INSTALLING HYDRANT FENDERS	\$ 200.00
164	63.11MH	5.0 TONS	FURNISHING, DELIVERING AND INSTALLING 36-INCH CAST IRON MANHOLE HEADS AND COVERS	\$ 1,500.00
165	63.11MS	160.0 EACH	FURNISHING, DELIVERING AND INSTALLING MANHOLE STEPS TYPE PS2-PF	\$ 20.00
166	63.11VC	43.0 TONS	FURNISHING AND DELIVERING VARIOUS CASTINGS	\$ 1,500.00

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167	637.9520	1.0 F.S.	FIELD INFORMATION MANAGEMENT SYSTEM	\$ 125,000.00
168	64.11EL	42.0 EACH	WITHDRAWING AND REPLACING HOUSE SERVICES USING 1-1/2-INCH OR LARGER SCREW TAPS	\$ 300.00
169	64.11ST	10.0 EACH	WITHDRAWING AND REPLACING HOUSE SERVICES USING SMALLER THAN 1-1/2-INCH SCREW TAPS	\$ 250.00
170	64.12COEG	300.0 L.F.	CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	\$ 200.00
171	64.12COLT	100.0 L.F.	CUTTING AND OFFSETTING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	\$ 100.00
172	64.12ESEG	200.0 L.F.	EXTENDING HOUSE SERVICE WATER CONNECTIONS (EQUAL TO OR GREATER THAN 3-INCH DIAMETER)	\$ 75.00
173	64.12ESLT	100.0 L.F.	EXTENDING HOUSE SERVICE WATER CONNECTIONS (LESS THAN 3-INCH DIAMETER)	\$ 50.00
174	64.13WC12	15.0 EACH	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 12-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	\$ 1,500.00
175	64.13WC20	32.0 EACH	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 20-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	\$ 2,500.00
176	64.13WC24	1.0 EACH	FURNISHING, DELIVERING AND INSTALLING WET CONNECTION SLEEVE ON 24-INCH WATER MAIN PIPE WITH VARIOUS OUTLETS	\$ 3,600.00
177	65.11BR	4,500.0 LBS.	FURNISHING, DELIVERING AND INSTALLING BANDS, RODS, WASHERS, ETC., COMPLETE, FOR RESTRAINING JOINTS	\$ 5.00
178	65.21PS	2,968.0 L.F.	FURNISHING AND PLACING POLYETHYLENE SLEEVE	\$ 1.00
179	65.31FF	91,367.0 S.F.	FURNISHING, DELIVERING AND PLACING FILTER FABRIC	\$ 0.20

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180	65.41PS06	6.0 EACH	FURNISHING, DELIVERING AND INSTALLING 6-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 700.00
181	65.41PS20	4.0 EACH	FURNISHING, DELIVERING AND INSTALLING 20-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 1,800.00
182	65.41PS24	4.0 EACH	FURNISHING, DELIVERING AND INSTALLING 24-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 2,000.00
183	65.41PS30	2.0 EACH	FURNISHING, DELIVERING AND INSTALLING 30-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 2,400.00
184	65.41PS36	10.0 EACH	FURNISHING, DELIVERING AND INSTALLING 36-INCH PIPE-TO-WALL PENETRATION SEAL, INCLUDING STEEL SLEEVE AND ANCHOR/WATER STOP PLATE	\$ 2,700.00
185	65.51PC	335.0 C.Y.	FURNISHING AND PLACING CAST-IN-PLACE CONCRETE CLASS 40 AND PRECAST CONCRETE CLASS 50	\$ 960.00
186	65.61SS	35,300.0 LBS.	FURNISHING, DELIVERING AND PLACING STRUCTURAL, REINFORCING AND MISCELLANEOUS STEEL	\$ 3.00
187	65.71SG	1,582.0 C.Y.	FURNISHING, DELIVERING AND PLACING SCREENED GRAVEL OR SCREENED BROKEN STONE BEDDING	\$ 35.00
188	7.01 AB	500.0 S.F.	INSTALLING NEW OR RESET EXISTING SIDEWALK SUBWAY FRAMES AND GRATINGS	\$ 98.00
189	7.01 C	250.0 S.F.	FURNISH NEW SIDEWALK SUBWAY FRAMES AND GRATINGS	\$ 60.00
190	7.02	15.0 C.F.	EPOXY MORTAR REPAIRS	\$ 70.00

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191	7.13 B	60.0 MONTH	MAINTENANCE OF SITE	\$ 7,500.00
192	7.16 D	10.0 C.Y.	TEST PITS	\$ 300.00
193	7.20	360.0 L.F.	RESET BASEMENT ACCESS	\$ 45.00
194	7.28 SA	2.0 EACH	PROJECT INFORMATION AND GROUND BREAKING SIGNS, TYPE A (LARGE FORMAT)	\$ 800.00
195	7.28 SB	8.0 EACH	PROJECT INFORMATION AND GROUND BREAKING SIGNS, TYPE B (SMALL FORMAT)	\$ 450.00
196	7.30 A	600.0 C.Y.	REMOVAL OF TRACK	\$ 120.00
197	7.31 A	50.0 C.Y.	DEMOLITION OF ROADWAY VAULTS	\$ 200.00
198	7.31 B	20.0 C.Y.	DEMOLITION OF TROLLEY TRACK TRUSS BLOCKS	\$ 230.00
199	7.36	2,500.0 L.F.	PEDESTRIAN STEEL BARRICADES	\$ 3.00
200	7.88 AA	1.0 L.S.	RODENT INFESTATION SURVEY AND MONITORING	\$ 12,000.00
201	7.88 AB	11,976.0 EACH	RODENT BAIT STATIONS	\$ 62.50
202	7.88 AC	11,976.0 EACH	BAITING OF RODENT BAIT STATIONS	\$ 7.50
203	7.88 AD	600.0 BLOCK	WATERBUG BAIT APPLICATIONS	\$ 50.00

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204	70.21DK	2,000.0 S.Y.	DECKING	\$ 200.00
205	70.31FN	76,730.0 L.F.	FENCING	\$ 4.00
206	70.51EO	215.0 C.Y.	EXCAVATION OF BOULDERS IN OPEN CUT	\$ 150.00
207	70.61RE	100.0 C.Y.	ROCK EXCAVATION	\$ 500.00
208	70.71SB	15.0 C.Y.	STONE BALLAST	\$ 30.00
209	70.81CB	4,650.0 C.Y.	CLEAN BACKFILL	\$ 30.00
210	70.91SW12	2,330.0 S.F.	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 12-INCH IN DIAMETER AND LESS	\$ 1.00
211	70.91SW20	50,220.0 S.F.	FURNISHING AND PLACING SHEETING AND BRACING IN TRENCH FOR WATER MAIN PIPE 20-INCH IN DIAMETER	\$ 1.00
212	72.11HF	75.0 C.Y.	HYDRAULIC FILL FOR ABANDONED SEWERS AND WATER MAINS	\$ 95.00
213	73.11AB	30.0 C.Y.	ADDITIONAL BRICK MASONRY	\$ 125.00
214	73.21AC	135.0 C.Y.	ADDITIONAL CONCRETE	\$ 125.00
215	73.31AE0	420.0 C.Y.	ADDITIONAL EARTH EXCAVATION INCLUDING TEST PITS (ALL DEPTHS)	\$ 40.00
216	73.41AG	395.0 C.Y.	ADDITIONAL SELECT GRANULAR BACKFILL	\$ 30.00



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217	73.51AS	300.0 LBS.	ADDITIONAL STEEL REINFORCING BARS	\$ 2.00
218	8.01 C1	6,000.0 TONS	HANDLING, TRANSPORTING AND DISPOSAL OF NON-HAZARDOUS CONTAMINATED SOIL	\$ 85.00
219	8.01 C2	10.0 SETS	SAMPLING AND TESTING OF CONTAMINATED/POTENTIALLY HAZARDOUS SOIL FOR DISPOSAL PURPOSES	\$ 1,500.00
220	8.01 H	1.0 TONS	HANDLING, TRANSPORTING AND DISPOSAL OF HAZARDOUS SOIL	\$ 350.00
221	8.01 S	1.0 L.S.	HEALTH AND SAFETY	\$ 15,000.00
222	8.01 W1	14.0 DAY	REMOVAL, TREATMENT, AND DISCHARGE/DISPOSAL OF CONTAMINATED WATER	\$ 1,200.00
223	8.01 W2	2.0 SETS	SAMPLING AND TESTING OF CONTAMINATED WATER	\$ 800.00
224	8.02 JA	26,944.0 S.F.	SPECIAL CARE EXCAVATION AND RESTORATION FOR SIDEWALK WORK	\$ 5.50
225	8.02 JB	2,301.0 L.F.	SPECIAL CARE EXCAVATION AND RESTORATION FOR CURB WORK	\$ 10.75
226	8.07	70.0 EACH	TEMPORARY ALUMINUM PEDESTRIAN BRIDGE	\$ 300.00
227	8.08	6.0 EACH	VARIABLE MESSAGE BOARD	\$ 7,000.00
228	8.22 D	13,800.0 S.F.	THREE PLY MEMBRANE WATERPROOFING	\$ 14.00
229	8.32	500.0 S.Y.	BARK CHIP MULCH	\$ 15.00

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230	9.00 C	600.0 C.F.	EXPLORATORY TEST PITS	\$ 40.00
231	9.04 HW	1.0 F.S.	ALLOWANCE FOR ANTI-FREEZE ADDITIVE IN CONCRETE	\$ 50,000.00
232	9.06 HW	1.0 F.S.	ALLOWANCE FOR DECORATIVE MESH FABRIC	\$ 300,000.00
233	9.99 M	60.0 MONTH	FLASHING ARROW BOARD	\$ 1,650.00
234	91698.93	1.0 F.S.	INCENTIVE PAYMENT FOR "B" PORTION WORK	\$ 1,200,000.00
235	HW-900H	1.0 F.S.	ALLOWANCE FOR CITY WORK ACCELERATION	\$ 900,000.00
236	HW-908	1.0 F.S.	ALLOWANCE FOR EXTRA WORK DUE TO ARCHAEOLOGICAL DISCOVERIES	\$ 100,000.00
237	HW-910A	1.0 F.S.	ASPHALT PRICE ADJUSTMENT	\$ 100,000.00
238	HW-910F	1.0 F.S.	FUEL PRICE ADJUSTMENT	\$ 250,000.00
239	HW-910S	1.0 F.S.	STEEL/IRON PRICE ADJUSTMENT	\$ 1,300,000.00
240	JB 100.1(CE)	30.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .1)	\$ 443.00
241	JB 100.1(ECS)	9.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .1)	\$ 595.00
242	JB 100.1(TW)	4.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .1)	\$ 550.00

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243	JB 100.2(CE)	8.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .2)	\$ 829.00
244	JB 100.2(ECS)	7.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .2)	\$ 808.00
245	JB 100.3(CE)	8.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .3)	\$ 1,229.00
246	JB 100.3(ECS)	10.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .3)	\$ 998.00
247	JB 100.4(CE)	2.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .4)	\$ 1,600.00
248	JB 100.6(AT&T)	1.0 EACH	UTILITIES CROSSING TRENCH FOR CATCH BASIN CHUTE CONNECTION AND/OR TEST PIT (TYPE .6)	\$ 1,697.00
249	JB 101.1(CE)	10.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	\$ 3,751.00
250	JB 101.1(ECS)	2.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	\$ 2,364.00
251	JB 101.1(TW)	1.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .1)	\$ 2,000.00
252	JB 101.2(CE)	3.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	\$ 4,690.00
253	JB 101.2(ECS)	3.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .2)	\$ 2,394.00
254	JB 101.3(CE)	3.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	\$ 6,174.00
255	JB 101.3(ECS)	1.0 EACH	UTILITIES CROSSING TRENCH FOR SEWERS OVER 12" TO 24" DIAMETER (TYPE .3)	\$ 3,309.00

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256	JB 108.1(AT&T)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	\$ 886.00
257	JB 108.1(CE)	51.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	\$ 609.00
258	JB 108.1(ECS)	15.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	\$ 886.00
259	JB 108.1(TW)	3.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .1)	\$ 600.00
260	JB 108.2(CE)	17.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)	\$ 1,894.00
261	JB 108.2(ECS)	11.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .2)	\$ 1,097.00
262	JB 108.3(CE)	9.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .3)	\$ 3,077.00
263	JB 108.3(ECS)	23.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .3)	\$ 1,322.00
264	JB 108.4(CE)	3.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .4)	\$ 3,844.00
265	JB 108.4(ECS)	9.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .4)	\$ 1,622.00
266	JB 108.5(CE)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN UP TO AND INCLUDING 12" DIAMETER (TYPE .5)	\$ 4,489.00
267	JB 109.1(AT&T)	3.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	\$ 1,003.00
268	JB 109.1(CE)	83.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	\$ 1,563.00

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269	JB 109.1(ECS)	13.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	\$ 1,003.00
270	JB 109.1(TW)	5.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .1)	\$ 1,000.00
271	JB 109.2(CE)	22.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)	\$ 2,335.00
272	JB 109.2(ECS)	22.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .2)	\$ 1,345.00
273	JB 109.3(AT&T)	2.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	\$ 1,666.00
274	JB 109.3(CE)	16.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	\$ 3,734.00
275	JB 109.3(ECS)	21.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .3)	\$ 1,666.00
276	JB 109.4(AT&T)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4)	\$ 2,007.00
277	JB 109.4(CE)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4)	\$ 4,854.00
278	JB 109.4(ECS)	7.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .4)	\$ 2,007.00
279	JB 109.5(AT&T)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .5)	\$ 2,508.00
280	JB 109.5(CE)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .5)	\$ 5,361.00
281	JB 109.6(AT&T)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE .6)	\$ 3,010.00

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282	JB 109.6(CE)	2.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 12" AND UP TO 24" DIAMETER (TYPE. 6)	\$ 5,722.00
283	JB 110.1(CE)	70.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 1)	\$ 2,156.00
284	JB 110.1(ECS)	21.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 1)	\$ 1,345.00
285	JB 110.1(TW)	9.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" TO 36" DIAMETER	\$ 1,400.00
286	JB 110.2(CE)	19.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 2)	\$ 2,927.00
287	JB 110.2(ECS)	8.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 2)	\$ 1,505.00
288	JB 110.3(CE)	15.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 3)	\$ 4,177.00
289	JB 110.3(ECS)	21.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 3)	\$ 1,666.00
290	JB 110.4(CE)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 4)	\$ 5,412.00
291	JB 110.4(ECS)	4.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 4)	\$ 2,007.00
292	JB 110.5(CE)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 5)	\$ 6,103.00
293	JB 110.6(CE)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 24" AND UP TO 36" DIAMETER (TYPE. 6)	\$ 6,833.00
294	JB 111.1(CE)	12.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE. 1)	\$ 2,935.00

