CITY OF NEW YORK
DEPARTMENT OF CORRECTION

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

North Infirmary Command (NIC) Main Building
Roof Replacement

PROCUREMENT IDENTIFICATION NUMBER
072201918CPD

Commissioner
Cynthia Brann

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PART A: INFORMATION FOR BIDDERS

DEPARTMENT OF CORRECTION

The pages in each Part of this document are numbered consecutively. Prospective Bidders must examine the documents carefully. Before bidding, prospective Bidders must notify the agency contact person listed in Section 7 below, in writing, if pages are missing and request that these missing pages be furnished to them.

1. DESCRIPTION OF PROCUREMENT

A. The description and location of the services to be performed are as follows:

This project is to provide construction for the Roof Replacement at the North Infirmary Command (NIC) Main Building located at Rikers Island as hereinafter described in these Technical Requirements. The Contractor who is awarded the subject Contract shall furnish all labor, materials, equipment, paving, tools, implements, rigging, hoisting, shoring, cutting and patching, waste disposal, transportation, testing, utility surveys and protection necessary and/or required to complete all required rehabilitation and construction services as described in these Technical Requirements.

B. The term for this service is**: 365 Consecutive Calendar Days.**

2. TIME AND PLACE FOR RECEIPT OF BIDS

A. The Department shall receive all sealed bids at the following location on or before the date and time set forth below:

Ava B. Rice
Assistant Commissioner
Agency Chief Contracting Officer New York City Department of Correction Central Office of Procurement
75-20 Astoria Blvd., Suite 160, Conf. Rm. B
East Elmhurst, New York 11370
Attention: Tariq Abu Touq

Wednesday, September 2, 2020 NO LATER THAN 10:00 AM

B. It is the Bidder's responsibility to assure that its bid is received at the bid location on or before the date and time of the scheduled bid opening and that the bid and all other documents requiring signature are signed and notarized.

C. The completed bid must be submitted in a sealed envelope on or before the time and at the place indicated above. The envelope must indicate:

(1) The name of the person, firm or corporation presenting the bid;

(2) The bid opening date;

(3) The PIN number; and

(4) The bid title.

D. Failure to comply with the instructions in this Section 2 may result in rejection of the bid.

3. PROCUREMENT POLICY BOARD RULES

This Bid document is subject to the Rules of the Procurement Policy Board of the City of New York ("PPB Rules") effective September 1, 1990, as amended from time to time. In the event of a conflict between said Rules and a provision of any of these bid documents, then the Rules shall take precedence. A copy of the rules may be obtained by contacting the agency contact person for this project, or online at http://www.nyc.gov/html/mocs/ppb/html/home/home.shtml

4. DEFINITIONS

The definitions set forth in the PPB Rules shall apply to this bid document.

5. BID DOCUMENTS

A. **Documents to be Included.** 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 bid documents.

(1) The Advertisement for Bids;

(2) The Information for Bidders;

(3) The Bid;

(4) The Contract;

(5) The Procurement Policy Board Rules;

(6) The Specifications and Description of the Work;

(7) The Contract Drawings;

(8) All addenda issued by the Department, regarding this request for bids, prior to the receipt of bids;

(9) All provisions required by law to be inserted in this Contract, whether actually inserted or not;

(10) Notice of Award;

(11) Insurance Documents;

(12) Performance and Payment Bonds; and

(13) Notice to Proceed with Work (*Also known as the Commence Work Letter*).

B. **General Conditions and Specifications.** 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 bid material, the Detailed Specifications/Scope of Work and the General Condition Parts, which are attached to these bid documents.

C. **Deposit for Copy of the Bid Documents.** Prospective Bidders may obtain a copy of the bid documents by complying with the conditions set forth in the Advertisement for Bids. A Bid Book deposit is $25 Dollars, must be in the form of a **United States Post Office money order** or a **certified check,** made payable to the order of the **Commissioner of Finance**, 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. **Additional Copies.** Additional copies of the bid documents may be obtained, subject to the conditions set forth in the advertisement for bids.

6. PRE-BID CONFERENCE

A. The Department shall hold a pre-bid conference on the date and time and at the location set forth below:

Monday, August 17, 2020 at 11:00 AM – Conference Line will available upon registration

B. Bidder attendance at this pre-bid conference is:

Mandatory **[ ]** Optional **[X] But Highly Recommended.**

Failure to attend a mandatory pre-bid conference shall be grounds for rejection of a bid.

C. Nothing stated at the pre-bid conference shall change the terms and conditions of the bid documents unless a change is made by a written amendment as provided in Section 8 below and in accordance with the PPB Rules.

D. Please notify the agency contact person listed in Section 7 below of the number of representatives from your firm that will attend the pre-bid conference when the bid solicitation documents are picked up.

7. AGENCY CONTACT

The agency contact person for this bid shall be:

NAME: **Tariq Abu Touq**
TITLE: **Contract Manager**
ADDRESS: **75-20 Astoria, Blvd., Suite 160**
East Elmhurst, New York 11370
PHONE: **(718) 546-0695**
FAX NO: **(718) 278-6276**

Any questions or correspondence relating to this bid solicitation shall be addressed to the agency contact person.

8. EXAMINATION OF PROPOSED CONTRACT

A. **Request for Interpretation or Correction.** Prospective Bidders must examine the Contract documents carefully and before bidding must request the ACCO in writing for an interpretation or correction of every patent or latent 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 ACCO may decide to include, will be issued in writing by the ACCO as an addendum to the Contract, which will be sent by mail or delivered to each person recorded as having received a copy of the Contract documents from the Agency Contact, and which also will be posted at the place where the Contract documents are available for the inspection of prospective Bidders. Upon such mailing or delivery and posting, 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 the Agency Chief Contracting Officer's Interpretation or Correction Binding.** Only the written interpretation or correction given by the ACCO 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.

9. FORM OF BID

A. Part B consists of the prescribed forms that must be submitted and must contain:

(1) The name, residence and place of business of the person(s) making the bid;

(2) The name of all persons interested therein, and if no other person is so interested, such fact must be distinctly stated;

(3) 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;

(4) A statement that no Council Member or other officer, employee or person whose salary is payable in whole or in 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;

(5) A statement that the Bidder is not in arrears to the City or to any agency upon a debt, contract or taxes, and is not a defaulter as surety or otherwise upon any obligation to the City or to any agency thereof, except as set forth in the bid.

10. BIDDER'S OATH

A. The bid shall be properly signed by an authorized representative of the Bidder and 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.

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

11. SITE VISIT

A. Pre-Bid Investigation: Where the work to be performed involves performance of services on City facilities, all Bidders are urged and expected to inspect the site where services are to be performed and to satisfy themselves as to all general and local conditions that may affect the cost of performance of the Contract. Bidders will be conclusively presumed to have full knowledge of any and all conditions on, about or above the site relating or affecting the performance of the work to be done under this Contract which were or should have been indicated to a reasonably

prudent bidder. In no event will a failure to inspect a site constitute grounds for withdrawal of a bid after opening or for a claim after award of the Contract.

B. Changed Conditions: 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 as 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, Contractor must notify the Commissioner immediately and before any such conditions are disturbed. If the Commissioner finds that the conditions do so materially differ, or that they could not reasonably have been anticipated by the Contractor and were not anticipated by the City, the Contract may be modified with the Commissioner's written approval.

12. 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 16 and 19 below.

13. ACKNOWLEDGMENT OF AMENDMENTS

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

14. 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.

15. PROPRIETARY INFORMATION/TRADE SECRETS

A. The Bidder shall identify those portions of its bid that it deems to be confidential, or include proprietary information or trade secrets, and shall provide justification why such materials should not be disclosed by the City. The Bidder shall clearly indicate all materials the Bidder desires to remain confidential 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 Department 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, models 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.

16. PRE-OPENING MODIFICATION OR WITHDRAWAL OF BIDS

A. A bid may be modified or withdrawn by written notice, received and signed for by the designated agency contact person in Part A, Paragraph 7, at the Central Office of Procurement, 75-20 Astoria Blvd., Suite 160, East Elmhurst, New York 11370, before the time and date set for the bid opening.

B. If a bid is withdrawn in accordance with this Section the bid security, if any, shall be returned to the Bidder.

17. BID EVALUATION AND AWARD

A. In accordance with the New York City Charter, the PPB Rules and the terms and conditions of the bid documents, this Contract shall be awarded, if at all, to the responsible Bidder whose bid meets the requirements and evaluation criteria set forth in the bid documents, and whose bid price is either the lowest responsive and responsible bid price, or, if the bid documents so state, the lowest responsive and responsible evaluated bid price. A bid may not be evaluated for any requirement or criterion that is not disclosed in the bid documents.

B. No negotiations with any bidder shall be allowed to take place except under circumstances and in the manner set forth below. 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 Bid if that bid is not also the most favorable bid.

C. Upon determination of the apparent lowest responsive and responsible bidder and prior to award, the ACCO may elect to open negotiations with the selected bidder in an effort to improve the bid to the City with respect to the price only. In the event the apparent lowest responsive and responsible bidder declines to negotiate, the Contracting Officer may elect to either award the contract to the apparent lowest responsive and responsible bidder, or may, upon written approval by the ACCO, reject all bids in accordance with the PPB Rules.

18. LATE BIDS, LATE WITHDRAWAL 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.

19. WITHDRAWAL OF BIDS

A. Except as provided for in Section 16 above, a Bidder may not withdraw its bid before the expiration of forty five (45) days after the date of opening of bids; thereafter, a Bidder may withdraw its bid only in writing and in advance of an actual award.

B. 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 its option, may ask to be relieved of its obligation to perform the work called for by written notice to the Commissioner. If such notice is given, and the request to withdraw is granted, the Bidder waives all claims in connection with this Contract.

20. MISTAKES IN BIDS

A. Mistakes 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 16 above.

B. Mistakes Discovered Before Award: In accordance with the PPB Rules, if a Bidder alleges a mistake in its bid after bid opening and before award, the bid may be corrected or withdrawn upon written approval of the ACCO if the following conditions are met:

(1) Minor Informalities. Minor informalities in bids are matters of form rather than substance evident from the bid document, or insignificant mistakes that can be corrected without prejudice to other Bidders; that is, the effect on price, quantity, quality, delivery, or contractual conditions is negligible. The ACCO may waive such informalities or allow the Bidder to correct them depending on which is in the best interest of the City.

(2) Mistakes Where Intended Correct Bid is Evident. 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 maynot be withdrawn.

(3) Mistakes Where Intended Correct Bid is Not Evident. Mistakes may not be corrected after bid opening. A bidder may be permitted to withdraw a low bid where a unilateral error or mistake has been discovered in the bid and the ACCO makes the following determination:

(a) the mistake was known or made known to the agency prior to bidder selection or within three days after the opening of the bid, whichever period is shorter;

(b) the price bid was based on an error of such magnitude that enforcement would be unconscionable;

(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;

(d) the error in bid is actually due to an unintentional and substantial arithmetic error or unintentional omission of a substantial quantity of work, labor, material, goods, 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 City in the same condition that had existed prior to the receipt of the bid.

A. Upon the approval of the ACCO, the bid may be withdrawn, and the bid bond or other security returned to the bidder. The contract shall either be awarded to the next lowest bidder or re-solicited pursuant to the PPB Rules. Under no circumstances shall a bid be amended or revised to rectify the error or mistake.

B. Mistakes Discovered After Award. Mistakes shall not be corrected after award of the Contract except where the ACCO, subject to the approval of City Chief Procurement Officer (CCPO), makes a determination that it would be unconscionable not to allow the mistake to be corrected.