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295	JB 111.2(CE)	2.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE. 2)	\$ 4,196.00
296	JB 111.2(ECS)	3.0 EACH	SUPPORT OF FACILITIES OVER 0.75 S.F. UP TO & INCLUDING 2.0 S.F. CROSSING WATER MAINS OVER 36" UP TO & INCLUDING 48" IN DIAMETER	\$ 1,666.00
297	JB 111.3(CE)	2.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE. 3)	\$ 5,891.00
298	JB 111.3(ECS)	1.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE. 3)	\$ 2,007.00
299	JB 111.4(CE)	2.0 EACH	UTILITIES CROSSING TRENCH FOR WATER MAIN OVER 36" AND UP TO 48" DIAMETER (TYPE.4)	\$ 7,561.00
300	JB 200(CE)	120.0 L.F.	EXTRA DEPTH EXCAVATION OF CATCH BASIN CHUTE CONNECTION PIPES	\$ 149.00
301	JB 226(CE)	16.0 EACH	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	\$ 4,576.00
302	JB 226(ECS)	18.0 EACH	INSTALLATION OF CATCH BASINS WITH UTILITY INTERFERENCES	\$ 2,925.00
303	JB 227(CE)	3.0 EACH	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	\$ 2,395.00
304	JB 227(ECS)	11.0 EACH	REMOVAL OF CATCH BASINS WITH UTILITY INTERFERENCES	\$ 1,463.00
305	JB 300(AT&T)	21.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING	\$ 167.00
306	JB 300(CE)	120.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING	\$ 286.00
307	JB 300(ECS)	176.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING	\$ 167.00

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308	JB 301(CE)	190.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING FOR OIL-O-STATIC PIPE	\$ 351.00
309	JB 303(CE)	1,260.0 C.Y.	FURNISH, DELIVER AND INSTALL TYPE 3/8 CLEAN SAND BACKFILL	\$ 49.00
310	JB 330E.1(CE)	2,180.0 L.F.	SUPPORT AND PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .1)	\$ 31.00
311	JB 330E.2(CE)	760.0 L.F.	SUPPORT AND PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .2)	\$ 37.00
312	JB 330E.3(CE)	1,060.0 L.F.	SUPPORT AND PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .3)	\$ 43.00
313	JB 330E.4(CE)	200.0 L.F.	SUPPORT AND PROTECTION OF ELECTRIC AND GAS FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN FACILITIES LIE WITHIN TRENCH LIMITS (TYPE .4)	\$ 60.00
314	JB 330T1(AT&T)	350.0 L.F.	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED TRENCH	\$ 115.00
315	JB 330T1(ECS)	965.0 L.F.	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED TRENCH	\$ 115.00



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316	JB 330T1(TW)	90.0 L.F.	SUPPORT AND PROTECTION OF COMMUNICATION UTILITY FACILITIES DURING EXCAVATION OF CITY TRENCH WHEN PARALLELING COMMUNICATION FACILITIES LIE COMPLETELY IN THE PROPOSED TRENCH	\$ 100.00
317	JB 400(ECS)	40.0 C.Y.	TEST PITS FOR UTILITY FACILITIES	\$ 218.00
318	JB 400(CE)	140.0 C.Y.	TEST PITS FOR UTILITY FACILITIES	\$ 244.00
319	JB 401(AT&T)	89.0 C.Y.	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	\$ 228.00
320	JB 401(CE)	560.0 C.Y.	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	\$ 292.00
321	JB 401(ECS)	1,019.0 C.Y.	TRENCH EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES	\$ 228.00
322	JB 401A(CE)	200.0 C.Y.	SPECIAL CARE PAVEMENT EXCAVATION FOR ADJUSTMENT OF UTILITY FACILITIES CONNECTED TO THE BASE PAVEMENT	\$ 365.00
323	JB 402.1(CE)	100.0 L.F.	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	\$ 87.00
324	JB 402.1A(CE)	200.0 L.F.	EXISTING CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	\$ 93.00
325	JB 402.2(CE)	400.0 L.F.	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	\$ 55.00
326	JB 402.2A(CE)	100.0 L.F.	EXISTING NON-CONCRETE ENCASED CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	\$ 61.00
327	JB 402T.1A(AT&T)	14,420.0 L.F.	EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	\$ 53.00

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328	JB 402T.1A(ECS)	58,551.0 L.F.	EXISTING CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	\$ 53.00
329	JB 402T.2(ECS)	140.0 L.F.	EXISTING NON-CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	\$ 44.00
330	JB 402T.V1A(ECS)	14,689.0 L.F.	EXISTING VACANT CONCRETE ENCASED TELECOMMUNICATION CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	\$ 48.00
331	JB 403(AT&T)	700.0 S.F.	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	\$ 4.00
332	JB 403(CE)	4,000.0 S.F.	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	\$ 3.00
333	JB 403(ECS)	2,260.0 S.F.	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	\$ 4.00
334	JB 403(TW)	26.0 S.F.	PLACING STEEL PROTECTION PLATES FOR UTILITY FACILITIES	\$ 4.00
335	JB 404(CE)	200.0 S.F.	PIER & PLATE METHOD OF PROTECTION FOR DUCTILE IRON WATER MAINS AND OTHER SHALLOW FACILITIES	\$ 427.00
336	JB 405.1(CE)	3,005.0 C.Y.	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET	\$ 251.00
337	JB 405.1(TW)	6.0 C.Y.	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS LESS THAN FIVE FEET	\$ 150.00
338	JB 405.2(CE)	580.0 C.Y.	TRENCH EXCAVATION FOR INSTALLATION OF UTILITY FACILITIES WITH TOTAL DEPTHS EQUAL TO OR GREATER THAN FIVE FEET, REQUIRING SHEETING	\$ 363.00

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339	JB 406(CE)	830.0 C.Y.	EXCAVATION FOR UTILITY STRUCTURE	\$ 281.00
340	JB 406(TW)	2.0 C.Y.	EXCAVATION FOR UTILITY STRUCTURE	\$ 150.00
341	JB 410.1(CE)	200.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% (TYPE .1)	\$ 344.00
342	JB 410.2(CE)	2,790.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% (TYPE .2)	\$ 436.00
343	JB 410.3(CE)	200.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 40% AND UP TO AND INCLUDING 60% (TYPE .3)	\$ 527.00
344	JB 410.4(CE)	200.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 60% AND UP TO AND INCLUDING 80% (TYPE .4)	\$ 619.00
345	JB 410.5(AT&T)	1,067.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .5)	\$ 187.00
346	JB 410.5(CE)	200.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES UP TO AND INCLUDING 20% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .5)	\$ 354.00
347	JB 410.6(CE)	6,920.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .6)	\$ 446.00
348	JB 410.6(ECS)	1,732.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 20% AND UP TO AND INCLUDING 40% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .6)	\$ 187.00
349	JB 410.7(AT&T)	531.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 40% AND UP TO AND INCLUDING 60% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .7)	\$ 246.00

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350	JB 410.7(CE)	1,890.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 40% AND UP TO AND INCLUDING 60% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .7)	\$ 536.00
351	JB 410.7(ECS)	980.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 40% AND UP TO AND INCLUDING 60% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .7)	\$ 246.00
352	JB 410.8(AT&T)	321.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 60% AND UP TO AND INCLUDING 80% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .8)	\$ 445.00
353	JB 410.8(CE)	990.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 60% AND UP TO AND INCLUDING 80% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .8)	\$ 628.00
354	JB 410.8(ECS)	370.0 C.Y.	MASS TRENCH EXCAVATION FOR UTILITY FACILITIES OVER 60% AND UP TO AND INCLUDING 80% WITH TRENCH DEPTH EQUAL TO OR GREATER THAN FIVE FEET (TYPE .8)	\$ 445.00
355	JB 450.1(AT&T)	80.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - SURVEY CREW (TYPE .1)	\$ 276.00
356	JB 450.1(CE)	600.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - SURVEY CREW (TYPE .1)	\$ 336.00
357	JB 450.1(ECS)	160.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - SURVEY CREW (TYPE .1)	\$ 276.00
358	JB 450.2(AT&T)	2,335.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)	\$ 463.00
359	JB 450.2(CE)	800.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)	\$ 332.00
360	JB 450.2(ECS)	5,020.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - SMALL SIZE CREW (TYPE .2)	\$ 463.00

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361	JB 450.3(AT&T)	1,167.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)	\$ 1,008.00
362	JB 450.3(CE)	1,600.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)	\$ 938.00
363	JB 450.3(ECS)	2,507.0 CREW/HR	CONSTRUCTION FIELD SUPPORT - MEDIUM SIZE CREW (TYPE .3)	\$ 1,008.00
364	JB 500(CE)	59,700.0 L.F.	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	\$ 4.00
365	JB 500(TW)	35.0 L.F.	REMOVAL OF ABANDONED UTILITY CONDUITS (NON-CONCRETE ENCASED)	\$ 4.00
366	JB 501(AT&T)	220.0 C.Y.	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	\$ 231.00
367	JB 501(CE)	200.0 C.Y.	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	\$ 368.00
368	JB 501(ECS)	19.0 C.Y.	REMOVAL OF ABANDONED MASONRY FOR UTILITY FACILITIES	\$ 231.00
369	JB 501.1(TW)	1.0 EACH	REMOVAL OF ABANDONED CABLE TELEVISION SIDEWALK PULL BOXES	\$ 500.00
370	JB 603E.1(CE)	1,620.0 L.F.	INSTALL UTILITY CONDUITS PLACED IN FINAL POSITION WITHOUT CONCRETE ENCASEMENT	\$ 6.00
371	JB 603E.2(CE)	64,490.0 L.F.	INSTALL UTILITY CONDUITS PLACED IN FINAL POSITION WITH CONCRETE ENCASEMENT	\$ 10.00
372	JB 603T.2(TW)	52.0 L.F.	INSTALL 2 EACH 2", 4" OR 1-1/4" QUAD CONDUITS (PVC OR STEEL) IN ANY COMBINATION	\$ 8.00
373	JB 620.12(CE)	75.0 L.F.	INSTALL 24" DIAMETER STEAM PIPE	\$ 429.00

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374	JB 620.4(CE)	45.0 L.F.	INSTALL 6" DIAMETER STEAM PIPE	\$ 183.00
375	JB 620.5(CE)	255.0 L.F.	INSTALL 8" DIAMETER STEAM PIPE	\$ 206.00
376	JB 621.12(CE)	4.0 EACH	INSTALL 24" DIAMETER STEAM PIPE FITTING	\$ 4,123.00
377	JB 621.4(CE)	6.0 EACH	INSTALL 6" DIAMETER STEAM PIPE FITTING	\$ 1,214.00
378	JB 621.5(CE)	6.0 EACH	INSTALL 8" DIAMETER STEAM PIPE FITTING	\$ 1,828.00
379	JB 625D(CE)	1.0 EACH	STEAM VALVE ASSEMBLY	\$ 3,500.00
380	JB 636 EB(CE)	5.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (7" TO UNDER 14" WIDTH)	\$ 374.00
381	JB 636 ED(CE)	5.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (30" TO UNDER 34" WIDTH)	\$ 965.00
382	JB 636 EE(CE)	80.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (34" TO UNDER 41" WIDTH)	\$ 1,113.00
383	JB 636 EE(ECS)	48.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (34" TO UNDER 41" WIDTH)	\$ 490.00
384	JB 636 EG(CE)	20.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (41" TO UNDER 75" WIDTH)	\$ 1,272.00
385	JB 636 EG(TW)	3.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (41" TO UNDER 75" WIDTH)	\$ 500.00
386	JB 636 EH(CE)	5.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (75" TO UNDER 125" WIDTH)	\$ 1,452.00

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387	JB 636 EI(CE)	2.0 EACH	ADJUSTMENT OF UTILITY HARDWARE (125" TO UNDER 170" WIDTH)	\$ 1,601.00
388	JB 636 R(CE)	50.0 C.Y.	REPAIR TO UTILITY STRUCTURES	\$ 257.00
389	JB 636 SA(CE)	50.0 S.F.	CONCRETE COLLAR AROUND STEAM CASTINGS	\$ 17.00
390	JB 636 SB(CE)	1.0 EACH	ADJUSTMENT TO UTILITY STEAM CASTINGS (UNDER AND INCLUDING 8" WIDTH)	\$ 275.00
391	JB 636 SC(CE)	2.0 EACH	ADJUSTMENT OF UTILITY STEAM CASTINGS (ABOVE 8" TO 34" WIDTH)	\$ 814.00
392	JB 638 N(CE)	430.0 C.Y.	INSTALLATION OF FIELD CONSTRUCTED UTILITY STRUCTURE	\$ 1,229.00
393	JB 638 NT(ECS)	68.0 C.Y.	INSTALLATION OF FIELD CONSTRUCTED TELEPHONE UTILITY STRUCTURE	\$ 2,576.00
394	JB 638 R(CE)	405.0 C.Y.	BREAK OUT AND REMOVE UTILITY STRUCTURE	\$ 955.00
395	JB 638 R(ECS)	89.0 C.Y.	BREAK OUT AND REMOVE UTILITY STRUCTURE	\$ 353.00
396	JB 700(AT&T)	90.0 C.Y.	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	\$ 95.00
397	JB 700(CE)	5,505.0 C.Y.	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	\$ 58.00
398	JB 700(ECS)	1,179.0 C.Y.	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	\$ 95.00

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399	JB 700(TW)	284.0 C.Y.	SPECIAL MODIFICATION OF WORK METHODS TO ACCOMMODATE/PROTECT UNDERGROUND FACILITIES WITH LIMITED COVER	\$ 75.00
400	JB 710.1(AT&T)	7,580.0 L.F.	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/ PLASTIC PIPES, UP TO AND INCLUDING 12" DIAMETER PIPE	\$ 12.00
401	JB 710.1(CE)	14,425.0 L.F.	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/ PLASTIC PIPES, UP TO AND INCLUDING 12" DIAMETER PIPE	\$ 16.00
402	JB 710.1(ECS)	347.0 L.F.	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/ PLASTIC PIPES, UP TO AND INCLUDING 12" DIAMETER PIPE	\$ 12.00
403	JB 710.2(CE)	120.0 L.F.	REMOVAL OF ABANDONED UTILITY STEEL/CAST IRON/ PLASTIC PIPES, OVER 12" AND UP TO AND INCLUDING 20" DIAMETER PIPE	\$ 18.00
404	JB 711(CE)	400.0 L.F.	USE SHEETING LINE AS FORM	\$ 6.00
405	JB 711(ECS)	50.0 L.F.	USE SHEETING LINE AS FORM	\$ 6.00
406	JB 781(ECS)	4.0 EACH	REMOVABLE SIDEWALK CURB PANEL FOR ACCESS TO UTILITY STRUCTURE OPENINGS	\$ 2,021.00
407	JB 800(CE)	270.0 L.F.	MODIFICATION OF TROLLEY STRUCTURE REMOVAL WHEN CROSSING UTILITY FACILITIES	\$ 197.00
408	JB 801(CE)	850.0 L.F.	MODIFICATION OF TROLLEY STRUCTURE REMOVAL PARALLEL TO UTILITY FACILITIES	\$ 182.00
409	JB 803.2(CE)	200.0 L.F.	LINE CUT BY PNEUMATIC TOOLS IN LIEU OF SAW CUT ASSOCIATED WITH ROADWAY REMOVAL OPERATIONS (LINE CUT ANY COMBINATION OF ASPHALT AND CONCRETE ROADWAY)	\$ 10.00