C. Determinations Required. When a bid is corrected or withdrawn, or correction or withdrawal is denied, the ACCO shall prepare a determination showing that the relief was granted or denied in accordance with the PPB Rules.

21. TIED LOW BIDS

A. When two (2) or more low responsive bids from responsible Bidders are identical in price, meeting all the requirements and criteria set forth in the bid documents, the ACCO will break the tie in the following manner in 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 (2) or more Bidders still remain equally eligible after application of Section A above, the 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.

22. REJECTION OF BIDS

A. Rejection of Individual Bids. The ACCO may reject a bid if:

(1) The Bidder fails to furnish any of the information required pursuant to the bid documents; or if

(2) The Bidder is determined to be not responsible pursuant to the PPB Rules; or if

(3) The bid is determined to be non-responsive pursuant to the PPB Rules; or if

(4) The bid, in the opinion of the ACCO 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 such items, or if the imbalance is corrected pursuant to the PPB Rules.

B. Rejection of All Bids. The ACCO may reject all bids and may elect to re-solicit by bid or by other method authorized by the PPB Rules.

23. RIGHT TO APPEAL DETERMINATION OF NON-RESPONSIVENESS OR NON-RESPONSIBILITY AND RIGHT TO PROTEST SOLICITATION 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, pursuant to the PPB Rules.

24. AFFIRMATIVE ACTION AND EQUAL EMPLOYMENT OPPORTUNITY

The bid solicitation is subject to applicable provisions of Federal, State and Local Laws and executive orders requiring affirmative action and equal employment opportunity.

25. PASSPort (formerly know as VENDEX)

A. The Bidder shall file all disclosures and pay related fees, as applicable, in accordance with Admin. Code § 6-116.2, PPB Rule § 2-08, and the policies and procedures of the Mayor's Office of Contract Services. The Contractor acknowledges that the Department's reliance on the completeness and veracity of the

information stated in such disclosures is a material condition to the award of a contract. For information about required disclosures, please visit nyc.gov/passport.

B. The fee(s) will be deducted from payments made to the contractor under the contract. For contracts with an estimated value of less than or equal to $1,000,000, the fee will be $175. For contracts with an estimated value of greater than $1,000,000, the fee will be $350.

26. COMPLAINTS ABOUT 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 1005, New York, NY 10007.

27. BID PERFORMANCE AND PAYMENT SECURITY

A. General. The ACCO may require bid, performance or payment security, or all three (3), on any contract for goods or services (see Schedule "A" located in Part E).

B. Bid security. Each bid must be accompanied by bid security in an amount and type as specified in Schedule "A" (see Part E). The bid security shall assure the City of New York of the adherence of the Bidder to its bid, the execution of the contract and the furnishing of performance and payment bonds by the Bidder, if required. If a bid does not comply with the bid security requirements of this bid document, the bid may be rejected as non-responsive.

C. Bid security will be returned to bidders as follows:

(1) Within ten (10) days after the bid opening, the Comptroller will be notified to return the bid securities of all but the three (3) lowest Bidders. Within five (5) days after the award, the Comptroller will be notified to return the bid securities of the remaining two (2) 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 no Performance and Payment bonds are required, the Comptroller will be notified to return the bid security only after the sum retained under applicable provisions of the Contract equals the bid security.

(3) Where all bids are rejected, the Comptroller will be notified to return the bid security of all Bidders at the time of rejection.

D. Performance and Payment Security. The performance and payment security, if required in the bid documents and in the amounts specified in Schedule "A" (see Part E), shall be delivered by the Contractor to the City within ten (10) days after the receipt of a Notice of Award. If a Contractor fails to deliver the required performance and payment security, then the award shall be rescinded, its bid security shall be enforced and the award of the Contract may be made to the next lowest responsive and responsible Bidder or the Contract may be rebid.

E. **ACCEPTABLE SECURITY.** Acceptable security for bids, performance and payment shall be limited to:

(1) A one-time bond in a form satisfactory to the City;

(2) A bank-certified check or money order; or

(3) City bonds.

F. **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 bid documents (*see Part B*). Such bonds must have as surety thereunder, such company or companies as are approved by the City of New York and authorized to do business in the State of New York.

G. **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 bond.

28. INSURANCE

Bidders are advised that the insurance requirements herein are regarded as a material term of this Contract. During performance and up to the date of final acceptance, including any maintenance and guaranty period, the Contractor must effect and maintain with insurance companies authorized and licensed to do business in the State of New York, the types and amounts of insurance specified in Schedule "A" (See Part E) of this Invitation for Bids. Pursuant to Section 57 of the New York State Worker's Compensation Law, the bidder must submit proof of worker's compensation and disability benefits coverage to the ACCO prior to the execution of any contract resulting from this solicitation. ALL other required insurance documentation must also be submitted prior to commencement of work of this Contract.

29. FAILURE TO EXECUTE CONTRACT AND FURNISH SECURITY OR INSURANCE

If the successful Bidder fails to execute the Contract and furnish any required security and insurance, within (10) days after notice of the award of the Contract, the bid security of the

successful Bidder or so much thereof as shall be applicable to the amount of the award made, shall be forfeited and 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 reletting less the amount of such bid security. No plea of mistake in such accepted bid shall be available to the Bidder for the recovery of the bid security 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, body or group on this project, less the amount of the forfeited bid security.

30. SALES, EXCISE AND FEDERAL TRANSPORTATION TAXES

Unless this Contract indicates otherwise, the City is exempt from the payment of any sales, excise or Federal transportation taxes. The bid price must be exclusive of such taxes and shall be so construed.

31. BIDDER QUALIFICATIONS - EVIDENCE OF ABILITY AND FINANCIAL QUALIFICATIONS

A. Before or after Contract award, the City reserves the right to inspect the Bidder's plant or premises.

B. The Bidder shall, upon request, submit evidence that will prove to the satisfaction of the Commissioner that the Bidder is qualified and able to furnish the services on which it bid and perform the services in the manner and time specified in the Contract. The Bidder shall also furnish evidence that it has secured the necessary licenses, permits or certificates, required by any legislative or regulatory body having jurisdiction, to carry on the business of furnishing the services on which the bid was submitted.

C. The Bidder shall, upon request, provide complete financial statements prepared by a certified public accountant, which shall include without limitation, a certified balance sheet, revenue and expense sheet, fixed and capital assets, or other information concerning the Bidder's financial status for examination as may be required by the Department to ascertain Bidder's financial qualifications to perform the Contract.

D. Bids will be accepted from any firm that has been in the business of providing comparable service to that specified herein, for at least the previous **Three (3)** years prior to the submission of their bids. Bidders shall further certify that they have performed in a satisfactory or better manner during the above referenced time period. In addition, bidders shall certify that they employ a work force qualified to perform the specified services, as referenced in Part C.

E. For verification purposes, the lowest apparent responsive and responsible Bidder shall submit the following within five (5) business days of receipt of a request for such from the Department:

1. Documentation that the Bidder has been in business for at least the previous 3 years, performing comparable work;

2. Documentation that the Bidder is able to provide specially trained and qualified technicians to service/repair of chilled water riser utility equipment.

3. Business references from at least three clients having comparable premises, serviced by the Bidder, indicating that the work performed was of a satisfactory or better quality; and

4. Information such as resumes, that provides the names and experience of the Bidder's employees and management that will be responsible for the specified work. If new employees are hired during the term of this contract to perform services for this Contract, the Contractor shall be responsible for providing the aforementioned information about said employee(s) to the Department, within five (5) business days of their hiring. All such new hires shall meet the requirements set forth in Part C, if any.

F. If the evidence required in Sections 31(B) through 31(E) above is not furnished, or if, upon examination of such evidence or other inspection of the Bidder's plant or premises, it is found that the Bidder does not comply with the requirements set forth in this Contract, the Commissioner shall have the right to reject the bid in whole or in part. Should the non-compliance be discovered after the award is made, the Commissioner shall have the right to cancel and terminate this Contract and/or declare the Contractor in default, in addition to any other remedies provided by Contract or at law or equity.

G. In addition to any other requirement of this Contract, the Commissioner may request the Bidder to submit a sworn statement or submit to an oral examination setting forth such information as may be deemed necessary by the Commissioner to determine the Bidder's ability and responsibility to perform the work and supply the services in accordance with the Contract.

32. DEPARTMENT OF BUSINESS SERVICES, DIVISION OF LABOR SERVICES (EMPLOYMENT REPORT)

A. **Who Must File A Complete Employment Report:** In accordance with Executive Order No. 50 (1980), as modified by Executive Order No. 108 (1986) and its

implementing regulations, the filing of a completed Employment Report (ER) is a requirement of doing business with the City of New York if:

(1) The Bidder has been identified as the lowest Bidder for a supply or service Contract or his/her proposal for supplies or services has been accepted; and

(2) The Contract value exceeds fifty thousand dollars ($50,000); and

(3) The Bidder's firm employs fifty (50) or more people.

Each successful Bidder must file an ER if it meets each of these conditions. In addition, suppliers, subcontractors or vendors performing on the Contract who meet conditions (2) and (3) above, must also file an ER. The ER will be sent by the low bidder under separate cover.

B. Who must file a Less Than 50 Employees Certificate?

(1) Any Contractor or any of its facilities performing on the Contract that has fewer than fifty (50) employees, although the Contract value exceeds fifty thousand dollars ($50,000), need only submit a "Less Than 50 Employees Certificate."

(2) Any Subcontractor, supplier or vendor to the prime Contractor performing on the Contract and any of its facilities performing on the Contract which have fewer than fifty (50) employees, need only submit the "Less Than 50 Employee Certificate," even if the Subcontract value exceeds fifty thousand dollars ($50,000).

33. PROMPT PAYMENT

A. The Prompt Payment provisions set forth in the PPB Rules in effect at the time of this solicitation will be applicable to payments made under a Contract resulting from this solicitation. The provisions require the payment to Contractors of interest on payments made after the required payment date except as set forth in the PPB Rules.

B. The Contractor must 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.

C. Determinations of interest due will be made in accordance with the provisions of the PPB Rules.

34. BIDS SHALL BE TYPEWRITTEN OR WRITTEN LEGIBLY IN INK

A. Each Bidder shall submit its bid typewritten or written legibly in ink and shall sign the bid in ink. The signer shall initial in ink any and all erasures or alterations to the bid.

B. If the bid price has been materially altered, alterations must be initialed in ink by the Bidder. If the alteration has not been initialed in ink, and can be severed from the other items in the bid, then that particular item only may be considered non-responsive.

35. APPROVAL OF CONTRACT

A. This Agreement shall be neither binding nor effective unless and until it is registered with the Comptroller of the City of New York pursuant to the New York City Charter § 328.

B. The requirements of this Section shall be in addition to, and not in lieu of, any approval or authorization otherwise required for this Agreement to be effective and for the expenditure of City funds.

36. PERFORMANCE EVALUATIONS

The Contractor is subject to an annual performance evaluation to be conducted by the Agency pursuant to the PPB Rules.

37. BID SHEETS

Please use the Bid Sheets in Part B of this Invitation for Bids document for your unit price quotations and projected total costs for the term of the Contract.