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410	JB 850(CE)	12,400.0 S.F.	PLACING RUBBER SHEETS FOR UTILITY FACILITIES	\$ 3.00
411	JB 900(AT&T)	1.0 F.S.	EXTRA UTILITY WORK COSTS ALLOWANCE	\$ 555,700.00
412	JB 900(CE)	1.0 F.S.	EXTRA UTILITY WORK COSTS ALLOWANCE	\$ 3,525,786.50
413	JB 900(ECS)	1.0 F.S.	EXTRA UTILITY WORK COSTS ALLOWANCE	\$ 1,581,947.00
414	JB 900(TW)	1.0 F.S.	EXTRA UTILITY WORK COSTS ALLOWANCE	\$ 8,664.00
415	NYCT-7A.1	35,000.0 S.F.	MEMBRANE WATERPROOFING	\$ 9.00
416	NYCT-7A.2	35,000.0 S.F.	WATERPROOFING PROTECTION BOARD	\$ 8.00
417	SL-20.02.02	28.0 EACH	FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION, AS PER DRAWING E-3788	\$ 1,080.00
418	SL-20.02.05	3.0 EACH	REMOVE LAMPPOST. REMOVE FOUNDATION (STANDARD, SPIDER, ETC.). FURNISH AND INSTALL NEW FOUNDATION, ( E-3788 OR J-5253). RE-INSTALL LAMPPOST OR NEW LAMPPOST WITH ALL ATTACHMENTS.	\$ 2,325.00
419	SL-20.02.10	7.0 EACH	FURNISH AND INSTALL STANDARD TYPE ANCHOR BOLT FOUNDATION AS PER DWG J-5253 FOR INSTALLING TYPE "BC", "M", LYRE AND "5TH AVENUE", "GCPW", LAMPPOST.	\$ 1,106.00
420	SL-20.07.01	1.0 EACH	FURNISH AND INSTALL ADDITIONAL RIGID CONDUIT BEND, SIZE AS ORDERED. USE THIS ITEM WHEN INSTALLING A NEW FOUNDATION.	\$ 63.00

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421	SL-21.03.02	28.0 EACH	FURNISH AND INSTALL TYPE 2S, 4S, 6S, 8S OR 12S LAMPPOST WITH TRANSFORMER BASE	\$ 1,342.00
422	SL-21.04.02	7.0 EACH	FURNISH AND INSTALL TYPE "BC" LAMPPOST WITH PHOTOELECTRIC CONTROL RECEPTACLE	\$ 5,200.00
423	SL-21.09.05	25.0 EACH	REMOVE STANDARD FABRICATED STEEL, SPUN ALUMINUM NO. 10, ETC. WITH ARM(S), LUMINAIRE(S), CONTROL(S) WITH ALL ATTACHMENTS, IF ANY.	\$ 382.00
424	SL-21.09.06	7.0 EACH	REMOVE ORNAMENTAL LAMPPOST (TYPE "BC", "M", "F", "5TH AVENUE", "LYRE" GRAND CENTRAL) ON FOUNDATION, WITH ALL ATTACHMENTS, IF ANY. REMOVE PORTION OF FOUNDATION.	\$ 498.00
425	SL-21.09.08	2.0 EACH	REMOVE ALL STREET LIGHTING EQUIPMENT FROM TYPE "M-2" TRAFFIC POST (ARM(S), PHOTOELECTRIC CONTROLLER, LUMINAIRE(S), SHAFT EXTENSION, WIRING, ETC.)	\$ 356.00
426	SL-22.03.18	31.0 EACH	FURNISH AND INSTALL TYPE COBRA HEAD LUMINAIRE WITH 150 WATT HPS WITH SOLID STATE BALLAST AND STRAY VOLTAGE INDICATOR FOR 100 VOLT LAMP.	\$ 235.00
427	SL-22.05.09	11.0 EACH	FURNISH AND INSTALL 250 WATT HIGH PRESSURE SODIUM "TEAR DROP" LUMINAIRE, FOR 100 VOLT LAMP, AS PER DRAWINGS H-5271A AND H-5271B.	\$ 660.00
428	SL-24.02.02	3.0 EACH	FURNISH AND INSTALL FABRICATED STEEL 8 Ft. ARM ON LAMPPOST OR "M-2" TRAFFIC POLE SHAFT EXTENSION.	\$ 356.00
429	SL-24.02.16	3.0 EACH	FURNISH AND INSTALL FABRICATED STEEL 6 FT. SHAFT EXTENSION (SINGLE ARM) FOR "M-2" TRAFFIC POST AS PER DWGS H-5159 OR H-5255.	\$ 617.00

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430	SL-24.04.01	4.0 EACH	FURNISH AND INSTALL TYPE "BC" SHAFT EXTENSION AND ARM ASSEMBLY WITH PHOTOELECTRIC CONTROL RECEPTACLE FOR "M-2" TRAFFIC POST, AS PER DRAWING H-5264. M-2 ORNAMENTAL CASTINGS FURNISHED AND INSTALLED BY OTHERS.	\$ 2,500.00
431	SL-24.04.16	4.0 EACH	REMOVE ORNAMENTAL SHAFT EXTENSION AND ARM(S) ASSEMBLY, LUMINAIRE(S), ETC. FROM "M-2" TRAFFIC LAMPPOST	\$ 260.00
432	SL-26.01.01	43.0 EACH	FURNISH AND INSTALL, OR FURNISH AND REPLACE A PLUG-IN SOLID STATE PHOTOELECTRIC CONTROL	\$ 71.00
433	SL-26.06.02	3.0 EACH	FURNISH AND INSTALL LED FIRE ALARM LUMINAIRES.	\$ 130.00
434	SL-29.01.01	38.0 EACH	FURNISH, INSTALL, MAINTAIN AND REMOVE EQUIPMENT FOR TEMPORARY LIGHTING (PYLON), AS PER DRAWINGS F-5005 AND F-5005A	\$ 1,100.00
435	SL-31.01.06	28.0 EACH	PAINT A STANDARD STREET LIGHT LAMPPOST WITH INSULATED "SUPERHTHANE" PAINT APR. 7' HIGH.	\$ 480.00
436	SL-33.02.02	9,800.0 L.F.	FURNISH AND INSTALL NO. 6 AWG XLP COPPER CABLE OR EQUAL FOR OVERHEAD INSTALLATION	\$ 5.25
437	T-1.1	3.0 EACH	INSTALL TYPE "S" OR "T" FOUNDATION	\$ 1,200.00
438	T-1.18	3.0 EACH	REMOVE TYPE "A", "B", "S" OR "T" SERIES FOUNDATION	\$ 650.00
439	T-1.20	11.0 EACH	REMOVE TYPE "M" SERIES FOUNDATION	\$ 1,000.00
440	T-1.3	11.0 EACH	INSTALL TYPE "M2-5S" FOUNDATION	\$ 2,600.00

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441	T-1.6	1.0 EACH	INSTALL TYPE "M2-5T" FOUNDATION	\$ 2,500.00
442	T-2.1	3.0 EACH	INSTALL TYPE "S-1" OR "T-1" SERIES POST	\$ 400.00
443	T-2.16	10.0 EACH	FURNISH, INSTALL, MAINTAIN AND REMOVE TEMPORARY POST OR PYLON WITH SIGNALS	\$ 900.00
444	T-2.18	6.0 EACH	FURNISH, INSTALL, MAINTAIN AND REMOVE TEMPORARY POST OR PYLON WITH CONTROLLER AND SIGNALS	\$ 1,000.00
445	T-2.22	3.0 EACH	REMOVE TYPE "S-1" OR "T-1" SERIES POST	\$ 350.00
446	T-2.24	11.0 EACH	REMOVE TYPE "M" SERIES POST	\$ 800.00
447	T-2.28	5.0 EACH	REMOVE MAST ARM FROM ANY POST	\$ 400.00
448	T-2.32	7.0 EACH	INSTALL STREET LIGHT LUMINAIRE SUPPORT ARM ON "M-2" POST	\$ 350.00
449	T-2.4	12.0 EACH	INSTALL TYPE "M-2" POST	\$ 1,000.00
450	T-20000	3.0 EACH	FURNISH TEN FOOT ALUMINUM SIGNAL POST TYPE "S-1"	\$ 600.00
451	T-20020	9.0 EACH	a) FURNISH 3/4" ANCHOR BOLT ASSEMBLIES FOR S-1 (EACH) (3 REQUIRED PER POST)	\$ 20.00
452	T-20160	12.0 EACH	FURNISH 20 FOOT SIGNAL MAST ARM POLE ASSEMBLY TYPE "M-2"	\$ 3,570.00
453	T-20184	8.0 EACH	a) FURNISH 5' EXTENSION ARM ASSEMBLY WITH FITTINGS	\$ 300.00

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454	T-20220	48.0 EACH	c) FURNISH 1-1/4" ANCHOR BOLT ASSEMBLIES FOR M-2 (EACH) (4 REQUIRED PER POST)	\$ 60.00
455	T-3.1	34.0 EACH	INSTALL "ONE-WAY" SIGNAL UNIT ON MAST ARM OR TOP OF TRAFFIC POST	\$ 300.00
456	T-3.18	15.0 EACH	REMOVE SIGNAL HEAD FROM ANY TYPE POST	\$ 250.00
457	T-3.2	1.0 EACH	INSTALL "ONE-WAY" SIGNAL UNIT ON THE SHAFT OF ANY POST	\$ 325.00
458	T-3.21	46.0 EACH	REMOVE PEDESTRIAN SIGNAL OR SIGN UNIT OR OTHER ILLUMINATED SIGNS FROM ANY POST	\$ 200.00
459	T-3.26	4.0 EACH	REMOVE STREET LIGHT LUMINAIRE AND PHOTO ELECTRIC CONTROL FROM STREET LIGHT ARM	\$ 235.00
460	T-3.27	6.0 EACH	INSTALL STREET LIGHT LUMINAIRE AND PHOTO ELECTRIC CONTROL ON STREET LIGHT MAST	\$ 460.00
461	T-3.6	46.0 EACH	INSTALL PEDESTRIAN SIGNAL ON ANY TYPE POST	\$ 250.00
462	T-30013L	35.0 EACH	FURNISH ADJUSTABLE 3 SECTION 1-WAY, DIE CAST ALUMINUM TRAFFIC SIGNALS 8" - W/LED LENS	\$ 550.00
463	T-31200	1.0 EACH	e) "VB" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	\$ 72.00
464	T-31210	25.0 EACH	h) "HUB" ASSEMBLY *ASSEMBLY IS EQUAL TO ONE PAIR	\$ 25.00
465	T-31215	2.0 EACH	b) "2MS"	\$ 160.00
466	T-31225	8.0 EACH	c) "3MS"	\$ 185.00

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467	T-31340	2.0 EACH	f) "VB-P" ASSEMBLY * ASSEMBLY IS EQUAL TO ONE PAIR	\$ 70.00
468	T-31351	22.0 EACH	g) "VB-2P" ASSEMBLY * ASSEMBLY IS EQUAL TO ONE PAIR	\$ 150.00
469	T-33000L	46.0 EACH	FURNISH POLYCARBONATE INCANDESCENT PED SIGNAL W/LED LENS	\$ 500.00
470	T-4.1	6.0 EACH	INSTALL ONE CONTROL BOX AND CONTROLLER ON ANY POST OR SUPPORT	\$ 1,100.00
471	T-4.23	4.0 EACH	INSTALL BATTERY BACK-UP POWER SUPPLY SYSTEM ON ANY POST	\$ 1,100.00
472	T-4.8	6.0 EACH	REMOVE ONE CONTROL BOX AND CONTROLLER FROM ANY POST OR SUPPORT	\$ 800.00
473	T-4.9	8.0 EACH	REMOVE CONTROL BOX FROM ANY POST OR SUPPORT	\$ 500.00
474	T-5.1	1,550.0 L.F.	FURNISH AND INSTALL 2" RIGID UNDERGROUND CONDUIT IN UNPAVED ROADWAY	\$ 40.00
475	T-5.2	50.0 L.F.	FURNISH AND INSTALL 2" RIGID UNDERGROUND CONDUIT IN PAVED ROADWAY	\$ 75.00
476	T-5.32	100.0 L.F.	RESTORING PERMANENT ROADWAY (INCLUDING SAWCUT)	\$ 45.00
477	T-5.4	50.0 L.F.	FURNISH AND INSTALL 3" RIGID UNDERGROUND CONDUIT IN UNPAVED ROADWAY	\$ 50.00
478	T-5.5	50.0 L.F.	FURNISH AND INSTALL 3" RIGID UNDERGROUND CONDUIT IN PAVED ROADWAY	\$ 100.00
479	T-6.1	1,000.0 L.F.	INSTALL CABLE (INCLUDES OVERHEAD)	\$ 4.00

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480	T-6.10	3,000.0 L.F.	REMOVE CABLE (INCLUDES OVERHEAD)	\$ 5.00
481	T-6.2	3,000.0 L.F.	INSTALL MULTIPLE CABLE (INCLUDES OVERHEAD)	\$ 6.00
482	T-60000B	3,500.0 L.F.	FURNISH 2 c # 10B (BREAKDOWN = 2#10 WITH 3RD WIRE FOR GROUNDING).	\$ 2.60
483	T-60040	2,000.0 L.F.	c) 7 CONDUCTOR, 14 A.W.G.	\$ 1.50
484	T-60190	4,000.0 L.F.	e) 13 CONDUCTOR, 14 A.W.G.	\$ 2.50
485	T-7.50	2.0 EACH	REMOVE (1812) HAND BOX OR PULL BOX IN PAVED SIDEWALK	\$ 450.00
486	T-79999	3.0 EACH	FURNISH ADVANCED SOLID STATE TRF CONTROLLER (6 LOAD SWITCH).	\$ 6,500.00
487	T-8.10	8.0 EACH	RELOCATE CONCRETE PYLON WITH POST	\$ 800.00
488	T-8.8	8.0 EACH	INSTALL CONCRETE PYLON	\$ 800.00
489	T-8.9	8.0 EACH	REMOVE CONCRETE PYLON	\$ 500.00
490	T-81000	8.0 EACH	FURNISH CONCRETE PYLON	\$ 1,100.00
491	T-89999	2.0 EACH	FURNISH ADVANCED SOLID STATE TRF CONTROLLER (12 LOAD SWITCH)	\$ 10,500.00
492	TV-USHS	1.0 F.S.	ALLOWANCE FOR MAINTAINING U.S. DEPARTMENT OF HOMELAND SECURITY CAMERAS	\$ 10,000.00

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493	TV-USMS	1.0 F.S.	ALLOWANCE FOR MAINTAINING U.S. MARSHALS SERVICE CAMERAS	\$ 91,700.00
494	UTL-6.01.1	6.0 EACH	GAS MAIN CROSSING SEWER UP TO 24" IN DIAMETER (\$6.01)	\$ 1,040.00
495	UTL-6.01.10	2.0 EACH	GAS MAIN CROSSING WATER MAIN 24" THRU 30" IN DIAMETER (\$6.01)	\$ 550.00
496	UTL-6.01.11	11.0 EACH	GAS MAIN CROSSING WATER MAIN 36" THRU 42" IN DIAMETER (\$6.01)	\$ 685.00
497	UTL-6.01.12	5.0 EACH	GAS MAIN CROSSING WATER MAIN 48" THRU 54" IN DIAMETER (\$6.01)	\$ 810.00
498	UTL-6.01.8	8.0 EACH	GAS SERVICES CROSSING TRENCHES AND/OR EXCAVATIONS (\$6.01)	\$ 465.00
499	UTL-6.01.9	29.0 EACH	GAS MAIN CROSSING WATER MAIN UP TO 20" IN DIAMETER (\$6.01)	\$ 485.00
500	UTL-6.02	4.0 EACH	EXTRA EXCAVATION FOR THE INSTALLATION OF CATCH BASIN SEWER DRAIN PIPES WITH GAS INTERFERENCES (\$6.02)	\$ 715.00
501	UTL-6.03	1,695.0 L.F.	REMOVAL OF ABANDONED GAS FACILITIES. ALL SIZES. (\$6.03)	\$ 15.00
502	UTL-6.03.1A	1,465.0 L.F.	REMOVAL OF ABANDONED GAS FACILITIES WITH POSSIBLE COAL TAR WRAP. ALL SIZES. (\$6.03)	\$ 25.00
503	UTL-6.04	5.0 EACH	ADJUST HARDWARE TO GRADE USING SPACER RINGS/ADAPTORS. (STREET REPAVING.) (\$6.04)	\$ 35.00
504	UTL-6.05	34.0 EACH	ADJUST HARDWARE TO GRADE BY RESETTING. (ROAD RECONSTRUCTION.) (\$6.05)	\$ 65.00
505	UTL-6.06	500.0 C.Y.	SPECIAL CARE EXCAVATION AND BACKFILLING (\$6.06)	\$ 180.00



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506	UTL-6.07	200.0 C.Y.	TEST PITS FOR GAS FACILITIES (\$6.07)	\$ 100.00
507	UTL-6.08A	1.0 EACH	PIER AND/OR PLATE METHOD OF PROTECTION FOR DUCTILE IRON WATER MAIN WITH LESS THAN 24" COVER (\$6.08A)	\$ 5,800.00
508	UTL-6.09	2,170.0 C.Y.	TRENCH EXCAVATION AND BACKFILL FOR GAS MAINS AND SERVICES. GAS INSTALLED BY OTHERS.	\$ 190.00
509	UTL-GCS-2WS	1.0 F.S.	GAS INTERFERENCES AND ACCOMMODATIONS	\$ 100,000.00

"(A) Comparison of Bids: Bids on Unit Price Contracts (using both A+B Bidding and a single Bid Multiplier) will be compared on the basis of a total estimate price arrived at by taking the sum total of the Bidder's cost adjustment multiplier (on page C-4 of the Bid Booklet) applied to every unit price item in the Bid Schedule, excluding items with a Fixed Sum unit of measurement, multiplied by the Engineer's Estimate of Quantities set forth in the Bid Schedule plus the Fixed Sum unit of measurement items to obtain the "A" portion of the bid, to which the Bidder's "B" portion of the bid (on page C-4 of the Bid Booklet) will be added for comparison of bids only."