38. MINORITY OWNED AND WOMEN OWNED BUSINESS ENTITY (M/WBE)

If the contract resulting from this Invitation for Bids will be subject to M/WBE participation requirements under Section 6-129 of the Administrative Code of the City of New York, as indicated by the inclusion of Schedule B – M/WBE Utilization Plan (Attachment A) and the Participation Goals indicated in Part I thereof, proposers must complete the Schedule B – M/WBE Utilization Plan and submit it with their proposal. Please refer to the Schedule B – M/WBE Utilization Plan and the Notice to All Prospective Contractors (Attachment A) for information on the M/WBE requirements established for this solicitation and instructions on how to complete the required forms. If the proposer intends to seek a full or partial waiver of the Participation Goals on the grounds described in Section 10 of the Notice to All Prospective Contractors, including but not limited to, proposer's intention to use its own forces to perform any or all of the required contract work would result in a failure to attain the Participation Goals, the proposer must request and obtain from the Agency a full or partial waiver of the Participation Goals (M/WBE Utilization Plan, Part III) in advance of proposal submission and submit the waiver determination with the proposal. Please note that if a partial waiver is obtained, the proposer is required to submit a completed Schedule

B-M/WBE Utilization Plan based on the revised Participation Goals in order to be found responsive.

39. NO BLASTING

Unless otherwise permitted in the Plans and/or Specifications, no blasting will be allowed. The Contractor shall use line drilling or other methods acceptable to DOC.

40. LABOR LAW

Section 220 of the New York State Labor Law requires payment of the prevailing rate of wages when a public agency contract involves the employment of laborers, workers, or mechanics and concerns a public work. Public works projects are, as a general matter, public construction projects.

Labor Law 231 requires prevailing wages to be paid to each service employee under a contract in which the "principal purpose" is to furnish services through the use of building service employees. Labor Law 230(1) defines "building service employee" or "employee" as "any person performing work in connection with the care or maintenance of an existing building, or in connection with the transportation of office furniture or equipment to or from such building, or in connection with the transportation and delivery of fossil fuel to such building." Labor Law section 231 does not require the payment of prevailing wages to service employees if the *principal purpose* of the contract is not to furnish services provided by building services employees.

41. IRAN DIVESTMENT ACT COMPLIANCE RIDER FOR NEW YORK CITY CONTRACTORS

A. 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") §103-9. 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:

(1) 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

(2) 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.

B. 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.

C. 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.

42. SUBCONTRACTOR REPORTING

A. As of March 2013 the City has implemented a new web based subcontractor reporting system through the City's Payee Information Portal (PIP), available at www.nyc.gov/pip. 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 that site. Additional assistance with PIP may be received by emailing the Financial Information Services Agency Help Desk at pip@fisa.nyc.gov.

B. In order to obtain subcontractor approval under Article 11 of Part D or Article 17 of the Standard Construction Contract and PPB Rule § 4-13, Contractor is required to list the subcontractor in the system. For each subcontractor listed, Contractor is required to provide the following information: maximum contract value, description of subcontractor work, start and end date of the subcontract and identification of the subcontractor's industry. 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.

C. Failure of the Contractor to list a subcontractor and/or to report subcontractor payments in a timely fashion may result in the Agency declaring the Contractor in default of the Contract and 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. For construction contracts, the provisions of Article15 of the Standard Construction Contract shall govern the issue of liquidated damages.

D. Contractor hereby agrees to these provisions.

PART B: BID FORMS

Section I: Bidder Information
Section II: Bidder Representations and Warranties
Section III: Bid Schedule of Prices and Signature of Bidder and Affidavit
Section IV: BIDDER'S IDENTIFICATION OF SUBCONTRACTORS- NOTICE TO BIDDERS
Section V: Tax Affirmation
Section VI: Iran Divestment Act Certification
Section VII Bid Bond

NOTICE

- Before bidding, Bidders must review, by personal examination or such other means as they may prefer, the nature and extent of the work required, detailed specifications, plans, agreement and location(s) of the proposed work. Bidders must determine and allow for all difficulties which may be encountered in the prosecution of the work.

FAILURE TO COMPLETE THIS PART B IN DETAIL WILL RESULT IN REJECTION OF YOUR BID

No Further Text on This Page.

The City of New York
Department of Correction
Bid for Furnishing All Labor and Material Necessary and Required For:

North infirmary Command (NIC) Main Building Roof Replacement.

PIN NUMBER: PIN: 072201918CPD

Date of Bid: TBD

I. BIDDER INFORMATION

Name of Bidder: _____

_____

Contact Person: _____

Address: _____

_____

Telephone Number: **(** **)** _____

Fax Number: **(** **)** _____

Type of Organization (Check one of the following boxes)

- o Individual
- o Unincorporated organization (e.g. partnership or joint-venture)
- o Corporation

Place of Business of Bidder: _____

STREET ADDRESS

_____

CITY **STATE** **ZIP CODE**

If Bidder is a Corporation

Corporate Tax ID Number: _____
Jurisdiction of Incorporation: _____
Year of Incorporation: _____

Names and Home Addresses of the Following Officers:

President:
NAME: _____
ADDRESS: _____

_____

Secretary:
NAME: _____
ADDRESS: _____
_____

Treasurer:
NAME: _____
ADDRESS: _____
_____

If Bidder is an individual
Residence of Bidder: _____
STREET ADDRESS
_____
CITY **STATE** **ZIP CODE**

***** Social Security Number: ____-____-____

** Under the Federal Privacy Act, 5 USC § 552a (1996), as amended from time to time, the furnishing of social security numbers on City Contracts is voluntary. Failure to provide a social security number will not result in a bidder's disqualification. The City will use social security numbers to identify bidders to ensure their compliance with laws, to assist the City in enforcement of laws and to provide the City with a means of identifying those businesses that seek City Contracts.*

If Bidder is a partnership
Employer Identification Number: _____

_____	_____
_____	_____
_____	_____

Names of Partners **Residence**

If Bidder is a Joint Venture
Employer Identification Number: _____

Names of Joint Venturers **Residence**

_____	_____
_____	_____
_____	_____

II. BIDDER REPRESENTATIONS AND WARRANTIES

Each of the above-named Bidders hereby certifies, affirms and declares:

A. This Bidder is of lawful age and the only one interested in this bid and that no person, corporation or organization other than hereinabove named has any interest in this bid or in the Contract.

B. The Bidder and each person bidding on the Bidder's behalf do hereby certify, under penalty of perjury, that to the best of each such persons knowledge and belief:

- ☐ 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 or potential competitor; and

- ☐ 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 the bid opening, directly or indirectly, to any other Bidder or to any competitor; and

- ☐ No attempt has been made or will be made by the Bidder to induce any other person, partnership, corporation or organization to submit or not to submit a bid for the purpose of restricting competition; and

- ☐ No member of the City Council, or other officer, 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; and

- ☐ This Bidder is not in arrears to the City of New York upon any debt, contract or taxes and is not a defaulter, as surety or otherwise, upon any obligations to the City of New York, and has not been declared not responsible, or disqualified by any agency of the City of New York or the State of New York, nor is there any proceeding pending relating to the responsibility or qualification of this Bidder to receive public contracts except

_____

_____

_____

_____

C. The Bidder has examined all parts of this Bid document, including but not limited to the Contract and the terms and conditions thereof, and if this bid is accepted as submitted, this Bidder shall execute the Contract as set forth herein.

D. This Bidder has inspected the site where the services are to be performed and is

satisfied as to all general and local conditions that may affect the cost of performance of the Contract.

E. This Bidder is duly licensed to do business in the City of New York and the State of New York and the Bidder currently holds or agrees to obtain all necessary permits and other authorization required by law or regulation for performance of the Contract.

F. This Bidder's attention has been specifically drawn to the equal employment provisions of the Contract and this Bidder warrants that it will comply with all the terms and provisions prescribed therein.

G. This 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 of this Contract:

☐ 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 220-e of the New York State Labor Law; and

☐ Have complied with the provisions of the aforesaid laws since its effective date; and

☐ Will post notices setting forth the requirements of the aforesaid laws, to be furnished by the City, 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 review them, and will continue to keep such notices posted until the supplies, materials, equipment, work labor and services required to be furnished or rendered by the Contractor have been finally accepted by the City.

H. 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 the Bidder is not disqualified under the provisions of Section 6-109 of the Administrative Code of the City of New York for the award of this Contract and that should this bid be accepted by the City and this Contract awarded to the Bidder, the Bidder and his subcontractors engaged in the performance of this Contract:

☐ Will comply with the provisions of Section 6-109 of the Administrative Code of the City of New York in relation to minimum wages and any other stipulations and rules and regulations applicable thereto; and

☐ Have complied with the provisions of said Section 6-109 and said rules and regulations since their respective enforcement date insofar as applicable to the bidder and to his subcontractors.

I. The Bidder as an individual, or as a member, partner, director or officer of the Bidder, by executing this document on behalf of such firm, partnership or corporation, represents and warrants that no payment, gift or thing of value has been made, given or promised to obtain this or any other Contract between the parties. The Bidder makes such representations and warranties to induce the City to enter into this Contract and the City relies upon such representations and warranties in the execution hereof. For breach or violation of such representations and warranties, the Commissioner shall have the right to annul this Contract without liability, entitling the City to recover all monies paid hereunder and the Bidder/Contractor shall not make claims for, or be entitled to recover any sum or sums due under this Contract. This remedy, if effected shall not constitute the sole remedy afforded the City for the falsity or breach nor shall it constitute a waiver of the City's right to claim damages or refuse payment or to take any other action provided for by law or pursuant to this Contract.

J. The Bidder has visited and examined the site of the work and has examined the Contract in the form approved by the Corporation Counsel, and will execute the Contract and perform all its items, covenants and conditions and will provide, furnish and deliver all work, materials, supplies, equipment and all labor and material necessary or required for the completion of the Contract work, all in strict conformity with the Contract, in accordance with the schedule of prices appended hereto.

K. The Bidder represents and warrants that it will not utilize tropical hardwoods as defined in Section 167-b of the New York State Finance Law in the performance of this Contract except as expressly permitted by the foregoing provisions of law.

All material fi tures supplies and equipment furnished under the Contract shall be new and unused e cept as approved by the Agency or as specified and of standard

first-grade quality and the best workmanship and design. The City encourages use of recycled products where practicable. The Engineer s Estimate of uantities included below is appro imate only and is not to be considered as a binding feature of the Contract. Bidders are required to submit their bids upon the following e press conditions which apply to and become part of every bid received. Bidders must satisfy themselves as to the accuracy of the foregoing estimate by personal examination of the location of the proposed work and surroundings thereof, and by such other means as they may prefer, and shall not, at any time after submission of their bids, dispute or complain of such estimate of Quantities of the Engineer's, nor assert that there was any misunderstanding in regard to quantity or kind of material to be furnished or work to be done. No error or misunderstanding of the Bidder shall affect the validity of the bid made or the Contract entered into hereunder.

The prices included in the bid sheets below are to be paid for the actual quantities of the several classes of Work covered in this Contract, and they cover the cost of all work, labor, material, tools, plant and appliances of every description necessary and required to complete the entire Work, as specified, and the removal of debris, temporary work and appliances. Should the dimensions of any part of the Work or the materials be less than those required by the Plans, the actual quantities only will be allowed for payment purposes.

Section III: Bid Schedule of Prices and Signature of Bidder and Affidavit

BID FORM

Grand Total Price shall include all costs and expenses, including but not limited to labor, material, overhead and profit for all the Work described and shown in the Drawings and Specifications.

ITEM A. LUMP SUM PRICE TO PERFORM THE WORK

In Item A, provide a bid price for all labor and material to complete the Work under this Contract.

Total Price for Labor	Total Price for Material	Total Price for Item A
$_____	$_____	$_____

GRAND TOTAL BID PRICE in figures: $_____ . ____.

GRAND TOTAL BID PRICE in words:

_____ DOLLARS and _____ CENTS.

The Contract shall be awarded to the qualified Bidder who submits the lowest responsive Total Bid Price, and who has been determined to be a responsible bidder.

BID BREAKDOWN

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

_____*X*___YES _____No

LIMITATIONS ON USE OF BID BREAKDOWN:

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

INSTRUCTIONS FOR PREPARING BID BREAKDOWN:

A. The Bid Breakdown is set forth on the following pages and is in accordance with the Construction Specification Institute (CSI) format. For all items of work listed in the Bid Breakdown, the bidder must indicate the price for labor and the price for material.

B. In preparing its Bid Breakdown, the bidder shall submit prices that include all costs for overhead and profit. Overhead shall include, without limitation, all costs in connection with the following: administration, management, superintendence, small tools, insurance, bonds, and provision of services or items required by the General Conditions.

C. If an item is set forth in the Bid Breakdown, but is not included in the Contract Documents (Drawings, Specifications, General Conditions, and/or Addenda), the bidder is advised to leave the item blank and exclude the cost of the item from its grand total. **In an attachment to its Bid Breakdown, the bidder shall provide a list of all items left blank**.

D. If an item is not set forth in the Bid Breakdown, but is included in the Contract Documents (Drawings, Specifications, General Conditions, and/or Addenda), the bidder is advised to add the item to its Bid Breakdown and include the cost of the item in its grand total. **In an attachment to its Bid Breakdown, the bidder shall provide a list of all items added.**

BID BREAKDOWN SHEETS

ITEM A. LUMP SUM PRICE TO PERFORM THE WORK

CSI Number	Description	Total Cost of Material	Total Cost of Labor	Total Cost: Materials and Labor
DIV 02[1]	**EXISTING CONDITIONS**			
DIV 03	**CONCRETE**			
DIV 04	**MASONRY**			
DIV 05	**METALS**			
DIV 06	**WOOD, PLASTICS, AND COMPOSITES**			
DIV 07	**THERMAL AND MOISTURE PROTECTION**			
DIV 08	**OPENINGS**			
DIV 09	**FINISHES**			
DIV 22	**PLUMBING**			
DIV 23	**HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)**			

[1] Division 01 specifications are intentionally omitted from the breakdown sheet. Bidders are instructed to incorporate Division 01 costs into their breakdowns for the other Specification divisions.

CSI Number	Description	Total Cost of Material	Total Cost of Labor	Total Cost: Materials and Labor
DIV 26	**ELECTRICAL**			
	TOTAL ITEM A	$ _____		

Bid Breakdown Total Item A **NOTE: This is not the bidder's bid price. This bid breakdown total is for bid analysis purposes only.**	$_____

List of Items <u>Left Blank</u> in the Bid Breakdown (if any):

List of Items <u>Added</u> to the Bid Breakdown (if any):

Notes:

(1) For further explanations of the above cost, see the appropriate sections of Part C, Detailed Specifications / Scope of Work.

(2) The bidder shall not alter the bid format from that required herein. Any such alterations of the bid format will result in a determination of the respondent being "nonresponsive".

(3) Inclusion of disclaimers which contradict the requirements of this Invitation to Bid will also result in a determination of the respondent being "nonresponsive".

Bidder's Company Name:

_____

Bidder's Representative:

_____

(Print Name) (Title)

Signature of Bidder's Representative:

_____ **Notes:**

E-mail address:

_____

Date: _____

SIGNATURE OF BIDDER AND AFFIDAVIT

Name of Bidder: _____

By: _____
Partner or Authorized Corporate Officer

_____
Print Name

_____
Print Title

Date: _____

FOR CORPORATIONS ONLY: (Corporate Seal):

ATTEST: _____
Secretary of Corporate Bidder

Affidavit on following page must be subscribed and sworn to before a Notary Public.

AFFIDAVIT

STATE OF NEW YORK, COUNTY OF _____ ss:
_____ being duly sworn, says:

Note to Bidders: *Choose only one (1) of the following three (3) options.*
(*Check box and complete*)

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

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

o Unincorporated Organization (*e.g. Partnership or Joint Venture*) Bidder:
I am a member of _____, the unincorporated organization described in and which executed the foregoing bid. I subscribed the name of the unincorporated organization thereto on behalf of such organization and the several matters therein stated are in all respects true.

_____
(*Signature of the person who signed the bid*)

Print Name: _____ Print Title: _____

Subscribed and sworn to before me this _____ day of _____, 20____.

_____
Notary Public

IV. BIDDER'S IDENTIFICATION OF SUBCONTRACTORS

NOTICE TO BIDDERS

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

****

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

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

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

All listed subcontractors must be used to perform the work identified on this form for the amount listed. The listed subcontractors are not alternatives to each other. The list of subcontractors is to be submitted in a separate sealed envelope by completing the form 'Bidders Identification of Subcontractors' for any subcontractors intended to be used in any of the three trades listed above. If bidder intends to use its own forces for any of the above listed work, bidder should complete this form using its own name.

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

PLEASE NOTE: for any contract that is subject to M/WBE Participation Goals under Local Law 1 of 2013, if the bidder's intention to use its own forces to do any of the above-referenced work would result in Bidder's failure to attain the Target Subcontracting Percentage identified in Schedule B (Subcontractor Utilization Plan), the bid will be non-responsive unless the bidder requests and obtains a Waiver of Target Subcontracting Percentage (Schedule B, Part III) in advance of bid submission. Failure to submit the completed 'BIDDERS IDENTIFICATION OF SUBCONTRACTORS' form that includes the names of subcontractors and the agreed upon amounts to be paid to such subcontractors will render the bid non-responsive.

After the low bid is announced, the sealed 1ist submitted by the low bidder will be opened and the names or the subcontractors will be announced. The sealed lists of subcontractors submitted by all other bidders shall be maintained by the Agency unopened unless such bidder shall become the low bidder (e.g., the initial low bidder

is found non-responsive). All unopened lists of subcontractors shall be returned to the bidders unopened after contract award, unless the bidder has given the agency permission to shred the form.

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

BIDDER'S IDENTIFICATION OF SUBCONTRACTORS

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

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

1. PLUMBING CONTRACTOR: Description of Plumbing Work:

   _____
   (Print Name)
   Agreed amount to be paid Subcontractor:
   $ _____

2. HVAC CONTRACTOR: Description of HVAC Work:

   _____
   (Print Name)
   Agreed amount to be paid Subcontractor

3. ELECTRICAL CONTRACTOR: Description of Electrical Work:

   _____
   (Print Name)
   Agreed amount to be paid Subcontractor

BIDDER'S SIGNATURE: The Bidder must sign and complete this form in the spaces provided below:

_____ _____

(Bidder's Signature) (Print Name)

_____ _____

(Address) (Title)

_____ _____

Phone # _____ (Date) _____

Fax # _____

V. TAX AFFIRMATION

The undersigned Bidder affirms and declares that said Bidder is not in arrears to the City of New York upon debt, contract or taxes and is not a defaulter, as surety or otherwise, upon any 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 proposer or Bidder to receive public contracts except

_____

Full name of Bidder: _____
Address: _____
City: _____ State: _____ Zip Code: _____

CHECK ONE BOX AND INCLUDE APPROPRIATE NUMBER:

A. o Individual or Sole Proprietorship *****
SOCIAL SECURITY NUMBER**:** ---------- _____

B. o Partnership, Joint Venture or other Non-Incorporated Organization.
EMPLOYER IDENTIFICATION NUMBER ---------- _____

C. o Corporation (*If a corporation place seal below*) EMPLOYER IDENTIFICATION NUMBER ---------- _____

By: _____
Signature **Title**

If a corporation place seal here:

***** Under the Federal Privacy Act, 5 USC § 552a (1996), as amended from time to time, 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 businesses which seek City Contracts.

VI. BIDDER'S CERTIFICATION OF COMPLIANCE WITH IRAN DIVESTMENT ACT

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

[*Please Check One*]

BIDDER'S CERTIFICATION

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

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

Dated:

_____, New York
_____, 20__

_____
SIGNATURE

_____
PRINTED NAME

_____
TITLE

Sworn to before me this
_____day of_____, 20____

_____
Notary Public

Dated

VII. BID BOND FORMS

1. Each executed Bid Bond shall be accompanied by:

a) appropriate acknowledgments of the respective parties; and

b) an appropriate duly certified copy of the Power of Attorney or other certificate of authority where the bond is executed by agent, officer or other representative of the Principal and Surety; and

c) a duly certified extract from the by-laws or resolution of Surety under which Power of Attorney or other certificate of authority of its agent, officer or representative was issued; and

d) a duly certified copy of the latest published financial statement of assets and liabilities of the Surety.

2. Affix Acknowledgments and Justification of Sureties.

BID BOND FORM

WE _____

_____

_____hereinafter

referred to as the "Principal," and _____

_____

_____

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

_____

($_____) Dollars, lawful money of the United States of America, 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 bid, hereby made a part hereof, to enter into, a contract in writing for

_____

_____

_____

_____.

NOW, THEREFORE, the conditions of this obligation are such that if the Principal shall not withdraw said bid 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 bid by the City the Principal shall:

A. Within ten (10) days after notification by the City, execute in triplicate 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 bid as accepted, and

B. Furnish a Performance Bond and a Payment Bond, as may be required by the City for the faithful performance and proper fulfillment of the 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 Contract created by the acceptance of the bid as provided in the Information for Bidders, which is incorporated herein by reference or if the City shall reject the aforesaid bid then this obligation shall be null and void; otherwise it remains in full force and effect and the Surety shall fulfill its obligations under this Bid Bond.

In the event that the Principal's bid shall be accepted by the City and the Contract awarded to him, then 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 under this Bid Bond shall in no event exceed the penal amount of this bid as stated herein.

In the event that the City accepts the Principal's bid, and either a Performance Bond, Payment Bond or both will not be required by the City on or before the thirtieth day after the date on which the City signs the Contract, there shall be no liability under the Bid Bond as to such Performance Bond or Payment Bond.

The Surety, for 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 bid, or by any waiver by the City of any of the requirements in the bid documents. 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 this_____day of_____, 20_**.**

_____(LS)
Principal

Seal) By: _____

_____
Surety

(Seal) By: _____

ACKNOWLEDGMENT OF CONTRACTOR—IF A CORPORATION

State of_____ County of_____ ss:

On this____day of_____, 20__, before me personally appeared _____ _____to me known, who being by me duly sworn, did depose and say that he /she resides at_____, that he/she is the_____of _____ _____, ____the corporation described in and which executed the foregoing instrument; that he/she knows the seal of said corporation; that one of the seals affixed to said instrument is such corporate seal; that it was so affixed by order of the directors of said corporation, and that he/she signed his/her name thereto by like order.

_____

Notary Public

ACKNOWLEDGMENT OF CONTRACTOR—IF A PARTNERSHIP

State of_____ County of_____ ss:

On this____day of _____, 20_, before me personally appeared _____ _____to me known and known to me to be a member of the firm of _____ the firm described in and who executed the foregoing instrument and he/she acknowledged to me that he/she executed the same as and for the act and deed of said firm.

_____

Notary Public

ACKNOWLEDGMENT OF CONTRACTOR—IF AN INDIVIDUAL

State of_____ County of_____ ss:

On this_____ day of_____, 20__, before me personally appeared

_____

to me known and known to me to be the person described in and who executed the foregoing instrument and he/she acknowledged to me that he/she executed same for the purpose herein mentioned.

_____

Notary Public

PART C: DETAILED SPECIFICATIONS/SCOPE OF WORK

(Note: See also Part E and Schedule "A" which contains the bonding and insurance requirements)

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PART C

DETAILED SPECIFACTIONS/ SCOPE OF WORK

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SECTION 013100 - PROJECT MEETINGS

PART 1 - GENERAL

1.01 INITIAL JOB MEETING

A. NYCDOC's Representative will notify all parties concerned of the time and place of the initial job meeting.

1.02 CONSTRUCTION PROGRESS MEETINGS

A. Progress meetings may be held as often as every two (2) weeks and will be held at a time and place agreed upon by NYCDOC's Representative as per Section II, A: Construction Services. Other interested parties may attend when needed, e.g., subcontractors and representatives from suppliers, public utilities, and local government.