B. A + B BIDDING.

- 1) PROPOSAL SHALL SPECIFY THE BID MULTIPLIER AND "B" PORTION OF THE BID. Each proposal shall specify the Bidder's Bid Multiplier and the "B" portion amount for determining the gross sum of both the "A" & "B" portions, in the manner hereafter described for which the work will be performed according to the Contract Drawings and specifications and any amendment to the specifications if the same are issued prior to the date of receipt of the bid. The lowest bid shall be determined by the City on the basis of the gross sum for which the entire work will be performed, arrived at by multiplying the Engineer's Estimate of Quantities, excluding items with a Fixed Sum unit of measurement, by their unit prices adjusted by the Bidder's bid multiplier plus the fixed sum unit priced items ("A" portion), plus the total number of calendar days proposed by the bidder to complete the "A" portion work to which A + B bidding is applicable multiplied by the Daily Cost established by the City ("B" portion).
- 2) The bidding for this project will take into account not only the amounts bid for each contract item ("A" portion), but also the bidder's stated number of consecutive calendar days multiplied by the daily cost ("B" portion) to substantially complete the project ("A" portion work). The total bid shall consist of both the amount of awarded contract, which shall be known as the "A" portion of the bid, plus the product of the number of calendar days specified by the Contractor times the Daily Cost established by the City, which product shall be known as the "B" portion of the bid.

The sum of "A" portion and "B" portion shall be used only in determining the lowest bidder. The days set forth in the "B" portion of the successful bidder's proposal, and the amount specified as the Daily Cost in the bid, will be used to determine any incentive or disincentive payments relative to timely performance of the "A" portion work under contract.

The incentive or disincentive will be paid or collected under Item 91698.93.

C. "B" PORTION WORK. For this project the "B" portion work shall consist of:

The time cost to substantial completion the entire project as described in the Contract Drawings and specifications, inclusive of "Changes and Extra Work" but exclusive of punch list and planting work. The number of consecutive calendar days "N" specified on page C-4 of the Bid Booklet by the Contractor for the "B" portion (time cost) work shall start on the date shown on the "Notice to Proceed".

D. DEFINITION OF TERMS. For this project the following additional definitions shall apply:

- (a) Calendar Day - The days as they succeed each other, inclusive of Sundays and holidays.
- (b) Amount of the Awarded Contract - The correct or corrected total of the quantities shown in the bid proposal, excluding items with a Fixed Sum unit of measurement, multiplied by the individual unit bid prices as adjusted by the Bid Multiplier set forth in the proposal by the bidder plus the Fixed Sum unit priced items ("A" portion of bid).
- (c) Daily Cost - The amount which represents the average daily cost of interference and inconvenience to the street user and the daily cost to the City, but excludes the construction engineering inspection costs.
- (d) Engineering Inspection Costs - The costs to the City for inspection of the Contractor's work.
- (e) Substantially Complete - THIS DEFINITION SHALL APPLY ONLY TO "B" PORTION WORK. The "B" portion (time cost) work shall be considered to be substantially complete when, at the sole determination of the NYCDDC Commissioner, all contract work has been completed, inclusive of Changes and Extra Work but exclusive of punch list and planting work.

E. PREPARATION OF PROPOSAL. The bidder shall establish the number of consecutive calendar days to be used for the "B" portion of the bid. The total number of such consecutive calendar days established by bidder for the "B" portion (time cost) of the bid shall not exceed 1,825 consecutive calendar days which shall include bad weather days, lane restrictions, peak hour restrictions or other similar items as specified in the contract. Bids showing time for completion of "B" portion work in excess of this amount will be considered non-responsive.

The product of the number of consecutive calendar days proposed by the bidder multiplied by the Daily Cost of \$10,000.00 per calendar day shall be added to the amount bid for the "A" portion (all items of

work) of the bid. This total sum will be the amount used to determine the lowest bid for consideration of bids for award.

F. CONSIDERATION OF BIDS. The submitted bid shall consist of two parts:

- (A) The Bid Multiplier which will be applied to each unit price item, excluding Fixed Sum items, in the Bid Schedule plus the Fixed Sum unit priced items to determine the amount of Awarded Contract ("A" portion).
- (B) Total number of consecutive calendar days (N) proposed by the bidder to complete the "A" portion work to which A + B bidding is applicable.

The lowest bid for the project will then be determined by the Department using the combination of (A) + (B) according to the following formula:

$$(A) + [ (N) \times (\text{Daily Cost}) ] = \text{Bid amount for award consideration.}$$

The preceding formula shall be used only to determine the lowest bid for the project and shall not be used to determine the amount of the awarded contract nor the final payment to the Contractor when the project is completed, other than using the Daily Cost for any incentive or disincentive calculations based on performance of "B" portion work.

In addition, as part of the pre-award process for this contract, the low bidder will be required to submit a preliminary schedule and work plan to explain how it arrived at its "N" time proposal.

G. EARLY COMPLETION OF THE "B" PORTION WORK. The Contractor will be paid the Daily Cost for each calendar day that the "A" portion of work of the project is completed before the number of calendar days "N" stated by the Contractor in its bid. However, the total number of calendar days for incentive payment may not exceed 120 days.

H. FAILURE TO SUBSTANTIALLY COMPLETE THE "A" PORTION WORK IN THE TIME BID. Failure to substantially complete the "A" portion work to which A+B bidding applies within the established number of calendar days "N" stated by the Contractor in the bid schedule will result in the Daily Cost of \$10,000.00 per day, assessed as liquidated damages in accordance with Article 15 of the Standard Construction Contract, and Schedule A on Page SA-1 of the Proposal. Said liquidated damages will be assessed for every calendar day in excess of the stated number, up to the time in which the "A" portion work subject to A+B bidding is substantially complete, exclusive of punch list and planting work.

The NYCDDC Commissioner will be the sole authority in determining as to when the work subject to A+B bidding is substantially complete.

**ATTACH TO CONTRACT DOCUMENTS**

**THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

**PROJECT ID: HMMWTCA7E**

**RECONSTRUCTION OF WORTH STREET FROM HUDSON STREET TO PARK ROW  
INCLUDING SEWER, WATER MAIN, STREET LIGHTING, AND TRAFFIC SIGNAL AND PRIVATE  
UTILITIES WORK**

**Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN**

**ADDENDUM NO. 4 (Revised)**

**DATED: May 20, 2015**

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**This Addendum is issued for the purpose of amending the requirements of the contract documents and is hereby made part of said contract documents to the same extent as if it was originally included therein.**

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The Standard Sewer And Water Main Specifications of the Department of Environmental Protection (dated July 1, 2014), Sewer Design Standards of the Department of Environmental Protection (dated September 2007) Revised January 2009), Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), Specifications For Trunk Main Work of the Department of Environmental Protection (dated July 2014) and the Standard Highway Specifications (Volumes I and II) of the Department of Transportation (dated November 1, 2010) of The City of New York, shall be included as part of the contract documents. These said specifications and standard drawings are hereby revised under the following section headings:

- A. NOTICE TO BIDDERS
- B. AMENDMENTS TO THE STANDARD HIGHWAY SPECIFICATIONS
- C. AMENDMENTS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS
- D. AMENDMENTS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK

**A. NOTICE TO BIDDERS**

- (1) (A) The Contractor is advised that copies of the Standard Sewer And Water Main Specifications (dated July 1, 2014), Sewer Design Standards (dated (September 2007) Revised January 2009), Specifications For Trunk Main Work (dated July 2014) and Water Main Standard Drawings (latest revisions) are available to all prospective bidders at no cost upon presentation of receipt of purchase of Bid Package at the following location:

Department of Design and Construction  
Division of Infrastructure  
Design Services, Specifications, 3<sup>rd</sup> Floor  
30-30 Thomson Avenue  
Long Island City, NY 11101

- (B) The Contractor is advised that copies of the Standard Highway Specifications (Volume I and II) (dated November 1, 2010), Standard Highway Details of Construction (latest revisions), Division of Street Lighting Specifications (latest revisions), Division of Street Lighting Standard Drawings (latest revisions), Standard Specifications for Traffic Signals (latest revisions), and Standard Drawings for Traffic Signals (latest revisions) are available to all prospective bidders for a fee at the following location:

Department of Transportation  
55 Water Street, Ground Floor  
New York City, NY 10041

- (2) The Contractor is notified that a Notice To Proceed (NTP) date will be issued for work to commence within twenty-one (21) to thirty (30) days of Contract Registration.
- (3) The Contractor shall furnish, install, maintain and subsequently remove temporary Protective Tree Barriers. Protective Tree Barriers shall be Type B, unless otherwise directed by the Engineer, and shall be constructed and installed as shown on the Protective Tree Barrier sketch in Department Of Transportation, Standard Highway Details Of Construction, Drawing No. H-1046A, as directed by the Engineer, and in accordance with Department of Parks and Recreation requirements.
- (4) All utility locations and invert elevations are not guaranteed, nor is there any guarantee that all existing utilities, whether functional or abandoned within the project area are shown.
- (5) All existing house connections shall be maintained and supported during construction. The Contractor shall replace any existing house connection damaged as a result of the Contractor's construction operations as ordered by the Engineer at no cost to the City.
- (6) The Contractor is advised that any City owned light poles, traffic signals, street name signs, traffic signs and encumbrances including, but not limited to, underground conduit displaced as the result of the installation of the new sewers, water mains, catch basins, catch basin connections and appurtenances shall be replaced in kind and as directed by the Engineer. The cost of such work shall be deemed included in the prices bid for all items of work under this contract.
- (7) The Contractor is notified that Victaulic Style 77 Coupling is no longer acceptable for use in any steel water main work. All reference to Victaulic Style 77 Coupling within the Standard Sewer And Water Main Specifications of the Department of Environmental Protection (dated July 1, 2014), the Water Main Standard Drawings of the Department of Environmental Protection (latest revisions), the Specifications For Trunk Main Work (dated July 2014), and the contract drawings, shall be replaced with Bolted Split-Sleeve Restrained Coupling.
- (8) The Contractor is notified that the fuel cost per gallon used in the formula under **Sub-Article 26.2.8** of the Standard Construction Contract for **Extra Work** will be derived from the fuel price index for the United States East Coast published weekly by the United States Energy Information Administration

("USEIA"), and available on its website at <http://www.eia.gov/petroleum/gasdiesel/> . The USEIA published cost per gallon for the applicable fuel on the East Coast for the week in which the first day of each calendar quarter during the contract term occurs (i.e., January 1<sup>st</sup>, April 1<sup>st</sup>, July 1<sup>st</sup> and September 1<sup>st</sup>) will be used in the reimbursement formula for all **Extra Work** invoiced that was performed during that calendar quarter. Should the USEIA stop publishing this fuel price index, the fuel cost per gallon will be determined by reference to a substitute index to be agreed upon by the Contractor and the City.

- (9) The Contractor is responsible for any damage to the existing street and traffic signal equipment, including underground conduits and the safety of both pedestrian and vehicular traffic for the duration of the contract.

Should any conduits, cables or foundations need repair due to the Contractor's negligent operations during construction, all work shall be performed according to NYCDOT Bureau of Traffic's Standard Drawings and Specifications at the sole expense of the Contractor.

It is the Contractor's responsibility to secure an approved electrical contractor to perform all traffic signal work (if any). For list of approved electrical contractors, contact Mr. Michael R. LeFosse of New York City Department of Transportation at (718) 786-2236.

- (10) The Contractor is notified that as part of this contract a "Cathodic Protection (CP) System Survey and Engineering Study of Soil and Stray Currents and Cathodic Protection System Design" has been prepared by the firm of CorrTech, Inc.. The Contractor's attention is directed to the Cathodic Protection Design drawings consisting of seven (7) sheets that are included in the contract drawings; to the Cathodic Protection (CP) System Survey and Engineering Study of Soil and Stray Currents and Cathodic Protection System Design report that consists of nineteen (19) pages that is attached to the end of this addendum; and to the Quantity and Cost Estimating report consisting of one (1) page that is attached to the end of this addendum.
- (11) The existing special bollards with special foundation on the south side sidewalk between Broadway and Lafayette Street are to remain. If the bollards need to be disturbed, the Contractor shall replace them in kind at no additional cost to the city. The Contractor shall contact Mr. Stephen M. Anest of the Department of Homeland Security at (917) 583-5541 prior to disturbing the bollards.
- (12) The existing special bollards with special foundation on the south side sidewalk between Centre Street and Baxter Street are to remain. If the bollards need to be disturbed, the Contractor shall replace them in kind at no additional cost to the city. The Contractor shall contact Inspector Eiad Saleh of the United States Marshals service at (212) 331-7201 prior to disturbing the bollards.
- (13) Removal and reinstallation of the security cameras from the Department of Homeland Security (DHS) between Broadway and Lafayette Street is to be paid under Item No. TV-USHS. The Contractor shall notify Mr. Stephen M. Anest of the Department of Homeland Security at (917) 583-5541 prior to removing the light poles with DHS cameras.
- (14) Removal and reinstallation of security cameras from the United States Marshals Service (USMS) between Center Street and Baxter Street will be paid under Item No. TV-USMS. The Contractor shall notify Inspector Eiad Saleh of the United States Marshals Service at (212) 331-7201 prior to removing the light poles with USMS cameras.
- (15) During construction on Mulberry Street vicinity between Worth Street and Mosco Street, the Contractor shall coordinate with all Funeral Homes present within the area. The cost of the above coordination work, including but not limited to, investigations, labor, work schedule changes, etc., and incidentals required to complete the work shall be deemed included in the prices bid for all scheduled items of the contract. No separate or additional payment will be made for this work.
- (16) The Contractor is notified that fire hydrants type S-2-LP - also known as Smith type hydrant shall be used in where designated historic landmark areas within project limits. (Assembly Drawing No. 43250-Z.)