B. The meetings will be conducted by NYCDOC's Representative for the following purposes:
   1. Review job progress, quality of Work, and approval and delivery of materials.
   2. Identify and resolve problems which impede planned progress.
   3. Coordinate the efforts of all concerned so that the project progresses on schedule to on time completion.
   4. Maintain a sound working relationship between the Contractor and NYCDOC's Representative and a mutual understanding of the project requirements.
   5. Maintain sound working procedures.

1.03 PRE-INSTALLATION MEETINGS

A. Pre-installation meetings will be held to review the specifications, drawings and approved submittals in preparation for start of a particular activity.

B. The meetings shall be attended by NYCDOC's Representative and the Contractor's Representative, including installer and representatives of manufacturers & fabricators involved in or affected by the installation and its coordination with other materials/trades.

C. NYCDOC's Representative shall schedule the meetings prior to the start of the work. The goal of these meetings is to ensure the quality of construction and to maintain the schedule.

1.04 ATTENDANCE

A. A Contractor's Representative shall be required to attend all meetings scheduled by NYCDOC's Representative.

B. The Contractor's Representative shall be a competent supervisor familiar with the work and have authority to act for the Contractor.

C. If the Contractor's Representative fails to attend 2 scheduled meetings without prior approval, the Contractor will be directed to replace the current Contractor's Representative. Further incidents of non-attendance by the Contractor's Representative, will form the basis for review of the Contractor's responsible bidder status.

END OF SECTION

SECTION 013300 - SUBMITTALS

PART 1 GENERAL

1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

A. Other requirements pertaining to submittals are included in the General Conditions and in various sections of the Specifications.

1.02 DEVIATIONS FROM REQUIREMENTS OF THE CONTRACT DOCUMENTS

A. If, for any reason, the Contractor has cause to believe that work in addition to that specified herein is required to put any or all of the subject systems in satisfactorily operating condition, then the Contractor is to notify the Engineer of the work entailed and the reason the Contractor believes such additional work is required. The Contractor is to proceed with the additional work only if written direction from the Department is provided. The written direction must be in the form of an approved change order.

The Contractor is to note that all work performed under this Contract, including additional change order work, is subject to audit by the City.

1.03 SUBSTITUTIONS

A. Whenever a product is specified by brand name, a substitute brand, equal to that named, may be submitted for approval subject to the requirements under Section II, B: Materials and Required Submissions.

1.04 SHOP DRAWINGS

A. Submit 6 copies of each shop drawing required by the Specifications. Show the information, dimensions, connections, and other details necessary to insure that the shop drawings accurately interpret the Contract Documents. Show adjoining construction in such detail as required indicating proper connections. Where adjoining connected construction requires shop drawings or product data, submit such information for approval at the same time so that connections can be accurately checked.

B. The shop drawings will be reviewed and 2 stamped copies returned. If returned copies are stamped “DISAPPROVED” or “RETURNED FOR CORRECTION”, promptly resubmit 6 copies of shop drawings meeting Contract requirements.

1.05 PRODUCT DATA

A. Submit 6 copies of each item of product data required by the Specifications. Modify product data by deleting information that is not applicable to the project or by

marking each copy to identify pertinent products. Supplement standard information, if necessary, to provide additional information applicable to the project.

B. The product data will be reviewed and 2 stamped copies returned. If returned copies are stamped "DISAPPROVED" or "RETURNED FOR CORRECTION", promptly resubmit 6 copies of product data meeting Contract requirements.

1.06 PAYMENT SUBMITTAL

A. Prepare and submit an application for payment as directed by DOC-Construction Management Unit. Payments will be made based on the determination of percentage of Work completed unless otherwise directed by NYCDOC's Representative and/or the Contracting Officer.

1.07 SUBMITTAL REQUIREMENTS

A. Identify all submittals by project title and number. Include Contractor's name, date, and revision date. On shop drawings, product data, and samples, also include name of supplier and subcontractor (if any), and applicable specification section number. Stamp each submittal and initial or sign the stamp to certify review and approval of submittal.

B. If a submittal is based on, or the result of, a change order or field order to the Contract documents include copies of applicable change order or field order with the submittal.

C. Transmit each submittal to:

Mr. Hardee Saini
Project Manager / Design Unit
NYC Department of Correction
75-20 Astoria Boulevard, Suite 160
East Elmhurst, NY 11370

Attn: Mr. Andrew Bowie
DOC Construction Mgt. Unit
640 Mandanici Road
Rikers Island
East Elmhurst, NY 11370

D. Send one additional copy of each transmittal letter to NYCDOC's Representative at the site.

END OF SECTION

SECTION 013513 - SPECIAL PROJECT PROCEDURES FOR DETENTION FACILITIES

PART 1 - GENERAL

SCHEDULE 0 - RELATED DOCUMENTS

PRODUCT DATA SHEET 0 - Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

SCHEDULE 1 - SUMMARY

PRODUCT DATA SHEET 0 - Section includes special procedures for detention work.

PRODUCT DATA SHEET 1 - Detention work required by, but not specified in, this Section includes the following:

1. Section 083463 "Detention Doors and Frames."
2. Section 087163 "Detention Door Hardware."

SCHEDULE 2 - INFORMATIONAL SUBMITTALS

PRODUCT DATA SHEET 0 - Coordination Drawings: Prepare and submit Project-specific coordination drawings, drawn to scale, on which the following items are shown and coordinated with each other, using input from Installers of the items involved. Address the following, as applicable:

1. Refer to individual Sections for specific coordination drawing requirements for products and equipment.
2. Show relationship of components shown on separate Shop Drawings.
3. Show dimensions and clearances of interrelated detention work.
4. Provide templates and patterns.
5. Indicate required operation sequences of interrelated detention work.
6. Indicate required installation sequences.
7. Include information necessary for interface with other trades and building components.
8. Refer to special construction, plumbing, electrical, communications, and electronic safety and security Sections for specific coordination drawing requirements for required installations.

PRODUCT DATA SHEET 1 - Qualification Data: For qualified Detention Specialist to demonstrate capabilities and experience. Include list of completed projects with project names and addresses; names, addresses, and telephone numbers of architects, owners, and contractors; and date of occupancy by Owner.

PRODUCT DATA SHEET 2 - Examination reports documenting inspections of substrates, areas, and conditions.

PRODUCT DATA SHEET 3 - Field quality-control reports.

PRODUCT DATA SHEET 4 - Field quality-control certification, signed by Contractor and Detention Specialist.

SCHEDULE 3 - QUALITY ASSURANCE

PRODUCT DATA SHEET 0 - Detention Specialist Qualifications: An experienced Installer of detention products and equipment who has completed detention work installations similar in material, design, and extent to that indicated for Project and whose work has resulted in construction with a record of successful in-service performance.

1. Experience: No fewer than five completed detention projects (jails or prisons) that have been in operation for a minimum of five years.

    a. Experienced in administration and supervision of detention work, including mechanical and electrical detention work, and integration of its various components.

SCHEDULE 4 - DETENTION SPECIALIST

PRODUCT DATA SHEET 0 - Detention Specialist: Subject to compliance with requirements, available detention specialists include, but are not limited to, the following:

1. Maximum Security Products Corp.
2. Southern Folger Detention Equipment.

PRODUCT DATA SHEET 1 - Responsibilities:

1. Detention work coordination.
2. Administrative procedures.
3. Examination.
4. Field quality control.
5. Demonstration.

SCHEDULE 5 - DETENTION WORK COORDINATION

PRODUCT DATA SHEET 0 - Coordinate detention work to ensure efficient and orderly installation and proper operation of each part of detention work. Coordinate detention work that depends on separate entities for proper installation, connection, and operation.

1. Develop special procedures required for coordination of detention work.
2. Coordinate installation of different detention components to ensure maximum accessibility for required maintenance, service, and repair.

PRODUCT DATA SHEET 1 - Coordinate selection of detention products and equipment and ensure compatibility.

PRODUCT DATA SHEET 2 - Verify qualifications of detention lock Installer specified in other Sections.

PRODUCT DATA SHEET 3 - Coordinate installation of products furnished by Owner.

PRODUCT DATA SHEET 4 - Assemble and coordinate Shop Drawings, work submittals, and applicable coordination drawings for detention work provided by separate entities responsible for detention work. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.

PRODUCT DATA SHEET 5 - Detention Work Subschedule: Coordinate sequencing and scheduling of detention work. Prepare a subschedule to Contractor's construction schedule for detention work. Base subschedule on preliminary construction schedule. Secure time commitments for performing critical construction activities from separate entities responsible for detention work.

1. Schedule construction operations in sequence required to obtain best results where installation of one part of detention work depends on installation of other components, before or after its own installation.
2. Coordinate sequence of detention work activities to accommodate tests and inspections.

PRODUCT DATA SHEET 6 - Coordinate installation of anchorages and embedments for detention work. Obtain and distribute, to parties involved, setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

PRODUCT DATA SHEET 7 - Coordinate type of security fasteners for detention work so no more than two different sets of tools are required to operate security fasteners for entire Project. Coordinate submittal of extra fasteners and tools for maintenance material submittals.

PRODUCT DATA SHEET 8 - Check Shop Drawings of other work to verify that adequate provisions are made for locating and installing detention work to comply with indicated requirements.

PRODUCT DATA SHEET 9 - Coordinate temporary facilities and controls required by detention work.

PRODUCT DATA SHEET 10 - Coordinate, schedule, and approve interruptions of existing utilities related to maintaining existing levels of security, including those necessary to make connections for temporary services.

1. Provide information necessary to adjust, move, or relocate existing detention utility structures affected by detention work.
2. Locate connection points to existing detention utility systems.

PRODUCT DATA SHEET 11 - Coordinate protection of detention work.

PRODUCT DATA SHEET 12 - Coordinate preparation of Project Record Documents for detention work and integrate information from entities responsible for detention work to form one combined record.

PRODUCT DATA SHEET 13 - Coordinate preparation of operation and maintenance manuals for detention work and integrate information from entities responsible for detention work to form one combined record.

SCHEDULE 6 - ADMINISTRATIVE PROCEDURES

PRODUCT DATA SHEET 0 - Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of detention work. Such administrative activities include, but are not limited to, the following:

1. Preparation of detention work subschedule for Contractor's construction schedule.
2. Installation and removal of temporary facilities and controls for detention work.
3. Delivery and processing of detention work submittals.
4. Preinstallation conferences for detention work.
5. Project closeout activities for detention work.

PRODUCT DATA SHEET 1 - Notifications: Prepare memoranda for distribution to each party involved with detention work, outlining special procedures required for coordination of detention work. Include such items as required notices, reports, and attendance at meetings.

PRODUCT DATA SHEET 2 - Coordination Meetings: Conduct coordination meetings specifically for detention work at regular intervals appropriate to the pace of work (minimum once per week). Coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.

1. Attendees: In addition to representatives of Owner and Contractor, each subcontractor, supplier, installer, and other entity concerned with progress or involved in planning, coordination, or performance of future detention work activities shall be represented at these meetings. All participants at meetings shall be familiar with Project and authorized to conclude matters relating to detention work.
2. Agenda: Review and correct or approve minutes of previous detention work coordination meeting. Review other items of significance that could affect progress of detention work. Include topics for discussion as appropriate to status of Project.

    a. Contractor's Construction Detention Work Subschedule: Review progress since last detention work coordination meeting. Determine whether each schedule item is on time, ahead of schedule, or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are

required to ensure that current and subsequent activities will be completed within the Contract Time.

b. Schedule Updating: Revise Contractor's construction detention work subschedule after each detention work coordination meeting where revisions to schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.

c. Review present and future needs of each entity present, including the following:

1) Detention work interface requirements.
2) Sequence of detention work operations.
3) Status of detention work submittals.
4) Access to detention work.
5) Temporary facilities and controls required by detention work.
6) Quality and work standards of detention work.
7) Change Orders for detention work.