- (17) Street Lighting, Traffic Signals and Pavement Marking approved drawings are provided in this contract. It is the Contractor's responsibility to secure the approved Street Lighting, Traffic Signal and Pavement Marking drawings prior to the start of construction at these areas. The Contractor will be required to coordinate with New York City Department of Transportation to obtain approval for the latest drawings at no additional or separate payment.
- (18) The Contractor is advised that existing masonry and/or concrete of all types may be encountered at certain locations within the project limit. Such existing masonry/concrete shall be excavated, removed and disposed of from the site of excavation. The cost of the above work shall be deemed included in the price bid for contract Item No. 6.02 AAN - UNCLASSIFIED EXCAVATION. Included in the above item of work shall be the cost of all investigations, test pits, labor, materials, equipment, insurance, etc. and incidentals required to complete the work. No separate or additional payment will be made for any of this work.
- (19) A separate NYCDDC Structure Contract PW185 SW2 will be constructed along north side sidewalk of Worth Street between Centre Street and Baxter Street. Proposed sidewalk neckdowns and handicapped ramps will be constructed under the PW185 SW2 contract. As such, the Contractor shall coordinate the work with the mentioned contract prior to the start of construction at this area. The Contractor will be required to coordinate and work simultaneously with other Contractors at no additional or separate payment.
- (20) All existing water and sewer house connections shall be maintained and supported during construction. The Contractor shall replace any existing house connections damaged as a result of the Contractor's negligent construction operations at no cost to the City.
- (21) The Contractor shall exercise extreme caution and take all necessary precautions in placing sheeting and excavating to prevent any damage to the existing NYC TRANSIT'S subway structures and its appurtenances during construction work throughout the project area. The Contractor shall take full responsibility to protect the said NYC TRANSIT'S subway structures and its appurtenances and any damage caused by the Contractor's operations shall be made good by the Contractor to the satisfaction of the Engineer at no additional cost to the City.
- (22) The Contractor shall submit shop drawings to NYC Transit Authority showing all the details and methods of construction, such as, sheeting and bracing, including the Contractor's procedure and sequence of construction, supporting and/or protection of the existing TA's structures and its appurtenances, with necessary design calculations for approval prior to starting of the construction. The design shall be made by a New York State Licensed Professional Engineer skilled in this type of construction and as further evidenced by the imprint of Professional Engineer's seal and signature on all drawings. The cost of this work shall be deemed included in the price bid for all items of work under this contract.



**B. AMENDMENTS TO THE STANDARD HIGHWAY SPECIFICATIONS**

(NO TEXT)

**C. AMENDMENTS TO THE STANDARD SEWER AND WATER MAIN SPECIFICATIONS**

- (1) **Refer** to Subsection 10.15 - Notice To Utility Companies, Etc., To Remove Structures Occupying Place Of Sewers, Water Mains Or Appurtenances, Page I-11:  
**Add** the following to Subsection 10.15:

(1) CONSOLIDATED EDISON COMPANY OF NEW YORK (CON EDISON)

There are CON EDISON facilities in the area of construction. The Contractor shall notify CON EDISON at least seventy-two (72) hours prior to the start of construction by contacting Ms. Theresa Kong at (212) 460-4834.

(2) VERIZON

There are VERIZON facilities in the area of construction. The Contractor shall notify VERIZON at least seventy-two (72) hours prior to the start of construction by contacting Mr. Aubrey Makhanall at (718) 977-8165.

(3) TIME WARNER CABLE OF NEW YORK CITY

There are TIME WARNER CABLE facilities in the area of construction. The Contractor shall notify TIME WARNER CABLE at least seventy-two (72) hours prior to the start of construction by contacting Mr. John Piazza at (718) 888-4261.

(4) AT&T CORP.

There are AT&T CORP. facilities in the area of construction. The Contractor shall notify AT&T CORP. at least seventy-two (72) hours prior to the start of construction by contacting Mr. Louis J. Marello at (914) 397-3744.

- (2) **Refer** to Subsection 10.21 - Contractor To Notify City Departments, Page I-13:  
**Add** the following to Subsection 10.21:

(1) N.Y.C. D.E.P., BUREAU OF WATER AND SEWERS OPERATIONS

The Contractor shall notify Mr. Edward Coleman, P.E., Assistant Commissioner, Engineering at the Department of Environmental Protection, 59-17 Junction Blvd., 3rd floor low rise, Corona N.Y. 11368, at least thirty (30) days prior to the start of construction.

(2) NEW YORK CITY FIRE DEPARTMENT

The Contractor shall notify the Bureau of Fire Communications at least thirty (30) days prior to the start of construction by contacting Mr. Ed Durkin at (718) 281-3933, and/or Mr. Nick Varone at (718) 281-3848.

(3) N.Y.C. DEPARTMENT OF TRANSPORTATION

The Contractor shall notify Mr. Steve Galgano, P.E. Chief of Signal/Street Lighting Operations, 34-02 Queens Blvd., Long Island City, N.Y. 11101 at (718) 786-3550, at least seventy-two (72) hours prior to the start of construction.

(4) N.Y.C. DEPARTMENT OF PARKS AND RECREATION

The Contractor shall notify the Parks Department at least seventy-two (72) hours prior to the start of construction by contacting Mr. Jimmy Mui at (718) 393-7240.

## (5) N.Y.C. TRANSIT AUTHORITY

- (a) The Contractor shall notify Outside Projects at least seven (7) days prior to the start of construction.

The Contractor shall contact:

Mr. Mohamed Adam, P.E.  
 Project Engineer-Outside Projects  
 New York City Transit  
 2 Broadway, 7th Floor  
 New York, N.Y. 10004  
 Attention Ms. Alina Avadanei  
 Telephone No. (646) 252-3641

- (b) The Contractor is advised that bus routes as well as bus stops, within the scope of this project may be affected during construction operations. The Contractor shall notify the Transit Authority at least two (2) weeks prior to the start of construction, in order to make the necessary arrangements as required under the NYC TRANSIT GENERAL NOTES included in **Section 10.25, paragraph (A), Section 10.25 paragraph (B), and Section 10.25 paragraph (C)** of this addendum.

Arrangements shall be made through:

Ms. Sarah Wyss  
 Director Of Short Range, Bus Service Planning (SRB)  
 New York City Transit  
 2 Broadway, 17<sup>th</sup> Floor  
 New York, N.Y. 10004  
 Telephone No. (646) 252-5517  
 sarah.wyss@nyct.com

- (3) **Refer to Subsection 10.25 - Contractor To Carry Out Agreement Between City And Railroad Company Or Property Owner(s), Page I-14:**

**Add** the following to **Subsection 10.25:**

**(A) NYC TRANSIT GENERAL NOTES**

For NYC TRANSIT notes see the contract drawings.

**(B) NYC TRANSIT INSURANCE REQUIREMENTS**

**N.Y.C. TRANSIT INSURANCE:** The Contractor (Permittee) shall indemnify and save harmless the City of New York and the New York City Transit (Permitter) in accordance with the following "Insurance Requirements" and proof that the necessary insurance is in effect will be required before work can commence:

**NYCT "OUTSIDE CONTRACT" INSURANCE REQUIREMENTS**

(1) The Permittee at its sole cost and expense shall carry or cause to be carried and shall maintain at all times during the period of performance under this Agreement policies of insurance as herein below set forth below:

- (A) **Workers' Compensation Insurance** - (including Employer's Liability Insurance) with limits as specified in Schedule "A", which limit may be met by a combination of primary and excess insurance meeting the statutory limits of New York State. The policy shall be endorsed to include

Longshoreman's and Harbor Workers' Compensation Act/Maritime Coverage Endorsement and/or Jones Act Endorsement when applicable.

- (B) Commercial General Liability Insurance - (I.S.O. 2001 Form or equivalent) approved by Permitter in the Permittee's name with limits of liability as specified in Schedule "A" for each occurrence on a combined single limit basis for injuries to persons (including death) and damages to property. The limits may be provided in the form of a primary policy or combination of primary and umbrella/excess policy. When the minimum contract amounts can only be met when applying the umbrella/excess policy; the Umbrella/Excess Policy must follow form of the underlying policy and be extended to "drop down" to become primary in the event primary limits are reduced or aggregate limits are exhausted. Such insurance shall be primary and non-contributory to any other valid and collectable insurance and must be exhausted before implicating any Permitter/MTA policy available.

Such policy should be written on an occurrence form; and shall include:

- Contractual coverage for liability assumed by the Permittee under this agreement;
- Personal and Advertising Injury Coverage;
- Products-Completed. Operations;
- Independent Contractors Coverage;
- "XCU" coverage (Explosion, Collapse, and Underground Hazards) where necessary;
- Contractual Liability Exclusion, applicable to construction or demolition operations to be performed within 50 feet of railroad tracks, must be voided, where necessary; and,
- Additional Insured Endorsement (I.S.O. Form CG 20 26 07/04 version or equivalent) approved the Permitter naming:

New York City Transit Authority (NYCTA), the Manhattan and Bronx Surface Transit Operating Authority (MaBSTOA), the Staten Island Rapid Transit Operating Authority (SIRTOA), MTA Capital Construction Co., the Metropolitan Transportation Authority (MTA) including its subsidiaries and affiliates, and the City of New York (as Owner).

- (C) Business Automobile Liability Insurance Policy - (I.S.O. Form CA 00 01 10 01 or equivalent) approved by the Permitter is required if Permittee's vehicle enters Permitter property. The insurance must be in the name of the Permittee or its contractor entering the Permitter property with limits of liability in the amount specified in Schedule "A" for claims for bodily injuries (including death) to persons and for damage to property arising out of the ownership, maintenance or use of any owned, hired or non-owned motor vehicle.

- (D) Railroad Protective Liability Insurance policy shall be required as specified in Schedule "A".

- (E) Environmental/Pollution Exposures:

In the event environmental or pollution exposures exist, the Permittee shall require the environmental contractor or sub-contractor to provide the applicable insurance covering such exposure. The limits and type of insurance provided shall be satisfactory to the Permitter and will be confirmed to the parties prior to the start of the work.

- (2) General Requirements Applicable To Insurance Policies:

- (a) All of the insurance required by this Article shall be with Companies licensed or authorized to do business in the State of New York with an A.M. Best Company rating of not less than A-/VII

or better and reasonably approved by the Permitior/MTA and shall deliver evidence of such policies.

- (b) Except for Workers Compensation, all references to forms and coverages referred to above shall be the most recent used by the Insurance Services Office, Inc. (ISO") or equivalent forms approved by the Insurance Department of the State of New York, provided, however, that excess coverages may be written on forms reasonably acceptable to Permitior containing provisions other than those contained in ISO forms but otherwise conforming in substance to the requirements of this Article.
- (c) The Permittee or its Contractor performing the work shall furnish evidence of all policies before any work is started to the permitior:

For NYCT Contract Inspection  
C/O Mr. John Malvasio  
Director, MOW Engineering  
130 Livingston Street, Room 8044F  
Brooklyn, NY 11201  
Telephone: (718) 694-1358

These policies must: (i) be written in accordance with the requirements of the paragraphs above, as applicable; (ii) be endorsed in form acceptable to include a provision that the policy will not be canceled, materially changed, or not renewed, unless otherwise indicated herein, at least thirty (30) days prior written notice to the Permitior c/o MTA Risk and Insurance Management (MTA RIM) Department - Standards, Enforcement & Claims Unit, 2 Broadway - 21st floor, New York, NY 10004; and (iii) state or be endorsed to provide that the coverage afforded under the contractor's policies shall apply on a primary and not on an excess or contributing basis with any policies which may be available to the Permitior/MTA, and also that the contractor's policies, primary and excess, must be exhausted before implicating any Permitior/MTA policy available. (iv) In addition, contractor's policies shall state or be endorsed to provide that, if a subcontractor's policy contains any provision that may adversely affect whether contractor's policies are primary and must be exhausted before implicating any Permitior/MTA policy available, contractor's and subcontractor's policies shall nevertheless be primary and must be exhausted before implicating any Permitior/MTA policy available. Except for Professional Liability, policies written on claims made basis are not acceptable. At least two (2) weeks prior to the expiration of the policies, contractor shall endeavor to provide evidence of renewal or replacement policies of insurance, with terms and limits no less favorable than the expiring policies. Except as otherwise indicated in the detailed coverage paragraphs below, self insured retentions and policy deductibles shall not exceed \$100,000, unless such increased deductible or retention is approved by Permitior/MTA. The Permittee shall be responsible for all claim expense and loss payments within the deductible or self-insured retention. The insurance monetary limits required herein may be met through the combined use of the insured's primary and umbrella/excess policies.

- (d) Certificates of Insurance may be supplied as evidence of policies of the above policies, except for Policy (D) Railroad Protective Liability Insurance Policy. However, if requested by the Permitior, the Permittee shall deliver to the Authority, within forty-five (45) days of be request, a copy of such policies, certified by the insurance carrier as being true and complete. The Railroad Protective Liability Insurance Policy must be provided in the form of the Original Policy. A detailed Insurance Binder may be provided, ACORD or Manuscript Form, pending issuance of the Original Policy. The Original Policy must be submitted to MTA RIM within thirty (30) days of the Binder Approval.
- (e) If a Certificate of Insurance is submitted, it must: (1) be provided on the Permitior Certificate of Insurance Form or MTA Certificate of Insurance Form for Joint Agency Agreements; (2) be signed by an authorized representative of the insurance carrier or producer and notarized; (3) disclose any deductible, self-insured retention, sub-limit, aggregate limit or any exclusions to the policy that materially change the coverage; (4) indicate the Additional Insureds and

Named Insureds as required herein, along with a physical copy of the Additional Insured Endorsement (I.S.O. Form CG 20 26 07/04 version or equivalent), as applicable and the endorsement(s) must include policy number(s); (5) reference the Contract by number on the face of the certificate; and (6) expressly reference the inclusion of all required endorsements.

- (f) The minimum amounts of insurance required in the detail description of policies (A), (B), (C), and (D) above shall not be construed to limit the extent of the Permittee's liability under this Agreement.
- (g) If, at any time during the period of this Agreement, insurance as required is not in effect, or proof thereof is not provided to the Permitter, the Permitter shall have the options to: (i) direct the Permittee to suspend work or operation with no additional cost or extension of time due on account thereof; or (ii) treat such failure as an Event of Default.

- (4) **Refer to Subsection 10.30 - Contractor To Provide For Traffic, Page I-15:**  
**Add** the following to **Subsection 10.30:**

- (1) Traffic Stipulations:

The Contractor shall refer to Traffic Stipulations identified in the maintenance of traffic requirements under Highway Contract No. HMMWTCA7E.

- (5) **Refer to Subsection 71.41.4 - Specific Pavement Restoration Provisions, Page VII-67:**  
**Add** the following to **Subsection 71.41.4:**

- (E) Specific Pavement Restoration Provisions:

- (1) Highway and roadway reconstruction shall be accomplished and paid for in accordance with Highway Construction Plans, Details and Specifications for Highway Project ID. HMMWTCA7E.

**D. AMENDMENTS TO THE SPECIFICATIONS FOR TRUNK MAIN WORK**

- 1) **Refer to Part 1 – Furnishing And Delivering Steel Pipes And Appurtenances 30 Inches In Diameter And Larger, Paragraph 13. Special Fittings:, Page 5;**  
**Add the following to Paragraph 13:**

The steel reducer shall have a length of seven (7) feet for every twelve (12) inches reduction in diameter.