3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

SCHEDULE 0 - EXAMINATION

PRODUCT DATA SHEET 0 - Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of detention work.

1. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of detention work.

PRODUCT DATA SHEET 1 - Verify locations of detention work with those indicated on coordination drawings.

PRODUCT DATA SHEET 2 - Proceed with installation only after unsatisfactory conditions have been corrected.

SCHEDULE 1 - FIELD QUALITY CONTROL

PRODUCT DATA SHEET 0 - Inspect installed detention work to verify compliance with requirements and that work is installed and connected according to the Contract Documents.

PRODUCT DATA SHEET 1 - Verify that wiring installation complies with manufacturer's submittal and written installation requirements in electrical, communications, and electronic safety and security Sections.

PRODUCT DATA SHEET 2 - Observe installation and startup checks of detention work according to manufacturer's written instructions.

PRODUCT DATA SHEET 3 - Testing: After installing detention work, test for compliance with requirements.

1. When testing reveals detention work does not comply with requirements, perform additional random testing to determine extent of noncompliance.
2. Where test results indicate that detention work does not comply with specified requirements, retest after repairs or replacements are made.
3. Perform additional testing and inspecting, at Contractor's expense, to determine compliance of replaced or additional work.

PRODUCT DATA SHEET 4 - Inspection Reports: Prepare inspection reports and indicate compliance with and deviations from the Contract Documents.

1. Perform additional inspections to determine compliance of replaced or additional work.

PRODUCT DATA SHEET 5 - Field Quality-Control Certification: Prepare field quality-control certification endorsed by Detention Specialist that states installed detention work complies with requirements in the Contract Documents.

SCHEDULE 2 - DEMONSTRATION

PRODUCT DATA SHEET 0 - Train, or where indicated engage a factory-authorized service representative to train, Owner's personnel to adjust, operate, and maintain detention products and equipment. Coordinate, schedule, and approve training.

END OF SECTION

014000 QUALITY REQUIREMENTS

PART 1 - GENERAL

1.01 Summary

A. This Section includes administrative and procedural requirements for the following:

1. Qualifications of entities involved in the Project.
2. Regulatory requirements, industry standards, and utility requirements.
3. Quality control tests and inspections.

B. Comply with Section 014339 (Mockups and Physical Quality Assurance Aids) for physical quality assurance aids.

1.02 Definitions

A. Quality Assurance Terms:

1. Experienced: When used with an entity, "experienced" means having a minimum of three (3) consecutive years experience of successfully completing previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction. Where applicable, for historical restoration Work, such previous projects must have involved facilities determined by the authorities to be of landmark quality and/or of historical significance.
2. Qualified Installer: A firm or individual (e.g., tradesperson) experienced in installing, applying, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance. Where required by authorities having jurisdiction, installer shall also be duly registered, licensed, approved, certified, and qualified, as applicable (e.g., licensed electricians, welders, riggers, etc.).
3. Qualified Specialist: An experienced firm or individual recognized as an expert in the specific activity or service for which they shall be engaged (e.g., site safety, etc.). Where required by authorities having jurisdiction, specialist shall also be duly registered, licensed, approved, certified, and qualified, as applicable.
4. Qualified Fabricator: A firm experienced in fabricating products similar to those indicated for this Project, with a record of successful in-service performance, and sufficient production capacity to fabricate the required quantity without delay to the Project construction schedule. Where required, fabricator shall also be approved by authorities having jurisdiction.
5. Qualified Manufacturer: A firm experienced in manufacturing products or systems similar to those indicated for this Project, with a record of successful in-service performance, and sufficient production capacity to manufacture the required quantity without delay to the Project construction schedule. For warranted systems,

manufacturer must provide and maintain a warranty for the specified system as indicated in the individual Specification Sections.

6. Qualified Professional Engineer: A professional engineer who is licensed to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or products that are similar to those indicted for this Project in material, design, and extent.
7. Qualified Testing Agency: A nationally recognized testing laboratory (NRTL) according to 29 CFR 1910.7, or a testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program (NVLAP), or an independent agency with the experience and capability to conduct the testing and inspections indicated, as documented according to ASTM E 329. Testing agency shall also meet additional qualifications where required by the individual Specification Sections, or by authorities having jurisdiction. "Qualified Testing Laboratory" or "Qualified Inspection Agency" shall mean the same as "Qualified Testing Agency."
8. Manufacturer Approved Installer: For warranted products and systems, the qualified installer shall also be approved by manufacturer for warranted installation of the specified products. Installer shall be credentialed by manufacturer for installation of specified products where such credentials are available.
9. Manufacturer's Authorized Representative: An authorized representative of manufacturer who is technically trained and approved by manufacturer to test, inspect and certify installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

B. Quality Control Terms:

1. Performance Requirements: Design criteria (e.g., structural loads, wind loads, etc.), tests (e.g., anchor pull out tests, sealant adhesion, etc.) and inspections specified to ensure that products and assemblies incorporated in the Work perform as intended. The individual Specification Sections indicate specific performance requirements.
2. Source Quality Control Testing: Tests and inspections that are performed at the source (i.e., plant, mill, factory, or shop) to verify performance and compliance with specified requirements.
3. Product Testing: Tests and inspections that are performed by a qualified testing agency to establish product performance and compliance with specified requirements and industry standards.
4. Pre-construction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated in the Work to verify performance and compliance with specified requirements.
5. Field Quality Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work to verify performance and compliance with specified requirements.

6. Special Inspections: Tests and inspections required by authorities having jurisdiction including, but not limited to, those listed on the Drawings.

1.03 Submittals

A. Qualification Submittals: Proof of specified qualifications.

1. Installer Qualifications (On-demand).
2. Specialist Qualifications (On-demand).
3. Fabricator Qualifications (On-demand).
4. Manufacturer Qualifications (On-demand).
5. Manufacturer Approved Installer Credentials (On-demand). Manufacturer's certification, or installer credentials, indicating that installer is approved for warranted installation of specified products and systems.
6. Testing Agency Qualifications (On-demand). In the form of a recent report on the inspection of the testing agency by a recognized authority demonstrating their capabilities and experience.

B. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts of fees payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.04 Qualifications of Entities Involved in the Project

A. Contractor and all entities engaged by the Contractor (e.g., employees, subcontractors, testing agency, etc.) for involvement in the Project shall meet the minimum qualifications for their respective roles (e.g., qualified installer, qualified testing agency, etc.) as established in the Definitions article above. Additional qualification requirements may be indicated in the Contract Documents.

1.05 Regulatory Requirements and Industry Standards

A. Comply with the latest applicable laws, codes and requirements of all authorities having jurisdiction without delay.

1. Meet all license and registration requirements as applicable.
2. File all required certificates (e.g., insurance certificates, etc.).
3. File all plans (e.g., site safety plan, etc.), except for those explicitly indicated as Owner's responsibility. Refer to Drawing notes.
4. Obtain all permits, approvals, and certificates.
5. Maintain a complete set of applications and Drawings, approved by authorities, at the Project site. Post copies of documents (e.g., licenses, permits, etc.) in a conspicuous place, as applicable.

6. Arrange for all tests and inspections for each element of construction, temporary facility, and permanent facility, when (e.g., before use, etc.) and as required.
7. Pay all applicable fees and expenses, except for those explicitly indicated as the Owner's responsibility. Refer to Drawing notes.
8. Remove any violations issued by authorities related to Contractor's operations. Contractor is solely responsible for payment of penalties and fees resulting from and related to the removal of these violations.

B. Comply with industry standards and the best trade practices.

1.06 Utility Company Requirements

A. Comply with requirements of all utility companies (e.g., water, gas, electric, sanitary waste, storm drainage, telephone, cable, etc.), as applicable.

1.07 Conflicting Requirements

A. In the event of conflict between or among parts of the Contract Documents, the more expensive way of doing the Work, the better quality or greater quantity of material shall govern. Refer all such conflicts to the Architect for a decision before proceeding.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 Tests and Inspections

A. General:

1. All Work, all products, whether or not incorporated in the Work, and all processes of manufacture, shall be subject to inspection and testing by the Owner and Architect at all times and at all places. If inspection or testing results indicate, at the sole discretion of the Architect, that any Work, products or processes of manufacture do not meet the requirements of the Contract Documents, the Architect will have the right to reject same as defective Work.
2. Test and inspection requirements include, but are not limited to, those specified in the Contract Documents.
3. Special Inspections: Comply with requirements for special inspections by all authorities having jurisdiction including, but not limited to, those listed on the Drawings.
4. Specified tests, inspections, and related actions do not limit the Contractor's other quality assurance and quality control procedures that facilitate compliance with the Contract Document requirements.

B. Owner Responsibilities: Where test and inspection services listed in the Contract Documents are explicitly indicated as the Owner's responsibility, the Owner will engage a qualified testing agency to perform the services.

C. Contractor Responsibilities:

1. Where test and inspection services listed in the Contract Documents are not explicitly indicated as the Owner's responsibility, or where test and inspection services, in addition to those listed, are required by authorities having jurisdiction, the Contractor shall engage and pay for a qualified testing agency to perform the services.
2. Tests and inspections requested by Contractor and not required by the Contract Documents are solely the Contractor's responsibility.
3. Retesting: Regardless of the assignment of responsibility for the original test and inspection services, costs for retesting and re-inspecting construction that replaces or is necessitated by Work that failed to comply with the Contract Documents will be charged to the Contractor and, if necessary, the Contract Sum will be reduced by Change Order.
4. Associated Services: Regardless of the assignment of responsibility for particular test and inspection services, the Contractor is responsible as follows:
    a. Cooperate with agencies performing required tests and inspections.
    b. Notify Architect and testing agencies sufficiently in advance of time when Work that requires testing or inspecting will be performed to permit assignment of personnel.
    c. Provide access to the Work, and incidental labor and facilities necessary to facilitate tests and inspections.
    d. Provide preliminary design mix proposed for use, for material mixes that require control by testing agency.
    e. Provide performance models as specified, and assist testing agency in obtaining test specimen for required tests and inspections.
    f. Protect construction exposed by or for test or inspection activities.
    g. Provide security and protection at Project site for test and inspection equipment.
    h. Repair damaged construction and restore substrates and finishes, upon completion of testing, inspecting, specimen taking, and similar services. Comply with Section 017300 (Removals, Cutting, and Patching).
5. Test and Inspection Reports: Submit two (2) copies, unless otherwise indicated. Submit additional copies if required by authorities having jurisdiction.

D. Testing Agency Responsibilities:

1. Cooperate with Architect and Contractor in performance of duties.
2. Determine the location where test specimens will be taken and where in-situ tests will be conducted.

3. Conduct tests and inspections with qualified personnel.
4. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
5. Certified Report:
    a. Interpret results and prepare a certified written report for each test, inspection, or other quality control service performed. Include the following information on the report, as applicable:
        1) Date of issue.
        2) Project number and title.
        3) Name, address, and telephone number of testing agency.
        4) Dates and locations of samples and tests or inspections.
        5) Names of individuals making tests and inspections.
        6) Description of the Work and test and inspection method.
        7) Identification of product and Specification Section.
        8) Complete test or inspection data.
        9) Test and inspection results and an interpretation of test results.
        10) Record of temperature and weather conditions at time of specimen taking and testing and inspecting.
        11) Statement indicating professional opinion whether tested and inspected Work complies with or deviates from the requirements of the Contract Documents.
        12) Name and signature of laboratory inspector.
        13) Recommendations on retesting and reinspecting.
    b. Submit report through Contractor.
6. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
7. Do not perform any duties of the Contractor.