**END OF ADDENDUM NO. 4**

**This Addendum consists of eleven (11) pages plus twenty (20) pages of attachments.**

**ATTACHMENT TO ADDENDUM NO.8**  
**Questions Submitted by Bidders and DDC responses**

**QUESTION # 1:** FOR ITEMS 7.01 AB AND 7.01 C, NO DETAILED DRAWING WAS INCLUDED FOR THE SUBWAY FRAMES AND GRATES, WHICH MAKES ACCURATE PRICING DIFFICULT TO OBTAIN FROM VENDORS. PLEASE ADVISE.

**DDC'S RESPONSE:** *THESE ITEMS ARE REQUIRED FOR ADJUSTMENT OF THE SUBWAY FRAMES AND GRATES DUE TO ADJUSTMENTS IN SIDEWALK GRADE DURING CONSTRUCTION. ALSO SEE REVISED ADDENDUM NO. 4 IN THIS ADDENDUM NO. 8, NOTICE TO BIDDERS, ITEM (22) FOR ADDITIONAL INFORMATION.*

**QUESTION # 2:** ITEM 50.41C6C24, 24" DIP CLASS 56 COMBINED SEWER ON CONCRETE CRADLE, WAS NOT FOUND ON THE PLANS. PLEASE ADVISE.

**DDC'S RESPONSE:** *REFER TO THE REVISED SHEET NOS. 22R AND 32R, AS CONTAINED IN THIS ADDENDUM NO. 8.*

**QUESTION # 3:** ON SHEET 22 OF THE PLANS, 18" ESVP COMBINED SEWER AND 24" RCP SEWERS WERE FOUND. THESE ITEMS ARE NOT ACCOUNTED FOR IN THE BID ITEM LIST. PLEASE ADVISE.

**DDC'S RESPONSE:** *THE 18" ESVP COMBINED SEWER ITEM HAS BEEN ADDED TO THE REVISED BID SCHEDULE CONTAINED IN THIS ADDENDUM NO. 8 AND THE 24" RCP SEWER HAS BEEN REPLACED WITH THE 24" DIP SEWER AS SHOWN ON THE REVISED SHEET NO. 22R, AS CONTAINED IN THIS ADDENDUM NO. 8.*

**QUESTION # 4:** ON SHEET 23, THE PLANS SHOW A NEW STANDARD MANHOLE TYPE A-1, BUT THIS ITEM IS NOT FOUND IN THE BID ITEM LIST. PLEASE ADVISE.

**DDC'S RESPONSE:** *THE ITEM HAS BEEN ADDED TO THE REVISED BID SCHEDULE, AS CONTAINED IN THIS ADDENDUM NO. 8.*

**QUESTION # 5:** ON SHEETS 25 AND 31, WHICH BOTH SHOW THE INTERSECTION OF WORTH STREET AND CENTRE STREET, THERE ARE 2 NEW CATCH BASINS THAT ARE NOT LABELED AS ANY TYPE. CAN WE ASSUME THESE TO BE TYPE 1 CATCH BASINS?

**DDC'S RESPONSE:** *REFER TO THE REVISED SHEET NO. 31R, AS CONTAINED IN THIS ADDENDUM NO. 8.*

**QUESTION # 6:** IN THE INTERSECTION OF WORTH STREET AND CENTRE STREET, THE LOCATION OF ONE OF THE HYDRANTS CONFLICTS BETWEEN SHEETS 25 AND 31. ON SHEET 25, THE HYDRANT IS ON THE NORTH SIDE OF WORTH STREET, BUT ON SHEET 31, THIS SAME HYDRANT IS SHOWN ON THE SOUTH SIDE. ANOTHER ISSUE IN THIS SAME INTERSECTION IS THAT THE DRAWING AND LOCATION OF THE 36" STEEL WATERMAIN AND THE 20" DISTRIBUTION WATERMAIN ARE COMPLETELY DIFFERENT. WHICH SHEET SHOULD WE FOLLOW?

**DDC'S RESPONSE:** *REFER TO THE REVISED SHEET NO. 31R, AS CONTAINED IN ADDENDUM NO. 8.*

**QUESTION # 7:** ON SHEET 4, GENERAL NOTE 6.11, IT STATES THAT ALL HYDRANTS TO BE INSTALLED ARE OF THE A.P. SMITH DESIGN. BUT THE BID ITEM LIST SHOWS 30 STANDARD HYDRANTS AND ONLY 9 HYDRANTS OF THE SMITH DESIGN. PLEASE CLARIFY.

**DDC'S RESPONSE:** *REFER TO NOTE 6.11 IN THE REVISED SHEET NO. 4R, AS CONTAINED IN THIS ADDENDUM NO. 8.*



**QUESTION # 8:** ON SHEETS 27 AND 28, IN THE INTERSECTION OF ST. JAMES 'PLACE AND OLIVER STREET, THE 20" WATERMAIN CONFLICTS BETWEEN THE TWO DRAWINGS. SHEET 27 SHOWS THE 20" WATERMAIN BEING AROUND 20' LONG WITH SLEEVES, BUT SHEET 28 SHOWS THIS SAME WATERMAIN BEING OF A MUCH LONGER LENGTH. PLEASE CLARIFY.

**DDC'S RESPONSE:** *THE SCALES ARE DIFFERENT ON BOTH DRAWINGS.*

**QUESTION # 9:** NO SPECIFIC PAVEMENT RESTORATION WAS GIVEN FOR THE SIDE STREETS IN THE SPECIFICATIONS, AND NOTHING WAS SHOWN IN THE HIGHWAY CONSTRUCTION PLANS OR THE CROSS SECTIONS. PLEASE CLARIFY.

WHAT IS THE SPECIFIC RESTORATION FOR MULBERRY ST. AND MOSCO ST.? THE PLANS ONLY IDENTIFY THE LIMITS OF PERMANENT RESTORATION.

**DDC'S RESPONSE:** *METHOD OF RESURFACING FOR PAVEMENT RESTORATION IS CALLED OUT ON THE REVISED SHEET NOS. 16R AND 17R, AS CONTAINED IN THIS ADDENDUM NO. 8.*

**QUESTION # 10:** SECTION 4.02 I PARAGRAPH B STATES THAT RECYCLED ASPHALT CAN BE USED IN ACCORDANCE WITH PARAGRAPH 4.02I.1.01.C. CAN RECYCLED ASPHALT BE USED FOR ITEM NUMBERS 4.02 AF-R, 4.02 CB AND 4.02 I4-3?

**DDC'S RESPONSE:** *YES PROVIDED THAT THE PERCENTAGE OF ALLOWABLE RECYCLED ASPHALT IS WITHIN THE AMOUNT PERMITTED IN THE SPECIFICATIONS FOR THAT ITEM. FOR ITEM NO. 4.02 I4-3, USING A PERFORMANCE GRADE ASPHALT, THE RECLAIMED ASPHALT PAVEMENT BLENDED WITH NEW MATERIALS MAY BE USED TO THE MAXIMUM PERCENT SPECIFIED IN SUBSECTION 4.02I.1.04.C.2.B. IN THE NEW SECTIONS OF ADDENDUM NO. 1.*

**QUESTION # 11:** IN THE CITY WORK ACCELERATION ALLOWANCE, PAYMENT IS TO BE MADE IN ACCORDANCE WITH ARTICLES 25 & 26 WHERE THERE IS NO PAYMENT ALLOWED ON THE PREMIUM PORTION OF OVERTIME WORK. WILL THIS BE CHANGED FOR THIS CONTRACT?

**DDC'S RESPONSE:** *NO.*

**QUESTION # 12:** ON PAGE A1-106, SECTION D. DEFINITION OF TERMS, SUBSECTION (E), SUBSTANTIALLY COMPLETE, HOW CAN INCLUDING CHANGES AND EXTRA WORK DETERMINE SUBSTANTIALLY COMPLETE AS WELL AS INCENTIVES/DECENTIVES WHEN THERE HAVE BEEN SEVERAL PAST INSTANCES OF UTILITY EXTRA WORK EXCEEDING 6 MONTHS? ALSO HOW WILL UTILITY FUNDING ISSUES BE TAKEN INTO ACCOUNT WHEN CALCULATING SUBSTANTIALLY COMPLETE AND CORRESPONDING INCENTIVES/DECENTIVES CAN BE MATERIALLY AFFECTED BY BUDGET CODE SHORTFALLS CAUSING DISRUPTION OF WORK AS HAS HAPPENED. IN THE PAST AS WELL?

**DDC'S RESPONSE:** *TIME EXTENSION WILL BE ALLOWED WITHOUT PENALTY FOR ADDITIONAL CITY AND PRIVATE UTILITY WORK, BUT TIME EXTENSIONS FOR THE INCENTIVE PAYMENT WILL NOT BE EXTENDED.*

**QUESTION # 13:** ON PAGE A1-107, SECTION F, CONSIDERATION OF BIDS, PLEASE CLARIFY AMOUNT OF AWARDED CONTRACT "A" PORTION IS THE SUM OF EACH UNIT PRICE APPLIED BY THE MULTIPLIER, EXCLUDING F.S. ITEMS PLUS THE F.S. ITEMS THEMSELVES.

**DDC'S RESPONSE:** *SEE ATTACHED PAGES A1-105(R), A1-106(R) AND A1-107(R), AS CONTAINED IN THIS ADDENDUM NO. 8.*

**QUESTION # 14:** IS WORTH ST. ON THE NYCDOT EMBARGO LIST?

**DDC'S RESPONSE:** *YES.*

**QUESTION # 15:** DO ANY OF THE OTHER LISTED EMBARGOS IN THE SPECIAL PROVISIONS AFFECT WORTH ST?

***DDC'S RESPONSE:*** YES AS LISTED IN THE SPECIAL PROVISIONS.

**QUESTION # 16:** DOES THE DBE PERCENTAGE APPLY TO THE FIXED SUM ITEMS ALSO? FOR EXAMPLE, TEAS ARE AN ASSIGNMENT AND PAYMENT ACCORDINGLY BYPASSES THE CONTRACTOR.

***DDC'S RESPONSE:*** SEE RESPONSE TO BIDDERS QUESTION #2 IN ADDENDUM NO. 7.

**QUESTION # 17:** IN ADDENDUM NO.3, ITEM NO. 6.09, SCOPE OF WORK, PAGE A3-23C AS WELL AS SKETCHES PAGES A3-22C TO 23C, PLEASE CLARIFY THAT RELOCATION/REPLACEMENT OF THE EXISTING GAS MAIN IN WORTH ST FROM HUDSON ST TO WEST BROADWAY HAS BEEN PREVIOUSLY BEEN COMPLETED?

***DDC'S RESPONSE:*** THE 12" GAS MAIN ON WORTH STREET BETWEEN WEST BROADWAY AND HUDSON STREET HAS BEEN REPLACED PRIOR TO THE WORTH STREET PROJECT. HOWEVER, SOME ABANDONED MAINS MAY STILL BE IN THE GROUND AND NEEDED TO BE REMOVED.

**QUESTION # 18:** WHAT IS THE SPECIFIC PIGMENT COLOR TO BE USED ON THIS PROJECT SINCE SEVERAL COLORS HAVE BEEN LISTED IN ADDENDUM NO. 1?

***DDC'S RESPONSE:*** THE COLOR SHALL BE GRAY EQUIVALENT TO ONE OF THE COLORS LISTED TO BE USED IN AREAS UNDER THE JURISDICTION OF THE LOWER MANHATTAN DEVELOPMENT CORPORATION. SEE ADDENDUM NO. 1, PAGE A1-1d, ARTICLE 10.

**QUESTION # 19:** PLEASE CLARIFY ON A FEDERALLY FUNDED PROJECT WHO, CITY OR CONTRACTOR, IS RESPONSIBLE FOR FIELD DENSITY TESTING (BACKFILL, ASPHALT), PLANT INSPECTION (CONCRETE/ASPHALT) AND PAVEMENT CORES?

***DDC'S RESPONSE:*** THE CONTRACTOR IS RESPONSIBLE FOR QUALITY CONTROL OF THE TESTS AND NYC DDC WILL DO THE QUALITY ASSURANCE.

**QUESTION # 20:** THE ENGINEER'S ESTIMATE OF QUANTITIES FOR ITEM 32 - 15" ESVP OF 70 LF APPEARS TO BE INCORRECT. THIS ITEM ONLY APPEARS ON DRAWING U1/U11 AND IS 33 LF. WHAT IS THE CORRECT QUANTITY?

***DDC'S RESPONSE:*** THE ESTIMATE IS CORRECT.

**QUESTION # 21:** THE ENGINEER'S ESTIMATE OF QUANTITIES FOR ITEM 33 - 24" DIP OF 410 LF APPEARS TO BE HIGH IN THAT ONLY 206 LF OF THIS ITEM APPEAR ON DRAWING U1/U11. WHAT IS THE CORRECT QUANTITY?

***DDC'S RESPONSE:*** THE QUANTITIES HAVE BEEN REVISED. SEE THE REVISED BID SCHEDULE, CONTAINED IN THIS ADDENDUM NO. 8.

**QUESTION # 22:** DRAWINGS U11 IDENTIFY THE 24" COMBINED SEWER, ABOVE, AS RCP WHILE THE BID PAGES, ITEM 33 CLASSIFY IT AS 24" DLP. WHAT IS THE DESIRED MATERIAL?

***DDC'S RESPONSE:*** ALL 24" COMBINED SEWER SHALL BE DUCTILE IRON PIPE.

**QUESTION # 23:** WHAT HAPPENS IF A JOINT UTILITY CROSSING IS LARGER THAN OR NOT COVERED BY ONE OF THE INCLUDED BID ITEMS?

***DDC'S RESPONSE:*** ANY ENCOUNTERED CROSSING THAT IS LARGER THAN THE INCLUDED JB ITEMS WILL BE COVERED BY ITEMS IN THE CONTINGENCY ITEM LIST. FOR UTILITY WORK NOT COVERED BY ONE OF THE INCLUDED BID ITEMS, THE PROCEDURE OUTLINED IN THE JOINT BID WITH PRIVATE UTILITY COMPANIES SPECIAL PROVISIONS UNDER ARTICLE 5 IN ADDENDUM NO. 6 SHALL APPLY.

**QUESTION # 24:** SHEET 22 AT THE INTERSECTION OF WORTH STREET AND WEST BROADWAY, AN ECS MH AT THE NW CORNER HAS DUCT BANK 62.70 WITH 10-2-1/2" IR AND DUCT BANK 68.00 WITH 18-3-1/2" IR DUCT CROSSING THE 36" VALVE CHAMBER AND 48" STEEL WATER MAIN. ARE THE DUCT BANKS TO REMAIN, BE REMOVED OR RELOCATED?

**DDC'S RESPONSE:** *RL 62.70 (6-IR & 6-RET.) - RELOCATE 9 DUCTS AND REMOVE 3 RETIRED DUCTS AND RL 68.0 (18-IR) - RELOCATE 18 DUCTS.*

**QUESTION # 25:** WHERE CAN WE LOCATE A DESCRIPTION OF ALL WORK INCLUDED FOR ALL UTILITY JOINT BID ITEMS?

**DDC'S RESPONSE:** *SEE ADDENDUM NO. 6 IN THE BID AND CONTRACT DOCUMENTS, VOLUME 3 OF 3.*

**QUESTION # 26:** PLEASE CLARIFY DETAIL A ON SHEET 24 REQUIRES A SLEEVE TO MAKE THE CONNECTION TO THE EXISTING CI WATER MAIN.