END OF SECTION

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014339
MOCKUPS AND PHYSICAL QUALITY ASSURANCE AIDS

PART 1 - GENERAL

1.01 Summary

A. This Section includes administrative and procedural requirements for physical quality assurance aids, such as mockups, performance models, reference panels, and various specimens.

1.02 Definitions

A. Mockup: A full-size, physical assembly that is constructed on-site to indicate the configuration of materials to be incorporated in the Work, verify constructability, and establish the level of workmanship. Approved mockups establish the standard by which the Work will be judged. Mockups can also include examples of cleaning and coating applications.

B. Performance Model: A full size, physical assembly or portion thereof that is constructed for testing and evaluating the performance of products (e.g., field test joint sealant adhesion to Project joint substrates, or laboratory test curtain wall assembly).

C. Reference Panel: An exposed and representative portion (panel) of the existing building construction used as an aesthetic reference for the approval of product Samples by the Architect.

D. Replication Specimen: An existing building element used by a product manufacturer as the basis for producing replicas to be incorporated in the Work.

E. Aesthetic Specimen: A piece of material (e.g., mortar, brick, etc.) extracted from and representative of a particular construction element present on the existing building typically used for aesthetic determinations.

F. Test Specimen: A sampling of material (e.g., concrete, mortar, etc.) used for testing and evaluation of physical properties. Specific test requirements indicate whether the sampling is to be extracted from and representative of a particular construction element present on the existing building, or whether it is obtained from and representative of new material to be incorporated in the Work.

1.03 Submittals

A. Photographs of Mockups: Submit two (2) sets of photographs (hardcopy plus electronic file) for each mockup upon approval.

B. Photographs of Performance Models: Submit two (2) sets of photographs (hardcopy plus electronic file) for each performance model, showing condition before and after testing.

C. Photographs of Arranged Samples (see Reference Panels heading): Submit two (2) sets of photographs (hardcopy plus electronic file) for each Sample arrangement.

D. Photographs of Replication Specimens: Submit two (2) sets of photographs (hardcopy plus electronic file) for each specimen, showing condition before and after detachment from building.

E. Photographs of Test Specimens: Submit two (2) sets of photographs (hardcopy plus electronic file) for each specimen, showing condition before and after testing.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 Mockups

A. General:

1. Mockup requirements are indicated on the Drawings as follows:
    a. Specific restoration assemblies requiring mockups are indicated in the Restoration Summary on the Drawings.
    b. Mockup Dimensions table on the Drawings indicates specific requirements, size and extent of mockups classified by the restoration assembly type (e.g., CON (concrete), LTL (lintel), etc.).
    c. In some cases, additional mockup requirements are indicated in the individual Specification Sections.
2. Only products whose Samples and Product Data have been approved by Architect through the submittal process shall be used in mockups.
3. Do not proceed with Work demonstrated by the mockups until approved by Architect.
4. Mockups are not to be used for performance testing. Refer to Performance Models heading in this Section.

B. Construction of Mockup:

1. Location: Mockup location is indicated on the Drawings, or as otherwise determined by Architect.
2. Field construct mockup in a manner indicative of type and configuration of all included materials and components and level of workmanship.
    a. Mockup must demonstrate all contingent construction conditions and details, such as splices, material laps, expansion joints, shims, blocking, etc.
    b. Construct mockup with dimensions greater than the minimum indicated on the Drawings, if necessary to demonstrate all contingent construction conditions and details.

c. Construct mockup in “cutaway,” or "layered" fashion, if necessary to illustrate any construction components that would otherwise be concealed. For some mockups, where "cutaway" construction is not possible, separate photographs of each individual concealed component, installed in sequence (e.g., flashing, anchorage, etc.), may be allowed in lieu of "cutaway" construction, with prior written consent by the Architect.

d. Where mockup is intended for use as an example of a cleaning and/or coating application, prepare, clean, and/or coat surface in accordance with the Specifications. Delineate mockup boundaries using a lasting but non-defacing, easily removable method

3. Identification Label: Clearly label mockup including:

a. Date

b. Restoration assembly code.

C. Combination of Mockups: Mockups of multiple restoration assemblies may be combined, if approved in advance by the Architect. For example, the construction of a parapet, coping, and flashing might be combined in a single mockup.

D. Multiple Mockups: Construct multiple mockups, if necessary to demonstrate all pertinent aspects of a restoration assembly for which it is required.

E. Notification and Approval:

1. Notify Architect, and, if applicable, manufacturer's authorized representative, in writing when mockup is complete and ready for review. Use Mockup Review and Approval Form enclosed at the end of this Section, or equivalent.

2. Obtain Architect's approval of mockup, and where required, also obtain manufacturer's authorized representative's approval. Approvals will be conveyed on the Mockup Review and Approval Form.

3. Reconstruct disapproved / rejected mockup as needed until approved.

F. Photograph Mockup: Photograph approved mockup from all sides and angles to show in detail the type and configuration of materials, level of workmanship, and "cutaway" construction exposing concealed components. Identification label must be legible in photograph.

G. Retain and Protect: Retain approved mockup in undisturbed condition. Protect from soiling and other damage.

H. Standard for Judging the Work:

1. Approved mockups will establish the standard by which the Work will be judged.

2. Work not complying with approved mockup, or Work performed in advance of approved mockup, may be rejected.

I. Disposition of Mockups:

1. Notify the Architect prior to disposition.

2. Mockups may be incorporated in the finish Work as directed by Architect, otherwise demolish and remove mockups when the Work is complete.

3.02 Performance Models

A. General:

1. Performance model requirements are indicated in the individual Specification Sections.
2. Only products whose Samples and Product Data have been approved by Architect through the submittal process shall be used in performance models.
3. Do not proceed with Work demonstrated by the performance models until test results comply with performance requirements.

B. Construction of Performance Model:

1. Location: Performance model location is indicated in the Contract Documents, or as otherwise determined by Architect.
2. Construct performance model in a manner indicative of type and configuration of all included materials and components and level of workmanship. Model must include all contingent construction conditions and details required for testing, such as splices, material laps, joints, anchors, etc.
3. Facilitate storage and curing.
4. Identification Label: Clearly label performance model including:
   a. Date
   b. Section number
   c. Test identification.

C. Multiple Performance Models: Construct multiple performance models, if necessary to accomplish required testing.

D. Photograph Performance Model (Before and After Testing): Photograph approved performance model before and after testing from all sides and angles to show in detail the type and configuration of materials, and level of workmanship and physical results of tests, if any. Identification label must be legible in photograph.

E. Transport: If required, protect, pack and transport performance model to testing agency.

F. Tests, Inspections and Reporting:

1. Notify Architect, and if applicable, manufacturer's authorized representative, in writing of test and inspection schedule. Provide notice at least 48 hours in advance of testing.
2. Comply with test, inspection, and reporting requirements specified.

G. Disposition of Performance Models: Notify the Architect prior to disposition.

3.03 Reference Panels

A. Reference panels are required for all distinct exposed building construction elements specified in the Work to be restored or replaced.

B. Reference Panel Preparation:

1. Location: Reference panel location is indicated on the Drawings, or as otherwise determined by Architect. Location is typically based on the following criteria:
    a. Exposure to natural light.
    b. Unobstructed views from various vantage points (angles and distances).
    c. Accessibility (e.g., within reach from grade level or roof surface, where possible).
    d. Proximity to other existing construction elements that contribute to an overall aesthetic impact.
2. Size: Reference panel size is indicated in the individual Specification Sections, on Drawings, or as otherwise determined by Architect.
3. Identification Label: Clearly label reference panel and delineate its boundaries using a lasting but non-defacing easily removable method. Include the following information on label:
    a. Date
    b. Reference panel ID
    c. Sample ID

C. Retain and Protect: Retain reference panel in undisturbed condition. Protect from soiling and other damage.

D. Arrange Sample(s) for Evaluation:

1. Arrange product Sample(s) in relation to reference panel to permit a clear comparison when viewed by the Architect from various vantage points. Where Sample comprises multiple units, assemble units to best simulate the configuration and variation exhibited in the reference panel.
2. Provide any temporary support required.

E. Photograph Arranged Sample(s): Photograph Sample(s) in relation to reference panel from various vantage points to show clear comparison. Identification label must be legible in photograph.

F. Notification and Approval:

1. Notify Architect, 3 business days in advance, when Sample(s) in relation to reference panel will be ready to review.
2. Architect will view and evaluate the Sample properties including, but not limited to; color texture, pattern, and level of finish (e.g., gloss, matte, etc.); and range (extremes and distribution) of inherent variation.

3. Architect's approval or other action will be conveyed via stamp or written transmittal through the submittal process.

G. Disposition of Reference Panel:

1. Notify the Architect prior to disposition.
2. When no longer required for evaluating Samples, seamlessly incorporate the Reference Panel in the Work.

3.04 Replication Specimens

A. Replication specimen requirements are indicated on the Drawings.

B. Replication specimens are classified as "attached" or "detached" as follows:

1. Attached Replication Specimen: Existing building element to remain in-situ (attached to building), where an exact representation necessary for manufacturing replicas is formed in the field, whether by manual or digital techniques (e.g., laser photogrammetry, etc.).
    a. Record Properties: Make permanent record of measurements, materials, and construction details required for an exact representation.
    b. Identification Label: Clearly label specimen including:
        1) Date.
        2) Item number, if applicable.
        3) Description.
    c. Photograph Replication Specimen: Photograph specimen from all angles to fully show all details. Identification label must be legible in photograph.
    d. Manufacturing:
        1) Restore any defects in profile of replication specimen prior to manufacturing replicas.
        2) Clearly label the individual replicas (units) to correspond with the numbering scheme indicated on the shop drawings.
2. Detached Replication Specimen: Building elements requiring detachment from building and delivery to manufacturing plant for manufacturing replicas.
    a. Record Properties: Prior to detachment of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required for an exact representation.
    b. Detach from existing construction in a manner to prevent damage. Comply with the following Sections:
        1) 017300 (Removals Cutting and Patching).
        2) 024119 (Selective Demolition).

c. Identification Label: Clearly label specimen including:

1) Date.

2) Item number, if applicable.

3) Description.

4) Location (where removed).

d. Photograph Replication Specimen: Photograph specimen before and after detachment from building from all angles to fully show all details. Identification label must be legible in photograph.

e. Protect and transport replication specimen to manufacturer of replicas. Replication specimen remains the property of the Owner.

f. Manufacturing:

1) Restore any defects in profile of replication specimen prior to manufacturing replicas.

2) Clearly label the individual replicas (units) to correspond with the numbering scheme indicated on the shop drawings.

g. Disposition: After manufacturing of replicas is complete, protect and transport replication specimen to storage area designated by Owner, and obtain receipt from Owner, unless otherwise directed by Owner.

3.05 Aesthetic Specimens

A. Aesthetic specimens for matching existing building elements (e.g., brick, mortar, etc.) are indicated in the individual Specification Sections, or where needed to compare with and determine preliminary samples for submittal, or as otherwise directed by the Architect.

B. Specimen Extraction and Patching:

1. Comply with Section 017300 (Removals Cutting and Patching).

2. Location: Extract specimen from reference panel.

3. Size and Quantity: As indicated, or as otherwise directed by Architect.

4. Identification: Clearly label specimen including

a. Date extracted.

b. Project number and name.

c. Material description.

d. Extraction location / reference panel ID.