**DDC'S RESPONSE:** *REFER TO THE REVISED DRAWING SHEET 24R, AS CONTAINED IN THIS ADDENDUM NO. 8.*

**QUESTION # 27:** THE PROPOSED 24" SEWER AT WORTH ST. AND WEST BROADWAY, ON SHEET 32 (DRAWING NO. U11), THE DETAIL FOR THE 36" VERTICAL WATER MAIN OFFSET OVER 24" SEWER (DI ON DETAIL OR RCP ON PROFILE) INDICATES CONCRETE ENCASMENT AND AGAIN, THERE IS NO SUCH ITEM AND ALSO NO INDICATION OF HOW LONG THE 24" SEWER IS TO BE ENCASED. PLEASE CLARIFY.

**DDC'S RESPONSE:** *REFER TO REVISED DRAWING SHEET 32R AND NEW ITEMS ADDED IN THE REVISED BID SCHEDULE, AS CONTAINED IN THIS ADDENDUM NO. 8.*

**QUESTION # 28:** THERE IS NO ITEM FOR EITHER FURNISHING/DELIVERING OR INSTALLING 6" FL-MJ VALVES. PLEASE CLARIFY.

**DDC'S RESPONSE:** *REFER TO THE REVISED BID SCHEDULE, AS CONTAINED IN THIS ADDENDUM NO. 8, FOR THE NEW ITEM.*

**QUESTION # 29:** THERE SEEMS TO BE BID ITEMS MISSING FOR THE FOLLOWING ITEMS OF WORK ON THE ABOVE REFERENCE PROJECT:

- FURNISHING AND DELIVERING 30" DUCTILE IRON PIPE
- LAYING 30" DUCTILE IRON PIPE AND FITTINGS
- 18" ESVP COMBINED SEWER ON CONCRETE CRADLE

**DDC'S RESPONSE:** *REFER TO THE REVISED BID SCHEDULE, AS CONTAINED IN THIS ADDENDUM NO. 8, FOR THE NEW ITEMS.*

**QUESTION # 30:** WHAT KIND OF CONNECTION IS REQUIRED IN THE 36" BUTTERFLY VALVE CHAMBERS, EXPANSION JOINTS OR SPLIT SLEEVE RESTRAINED COUPLINGS? THERE ARE NO REFERENCES ON THE DRAWINGS AS WELL AS THERE ARE NO ITEMS FOR EITHER TYPE CONNECTION.

**DDC'S RESPONSE:** *SPLIT SLEEVE RESTRAINED COUPLINGS SHALL BE USED. REFER TO THE REVISED BID SCHEDULE, AS CONTAINED IN THIS ADDENDUM NO. 8, FOR THE NEW ITEMS.*

**QUESTION # 31:** THERE IS A QUANTITY OF 1 OF 30" D-O-L COUPLING. CAN'T FIND IT WHERE IS IT?

**DDC'S RESPONSE:** *THE ITEM HAS BEEN REMOVED.*

**QUESTION # 32:** THERE IS NO BID ITEM FOR COUPLINGS OR EXPANSION JOINTS NEEDED IN THE FIVE 36" BFV CHAMBERS ON THE JOB. DETAIL FOR THE BFV IS 44015-A-X SHOWS A BAKER STYLE EXPANSION JOINT.

**DDC'S RESPONSE:** THE ITEM HAS BEEN ADDED TO THE BID SCHEDULE. SEE REVISED BID SCHEDULE, AS CONTAINED IN THIS ADDENDUM NO. 8.

**QUESTION # 33:** THERE IS NO DETAIL FOR ANY OF THE 36" BY 36" TEE OUTLET OR 36" ON 48" TEE OUTLET. WE NORMALLY SEE THESE ON TYPICAL DRAWINGS AS WELL.

**DDC'S RESPONSE:** SEE REVISED DRAWINGS, AS CONTAINED IN THIS ADDENDUM NO. 8.

**QUESTION # 34:** THERE IS NO DETAIL FOR THE 36" HEADER TO TRANSITION TO 20" OUTLET TO CONNECT TO EXISTING PIPE. NORMALLY THE DETAIL IS FOUND ON TYPICAL DRAWINGS.

**DDC'S RESPONSE:** SEE REVISED DRAWINGS, AS CONTAINED IN THIS ADDENDUM NO. 8.

**QUESTION # 35:** THERE ARE SHORT PIPE RUNS TO CONNECT TO EXISTING PIPE IN THREE LOCATIONS WITH NO PROFILE OR DETAILS OF THESE. THEY ARE AT WEST BROADWAY, BROADWAY AND AT THE END OF THE LINE IN ST. JAMES PLACE. PLEASE GET THESE TO US.

**DDC'S RESPONSE:** THERE ARE NO SURVEY PROFILES AVAILABLE FOR THE SIDE STREETS.

**QUESTION # 36:** THERE IS A 36" DISHED HEAD CALLED OUT ON THE DRAWING SHEET 28 AT THE END OF THE LINE. THIS IS NORMALLY A SEPARATE BID ITEM AND IT IS NOT IN THE BID SCHEDULE. PLEASE CLARIFY.

**DDC'S RESPONSE:** THE ITEM HAS BEEN ADDED TO THE BID SCHEDULE. SEE REVISED BID SCHEDULE, AS CONTAINED IN THIS ADDENDUM NO. 8.

**QUESTION # 37:** DRAWINGS U1 AND U11 SHOW 33 LF OF 18" ESVP COMBINED SEWER. THERE IS NO ITEM FOR THIS WORK ON PAGE B-6.

**DDC'S RESPONSE:** THE ITEM HAS BEEN ADDED TO THE BID SCHEDULE. SEE REVISED BID SCHEDULE, AS CONTAINED IN THIS ADDENDUM NO. 8.

**QUESTION # 38:** THE SPECIFICATIONS FOR WATERPROOFING MEMBRANE ITEMS 8.22D, NCTA-7A.1 AND NCTA-7A.2 STATE THAT THE WORK IS TO BE DONE IN THE AREAS SPECIFIED BY THE CONTRACT DRAWINGS. AFTER LOOKING THROUGH THE CONTRACT DRAWINGS AND THE STANDARD DRAWINGS, I FOUND NO MENTION OF THESE ITEMS. CAN YOU PLEASE SPECIFY THE DRAWINGS WHERE THESE 3 ITEMS ARE LOCATED?

**DDC'S RESPONSE:** THE INTENT OF WATERPROOFING MEMBRANE ITEMS 8.22D, NCTA-7A.1 AND NCTA-7A.2 ARE TO PROVIDE WATERPROOFING ON TOP OF BUILDING VAULTS AND MTA SUBWAY ROOF STRUCTURES WHEN THE EXISTING WATERPROOFING SYSTEM ON THESE STRUCTURES ARE DISTURBED DURING CONSTRUCTION. THERE ARE NO DETAILS FOR BUILDING VAULTS AND MTA SUBWAY ROOF STRUCTURES IN THE CONTRACT DRAWINGS. THE CONTRACTOR MAY ENCOUNTER THIS WORK DURING CONSTRUCTION AND NEED TO PROVIDE SHOP DRAWINGS OF WATERPROOFING DETAILS TO THE ENGINEER FOR REVIEW AND APPROVAL. ALL OF THE ABOVE MENTIONED WORK SHALL BE DEEMED INCLUDED IN THE WATERPROOFING MEMBRANE ITEMS.



ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

ADDENDUM NO. 9

DATED: May 28, 2015

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

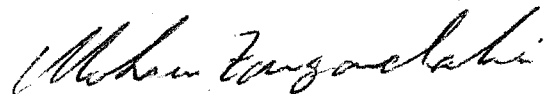
1. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, revised BID SCHEDULE, dated 05/21/2015, as amended by Addendum No. 8, page B-12 [REVISION #1], SEQ. NUM. 112, ITEM NO. 60.11R520; Change the Engineer's Estimate of Quantity, under COL. 3, for Item No. 60.11R520 from "5,270.0 L.F." to "3,580.0 L.F."
2. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, revised BID SCHEDULE, dated 05/21/2015, as amended by Addendum No. 8, page B-12 [REVISION #1], SEQ. NUM. 119, ITEM NO. 60.12D20; Change the Engineer's Estimate of Quantity, under COL. 3, for Item No. 60.12D20 from "6,100.0 L.F." to "4,300.0 L.F."
3. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, revised BID SCHEDULE, dated 05/21/2015, as amended by Addendum No. 8, page B-13 [REVISION #1], SEQ. NUM. 126, ITEM NO. 60.21SP3T36; Change the Engineer's Estimate of Quantity, under COL. 3, for Item No. 60.21SP3T36 from "4,775.0 L.F." to "3,595.0 L.F."
4. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, revised BID SCHEDULE, dated 05/21/2015, as amended by Addendum No. 8, page B-13 [REVISION #1], SEQ. NUM. 127, ITEM NO. 60.21SP4T48; Change the Engineer's Estimate of Quantity, under COL. 3, for Item No. 60.21SP4T48 from "620.0 L.F." to "480.0 L.F."
5. Refer to the Bid and Contract Documents, VOLUME 1 OF 3, revised BID SCHEDULE, dated 05/21/2015, as amended by Addendum No. 8, page B-20 [REVISION #1], SEQ. NUM. 205, ITEM NO. 70.31FN; Change the Engineer's Estimate of Quantity, under Col. 3 for Item No. 70.31FN from "76,730.0 L.F." to "17,110.0 L.F."

7. Refer to the Contract Drawings, SHEET 12R/C1 HIGHWAY CONSTRUCTION PLAN HUDSON STREET TO CHURCH STREET, as amended by Addendum No. 8, new Catch Basin located at station 12+95;  
Change the label for that new catch basin from  
"NEW CATCH BASIN T.C. 9.10      to      "NEW CATCH BASIN T.C. 9.10  
TYPE 1                      STA. 12+95"      TYPE 2                      STA. 12+95".
8. Refer to the Contract Drawings, SHEET 13/C2 HIGHWAY CONSTRUCTION PLAN CHURCH STREET TO LAFAYETTE STREET, new Catch Basin located at station 19+93;  
Change the label for that new catch basin from  
"NEW CATCH BASIN T.C. 25.6      to      "NEW CATCH BASIN T.C. 25.6  
TYPE 2                      STA. 19+93"      TYPE 1                      STA. 19+93".
9. Refer to the Contract Drawings, SHEET 18/H1 HIGHWAY PROFILE, new Catch Basin located at station 13+00;  
Change the type of the new Catch Basin from "TYPE 1" to "TYPE 2" and "STA 13+00" to "STA 12+95".
10. Refer to the Contract Drawings, SHEET 22R/U1 UTILITY PLANS AND PROFILES, as amended by Addendum No. 8, detail of 48" X 36" STEEL TIE shown in the middle of the sheet;  
Substitute the attached "DETAIL A".
11. Refer to the Contract Drawings, SHEET 24R/U3 UTILITY PLANS AND PROFILES, as amended by Addendum No. 8, detail of 36" X 36" STEEL TIE (TYP.) shown in the middle-right side of the sheet;  
Substitute the attached "DETAIL C" (which also applies to sheet 28 (U7)).
12. Refer to the Contract Drawings, SHEET 28/U7 UTILITY PLANS AND PROFILES;  
Add the attached "DETAIL B" in the upper left corner of the sheet.
13. See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES PROVIDED BY DDC for additional information.

**END OF ADDENDUM NO. 9**

**By signing in the space provided below, the bidder acknowledges receipt of this Addendum consisting of two (2) pages and five (5) pages of attachments.**

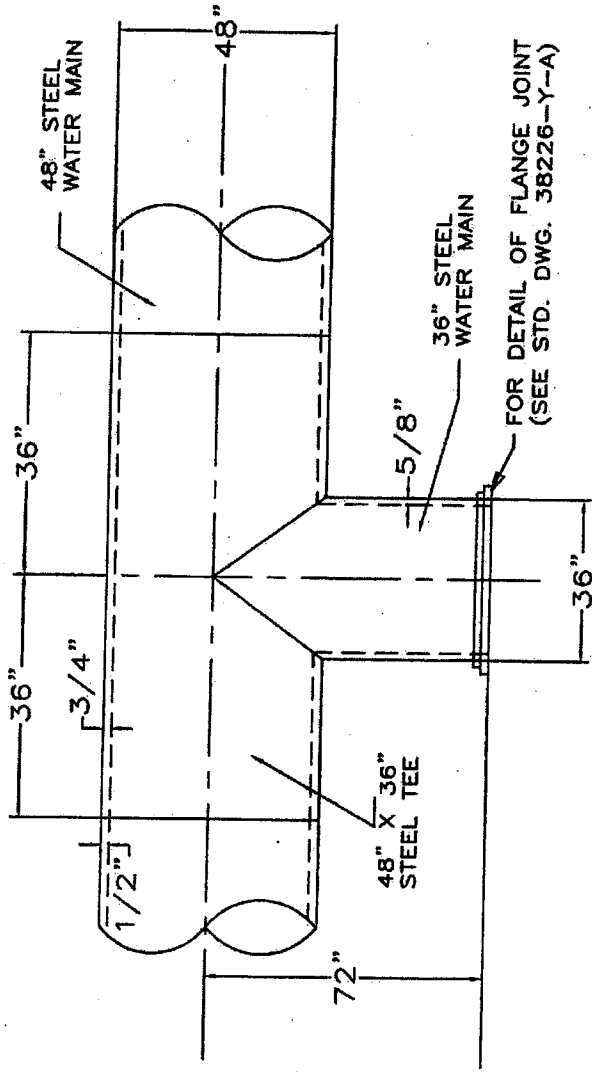
**THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID**



**MOHSEN ZARGARELAHI, P.E.**  
Assistant Commissioner

\_\_\_\_\_  
Name of Bidder

By: \_\_\_\_\_



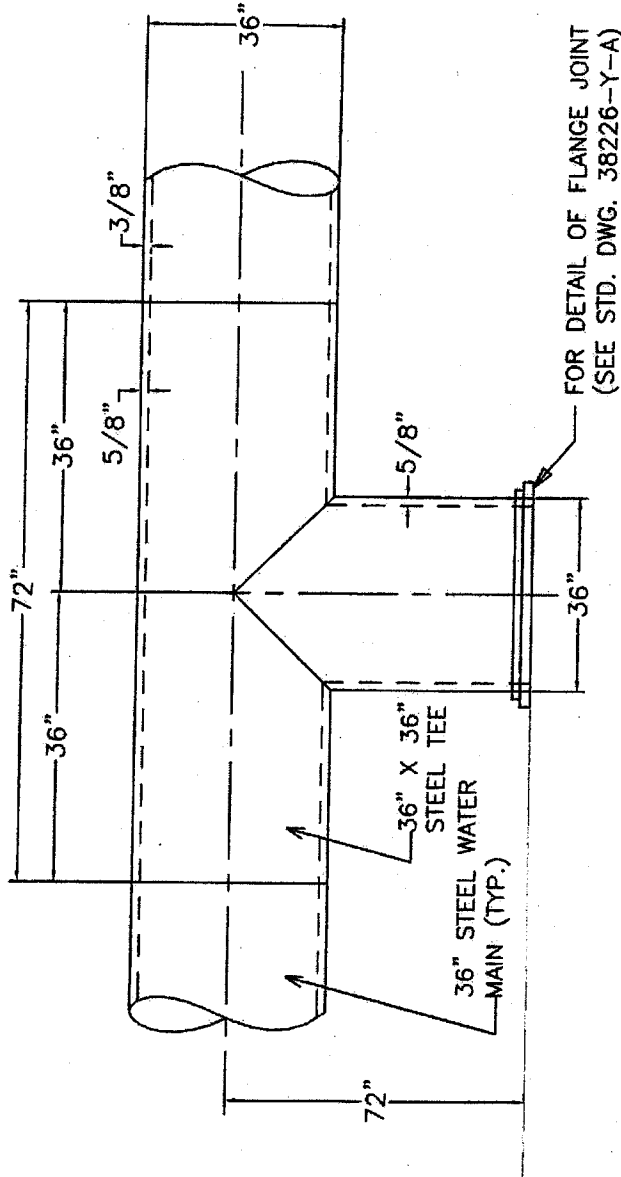
48" X 36" STEEL TEE  
"DETAIL A"

NOTE: SHOP DRAWING SHOWING  
 DIMENSIONS AND WELD  
 DETAILS SHALL BE  
 SUBMITTED TO THE  
 ENGINEER FOR APPROVAL  
 BEFORE FABRICATION

APPLY TO SHEET 22R/U1  
 N.T.S.

DETAIL A-- ADDENDUM NO. 9 PROJECT ID: HMMWTCAYE





NOTES:

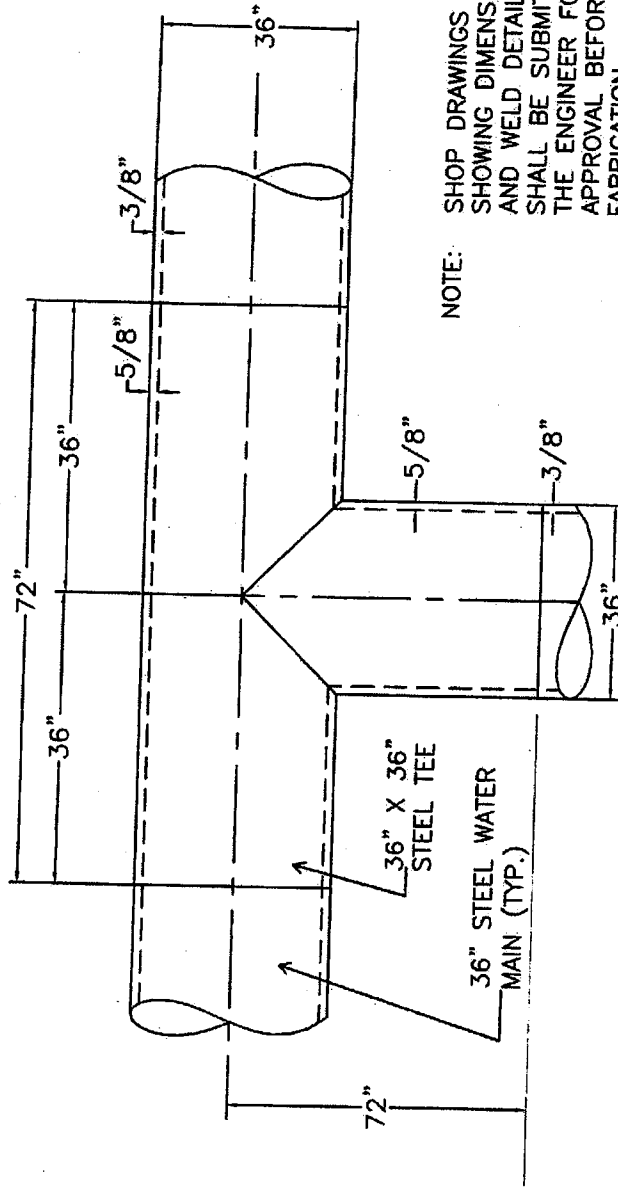
1. SHOP DRAWINGS SHOWING DIMENSION AND WELD DETAILS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE FABRICATION
2. NO SEPARATE PAYMENT WILL BE MADE FOR THE FLANGE JOINT. THE COST SHALL BE DEEMED INCLUDED IN THE PRICE BID FOR THE CONTRACT ITEM NO. 60.23ST36T36

36" X 36" STEEL TEE  
"DETAIL B"

APPLY TO SHEET 28/U7  
N.T.S.

PROJECT ID: HWMWTC7E

DETAIL B-- ADDENDUM NO. 9



NOTE: SHOP DRAWINGS  
SHOWING DIMENSIONS  
AND WELD DETAILS  
SHALL BE SUBMITTED TO  
THE ENGINEER FOR  
APPROVAL BEFORE  
FABRICATION

36" X 36" STEEL TEE, WITHOUT FLANGE JOINT  
"DETAIL C"

APPLY TO SHEET 24R/U3 & 28/U7

N.T.S.

DETAIL C- ADDENDUM NO. 9 PROJECT ID: HMAWTCATZ

**QUESTIONS SUBMITTED BY BIDDERS AND DDC RESPONSES**

**QUESTION # 1:** THE SEWER PROFILE ON CONTRACT DRAWING U-11 SHOWS A '24" R.C.P. COMBINED SEWER ON CONCRETE CRADLE', THERE ARE NO LINE ITEMS ON THIS CONTRACT FOR THIS ITEM. CAN YOU PLEASE CLARIFY THAT THE 24" RCP IS THE CORRECT MATERIAL THAT IS PLACED IN THIS AREA AND PLEASE CLARIFY WHICH ITEM IT WILL GET PAID UNDER?

**DDC'S RESPONSE:** REFER TO ADDENDUM NO. 8, ARTICLE 6 WHICH SUBSTITUTES A REVISED SHEET 32R/U11 FOR THE EXISTING SHEET 32/U11.

**QUESTION # 2:** THE SEWER PROFILE ON CONTRACT DRAWING U-11 SHOWS AN '18" E.S.V.P COMBINED SEWER', THERE ARE NO LINE ITEMS ON THIS CONTRACT FOR THIS ITEM. CAN YOU PLEASE CLARIFY THAT THE 18" ESVP IS THE CORRECT MATERIAL PLACED IN THIS AREA AND PLEASE CLARIFY WHICH ITEM IT WILL GET PAID UNDER?

**DDC'S RESPONSE:** REFER TO ADDENDUM NO. 8, ARTICLE 6 WHICH SUBSTITUTES A REVISED SHEET 32R/U11 FOR THE EXISTING SHEET 32/U11.

**Question # 3:** CONTRACT DRAWING C2 SHOWS A 'TYPE 2 CATCH BASIN' AT STA. 19+93, DRAWING U-2 SHOWS A 'TYPE 1 CATCH BASIN' IN THE SAME LOCATION. CAN YOU PLEASE CLARIFY WHICH TYPE OF BASIN IS TO BE INSTALLED IN THIS LOCATION?

**DDC'S RESPONSE:** REFER TO CONTRACT SHEET 13/C2, CATCH BASIN AT STATION 19+93 SHALL BE A 'TYPE 1 CATCH BASIN' AS PER ARTICLE 8 OF THIS ADDENDUM NO. 9 AND THE REVISED SHEET 23R/U2.

**QUESTION # 4:** CONTRACT DRAWING C1 SHOWS A 'TYPE 1 CATCH BASIN' AT STA. 12+95, DRAWING U-1 SHOWS A 'TYPE 2 CATCH BASIN' IN THE SAME LOCATION. CAN YOU PLEASE CLARIFY WHICH TYPE OF BASIN IS TO BE INSTALLED IN THIS LOCATION?

**DDC'S RESPONSE:** REFER TO CONTRACT SHEETS 12R/C1 AND 18/H1, CATCH BASIN AT STATION 12+95 SHALL BE A 'TYPE 2 CATCH BASIN' AS PER THE REVISED SHEET 22R/U1 AND ARTICLE 9 OF THIS ADDENDUM NO. 9.

**QUESTION # 5:** THERE IS A SIGNIFICANT DIFFERENCE BETWEEN THE QUANTITY FOR BID ITEM AND WHAT IS REALLY NEEDED FOR BID ITEM: 60.21SP3T36 - 36" STRAIGHT PIPE. THIS CAN IMPACT THE WAY PIPE IS BID VS. THEN SOLD LATER ON. IF A PIPE VENDOR THINKS THAT THE QUANTITY IS 4,775 LF, BUT ONLY SELLS 3,047 LF, BECAUSE OF THE QUANTITY DIFFERENCE, BECAUSE OF ECONOMY OF SCALE, HE WILL FIND HIMSELF UPSIDE DOWN IN HIS COSTS.

**DDC'S RESPONSE:** SEE ADDENDUM NO. 9, ARTICLES 1 THROUGH 5 FOR QUANTITY CHANGES.

**QUESTION # 6:** THE SPECIFICATIONS CALL FOR USING THE JOINT BIDDING SPECIFICATIONS AND SKETCHES FOR LOWER MANHATTAN ISSUED AUGUST 1, 2005. THERE IS A MORE CURRENT VERSION ACAILABLE. CAN YOU PLEASE VERIFY WHICH DATED VERSION OF THE ABOVE REFERENCED SPECIFICATION WE ARE TO USE?

**DDC'S RESPONSE:** THE SPECIFICATIONS DATED AUGUST 1, 2005 ARE THE LATEST VERISION.

**QUESTION # 7:** A DETAIL HAS BEEN ADDED FOR A 36" X 36" TEE, WELDED ON THE RUN PIPE AND FLANGED ON THE OUTLET PIPE. THERE ARE THREE 36" TEES BUT ONLY ONE OF THEM WILL BE FLANGED ON THE OUTLET AS SHOWN. ON SHEET 24R THERE IS A VAULT BUT IT IS TOO FAR AWAY FROM THE 36" LINE TO HAVE A FLANGE ON THE OUTLET. SHOULD THIS BE A WELDED OUTLET?

**DDC'S RESPONSE:** SEE ADDENDUM NO. 9, ARTICLE 11 FOR REVISED DETAIL.

**QUESTION # 8:** THERE ARE TWO TEES ON SHEET 28, ONE IS FLANGED ON THE OUTLET AS THE DETAIL SHOWS AND ONE IS NOT. SHOULD THERE BE A SECOND DETAIL SHOWING A TEE WITH A WELDED OUTLET?

**DDC'S RESPONSE:** SEE ADDENDUM NO. 9, ARTICLE 12 AND 11 FOR DETAILS.

**QUESTION # 9:**THE DETAIL ON SHEET 24R SHOWS THE 36" TEE WITH 3/8" WALLS. THIS WOULD TYPICALLY BE SHOWN WITH 1/2" WALLS. SHOULD THIS BE CHANGED TO 1/2" WALLS?

**DDC'S RESPONSE:** SEE ADDENDUM NO. 9, ARTICLE 11 FOR REVISED DETAIL.

**QUESTION # 10:**THE DETAIL THAT WAS ADDED ON SHEET 22R OF THE 48" X 36" TEE SHOWS THE WALL OF THE 48" TO BE 1/2" AND THE WALL OF THE 36" TO BE 3/8". THESE ARE TYPICALLY THICKER. SHOULD THIS BE 3/4" WALL ON THE 48" AND 1/2" WALL ON THE 36"?

**DDC'S RESPONSE:** SEE ADDENDUM NO. 9, ARTICLE 10 FOR REVISED DETAIL.

**QUESTION # 11:** A PARTIAL DBE WAIVER IS REQUESTED FOR THE DBE GOAL FOR THE ABOVE REFERENCED PROJECT TO BE AMENDED TO 9.50% OF THE PROJECT VALUE.

**DDC'S RESPONSE:** DDC DOES NOT GIVE PARTIAL DBE WAIVERS ON CONTRACT BIDS. THE CONTRACT AND BID WILL REMAIN AS HAS BEEN STATED IN THE ADVERTISEMENT AND BID PACKAGE.



ATTACH TO CONTRACT DOCUMENTS

THE CITY OF NEW YORK  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

FROM HUDSON STREET TO PARK ROW

INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

Together With All Work Incidental Thereto

BOROUGH OF MANHATTAN

CITY OF NEW YORK

ADDENDUM NO. 10

DATED: June 5, 2015

THIS ADDENDUM IS HEREBY MADE A PART OF THE CONTRACT DOCUMENTS

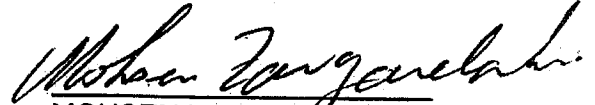
1. Refer to to the Bid and Contract Documents, Volume 3 of 3,  
Addendum No. 6, Page A6-33;  
Change the first Steam Qualified Contractor from "RCI Contracting"  
to "CAC Industries".
2. Refer to to the Bid and Contract Documents, Volume 3 of 3,  
Addendum No. 6, Page A6-33;  
Change the name and address of the first Steam Qualified  
Contractor
 

<u>From</u>	<u>To</u>
"Roadway Contracting Inc. 570 Gardner Ave Brooklyn, NY 11222 John Roman # 718-963-3500	CAC Industries 54-08 Vernon Blvd. Long Island City, NY 11101 Lavrov Dmitry # 718-729-3600"
2. See attached list of QUESTIONS SUBMITTED BY BIDDERS AND RESPONSES  
PROVIDED BY DDC for additional information.

**END OF ADDENDUM NO. 10**

By signing in the space provided below, the bidder acknowledges receipt of this  
Addendum consisting of one (1) page and one (1) page of attachments.

**THIS ADDENDUM MUST BE SIGNED BY ALL BIDDERS AND ATTACHED TO THEIR BID**



MOHSEN ZARGARELAHI, P.E.  
Assistant Commissioner

\_\_\_\_\_  
Name of Bidder

By: \_\_\_\_\_

**QUESTIONS SUBMITTED BY BIDDERS AND DDC RESPONSES**

**QUESTION # 1:** Please confirm that the bid items for the new steam work will be performed by the City Work Contractor for Worth Street.

**DDC'S RESPONSE:** *The Contractor may perform Con Edison gas and/or steam specialty work at their option, if they are Con Edison pre-qualified. If the Contractor elects not to perform the specialty work or if the Contractor is not Con Edison gas and/or steam qualified, then the Contractor shall subcontract the specialty work to Con Edison pre-qualified gas and steam contractors on page A6-33.*

**QUESTION # 2:** Please note that the costs listed for this work are lower than the actual cost by a factor of as much as 10.

**DDC'S RESPONSE:** *The price listed in the bid is for installation of the steam pipe with coating, insulation and housing only. The removal of asphalt, concrete, excavation, backfilling and restoration will be paid for under other contract items. The steel steam pipe will also be supplied by the utility (please refer to JB 620 and JB 621 for full list of materials provided by the utility). Please refer to JB 620 for the installation of the steam pipe (A6-26 to A6-27), JB 621 for installation of steam pipe fittings and units of measure (A6-28 to A6-29) and JB 625 for installation of steam equipment (A6-30 to A6-33). The approved contractors for steam are:*

a) **CAC Industries**  
54-08 Vernon Blvd,  
Long Island City, NY 11101  
Lavrov Dmitry  
(718)-729-3600

b) **Danella Construction**  
80 Business Park Dr.  
Suite 200  
Armonk, NY 10504  
John Mazzari  
914-403-2179







NEW YORK CITY DEPARTMENT OF  
DESIGN + CONSTRUCTION

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**INFRASTRUCTURE DIVISION  
BUREAU OF DESIGN**

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**VOLUME 3 OF 3**

PROJECT ID: HMMWTCA7E

RECONSTRUCTION OF WORTH STREET

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INCLUDING SEWER, WATER MAIN, STREET LIGHTING,  
TRAFFIC SIGNAL, AND PRIVATE UTILITIES WORK

Together With All Work Incidental Thereto  
BOROUGH OF MANHATTAN  
CITY OF NEW YORK

---

*Contractor.*

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Dated \_\_\_\_\_, 20\_\_\_\_

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