3.06 Test Specimens

A. Test specimens required for testing and evaluation are indicated in the individual Specification Sections.

B. Obtain Specimen:

1. Where test specimen is representative of existing construction proceed as follows:
    a. Comply with Section 017300 (Removals Cutting and Patching) for extraction of specimen and patching existing construction.
    b. Location: As required.
    c. Size and Quantity: As indicated, or as otherwise directed by Architect.
    d. Identification: Clearly label specimen including
        1) Date extracted.
        2) Project number and name.
        3) Material description.
        4) Extraction location.
2. Where test specimen is representative of new material to be incorporated in the Work proceed as follows:
    a. Obtain a sampling of material in compliance with the individual Specification Sections, codes and standards, as applicable.
    b. Size and Quantity: As indicated, or as otherwise directed by Architect.
    c. Identification: Clearly label specimen including
        1) Date obtained.
        2) Project number and name.
        3) Material description.
        4) Batch/lot number, etc., if applicable.

C. Photograph Test Specimen (Before and After Testing): Photograph test specimen before and after testing to fully show specimen in detail and physical results of tests, if any. Identification label must be legible in photograph.

D. Transport: If required, protect, pack and transport test specimen to qualified testing agency.

E. Tests, Inspections and Reporting:

1. Notify Architect, and if applicable, manufacturer's authorized representative, in writing of test and inspection schedule. Provide notice at least 48 hours in advance of testing.
2. Comply with test, inspection, and reporting requirements specified.

ENCLOSURES

Mockup Review and Approval Form

END OF SECTION

MOCKUP REVIEW AND APPROVAL FORM	
The following to be filled out by Contractor	
Super No:	
Project Address:	
Superstructures Project Mgr.	
RAD Code (e.g. LTL 02):	
Location:	
Variation:	
Date Complete:	
Contractor Signature / Date:	
Enclosures / Photos:	
The following to be completed by Architect	
Superstructures Acceptance Signature:	
Comments:	
The following to be completed by Manufacturer	
Manufacturer Acceptance Signature:	
Comments:	

Instructions:

When ready for review by Architect, Contractor to fill in Contractor portion of form and transmit via fax to: SUPERSTRUCTURES: 212 505 1726, and if necessary to other interested parties.

SECTION 016000
MATERIALS AND EQUIPMENT

PART 1 - GENERAL

1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

A. Specific requirements pertaining to materials and equipment specified elsewhere are additional to the provisions of this Section.

1.02 PRODUCT LABELS

A. When materials or equipment are specified to conform to ASTM, Federal or other reference specifications, the materials delivered to the site shall bear the manufacturer's printed labels stating that the materials meet the requirements of such referenced specifications.

1.03 TRANSPORTATION AND HANDLING

A. Deliver factory packaged materials and equipment in the manufacturer's original containers.

B. Transport and handle materials and equipment in such a manner as to prevent their damage.

C. Arrange for delivery of materials and equipment during the hours of the day established by NYCDOC's Representative.

D. Have workers available to receive and unload materials and equipment delivered to the site. Do not deliver, or have delivered, any materials and equipment to the site unless such forces are available.

E. Facility personnel are not authorized to sign for receipt of Contractor's material or equipment.

1.04 STORAGE AND PROTECTION

A. Neatly pile, store, protect, and secure materials and equipment in locations where directed.

B. Protect materials and equipment subject to damage by temperature or other weather conditions.

C. Do not store volatile liquids in a NYCDOC building.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION

SECTION 016100 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.01 Summary

A. This Section includes administrative and procedural requirements for product quality assurance; product manufacturers' warranties; product selection; product delivery, storage, and handling; etc.

1.02 Definitions

A. Product: An item purchased for incorporating in the Work, whether purchased for the Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

B. Product Callout: A product description (e.g., "Sealant: NT(NS)") noted on Drawings, and sometimes preceded by the Specification Section number where the product is further described. Within the Section the product callout is shaded for clarity followed by specific product requirements (e.g., named products, etc.).

C. Named Product: A product identified in the individual Specification Sections by product name (or other designation) and manufacturer name.

D. Comparable Product (sometimes referred to as "or equal"): Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified named product.

1.03 Submittals

A. Certificates of Manufacture (On-demand): Authoritative evidence in the form of certificates of manufacture that the products have been manufactured and tested in conformity with the Specifications. These certificates shall include copies of the results of physical tests and chemical analysis, where necessary, that have been made directly on the product, or on similar products being fabricated by manufacturer. This shall include all necessary approvals by agencies having jurisdiction as applicable.

1.04 Quality Assurance

A. Provide products that comply with the Contract Documents, and have been tested and approved for use, where applicable, and meet the requirements of all authorities having jurisdiction.

B. Product Approval: All products selected for incorporation in the Work, whether named or otherwise, must be approved by Architect through the submittal process. Do not order, manufacture, or fabricate any products until such approval by Architect.

C. Products shall be undamaged, and, unless otherwise indicated, new at time of installation. Expired products shall not be incorporated in the Work; expiration dates are as indicated by manufacturer.

D. Products shall be complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.

E. Every product callout shall be limited to a single approved product.

F. Product Source Limitation: Where products are intended to be installed as a system (warranted or otherwise) use only compatible products from the same manufacturer without exception, unless authorized in writing by Architect and, for warranted systems, approved in advance by manufacturer.

1.05 Volatile Organic Compounds (VOCs)

A. Comply with all regulations and limitations pertaining to VOCs. Do not use any product that does not meet the current requirements of all authorities having jurisdiction. In the event any named products are not in compliance, notify the Architect immediately.

1.06 Product Warranties

A. Warranties specified in the individual Specification Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

B. Manufacturer's warranty is the written warranty published by an individual manufacturer for a particular product or system and specifically endorsed by manufacturer to Owner. Warranty shall be in the manufacturer's standard form, unless otherwise directed by Owner, and shall be modified to include Project specific content as required in the individual Specification Sections. Project specific content may include, but is not limited to, extending time limit provided by manufacturer's warranty or to provide more rights for Owner.

C. Engage manufacturer approved installers for the installation of warranted products and systems, where required by the manufacturer, or where indicated in the individual Specification Sections.

D. Engage manufacturer's authorized representatives for participation in pre-installation conferences, examination of substrates and conditions, verification of materials, observation of installer activities, performance testing, inspection of completed portions of the Work, and preparation of reports/certifications. Submit manufacturer reports/certifications, including the following information, as applicable:

1. Specification Section number, manufacturer, and named products.
2. Name, address, and telephone number of representative making report.
3. Statement on condition of substrates and their acceptability for installation of product.

4. Summary of installation procedures being followed, whether they comply with requirements for warranted system and, if not, what corrective action was taken.
5. Results of operational and other tests and a statement of whether observed performance complies with requirements for warranted system.
6. Other required items indicated in individual Specification Sections.

E. Comply with the following Sections:

1. 017310 (Execution) relating to existing warranties.

PART 2 - PRODUCTS

2.01 Product Selection

A. Named Products: Where Specifications include one or more named products, provide one of the products listed.

B. Named Manufacturers: Where Specifications do not include named products, but only one or more named manufacturers, provide an appropriate product by one of the manufacturers listed.

C. Generically Specified Products: Where neither products nor manufacturers are named, descriptive, performance, and reference standard requirements listed in the individual Specification Sections establish "salient characteristics" of products.

D. Comparable Products:

1. Unless otherwise noted, Architect will consider Contractor requests for review of comparable products by other manufacturers in lieu of named products. The named products establish the basis of design for significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics. The burden of proof of the merit of a proposed comparable product is on the Contractor.
2. Prepare, package and submit requests for review of comparable products including the following:
    a. Identify proposed comparable product and manufacturer.
    b. Identify named product to be used as the basis for comparison. Include Specification Section number and title, product callout, and Drawing numbers and titles.
    c. Product Data
    d. Samples
    e. Detailed comparison of significant qualities of proposed comparable product with those of the named product. Significant qualities include attributes such as type, performance, weight, size, durability, visual effect, and other specific features and requirements indicated.

f. Evidence that the proposed comparable product:

1) Provides specified warranty.

2) Complies with all applicable regulatory requirements (e.g., building codes, etc.) and has received necessary approvals of all authorities having jurisdiction.

3) Will not be replacing individual components of another manufacturer's warranted system.

4) Will not adversely affect Project construction schedule.

g. Material test reports, where applicable, from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.

h. Cost information as compared with costs associated with named products.

i. List of similar installations on other projects completed by Contractor including project names and addresses, and names and addresses of architects and owners, if requested.

3. Architect's decision whether to review a proposed comparable product will be final.

2.02 Matching

A. Unless otherwise explicitly indicated in the Contract Documents, all products which replace existing exposed construction elements shall "match existing" aesthetic characteristics of those construction elements. This includes specified products which are not made of the same material as the existing construction element. (For example, glass-fiber reinforced concrete (GFRC) may be specified as a suitable replacement for terra cotta, provided it is able to simulate and maintain the appearance of the existing terra cotta.)

B. Comply with Section 014339 (Mockups and Physical Quality Assurance Aids) for reference panels and aesthetic specimens for aiding Architect in making aesthetic determinations.

2.03 Pre-shipping Protection

A. Provide all necessary crating, boxing, and other packaging (including shock-absorbing material), around and between product units as required to protect products from damage during transport.

B. Provide factory applied strippable plastic film for protection of finish surfaces which may be subject to scratches or marring.

2.04 Example Format of Named Products

The following example shows three (3) fictitious named products, one of which would be selected and approved for use where the "Sealant: NT(NS)" product callout is indicated on Drawings.

A. **Sealant: NT(NS)**

1. Seal-Right	ABC Sealants
2. XR1-Silicone	Big Electric Company, Inc.
3. Premium Silicone Building Sealant	Silicone Mfg, Inc.

PART 3 - EXECUTION

3.01 Product Delivery, Storage, and Handling

A. Deliver, store, and handle products in a safe manner, and to prevent damage, deterioration, theft, and other losses. Comply with manufacturer's written instructions.

B. Contractor is solely responsible for any loss or damage to products. In the case of loss or damage to Owner-furnished products, the Contract Sum will be reduced by Change Order for cost of replacement orders.

C. Transport and Delivery:

1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of Work areas.
2. Deliver products in ample quantities to ensure the most prompt and uninterrupted progress of the Work so as to complete the Work without delay.
3. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
4. Handle and transport units in a position consistent with their shape and design in order to avoid excessive stresses or damage.
5. Lift or support units only at the points prescribed by manufacturer.
6. Support units during shipment on non-staining shock-absorbing material. Place non-staining resilient spacers of even thickness between units.
7. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
8. Inspect products on delivery to ensure compliance with Contract Documents and to confirm that products are undamaged and properly protected.

D. Storage:

1. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
2. Store combustible materials in containers in fire safe locations. Keep containers tightly closed and away from open flames.
3. Store products to allow for inspection and measurement of quantity or counting of units.
4. Store products in a manner that will not endanger Project structure.
5. Store units on firm, level, and smooth surface; avoid warping.
6. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation. Cover materials when necessary to protect from the elements.
7. Store masonry units and cementitious products off the ground on elevated platforms to prevent contamination or staining.
8. Store grout, mortar, and other dry products and components in a dry location or waterproof containers. Protect from deterioration by moisture and temperature.
9. Store foam plastic away from exposure to sunlight, except to extent necessary for period of installation and concealment.
10. Store and handle roofing and waterproofing materials in a manner, which will prevent moisture pick up. Store in a dry, well ventilated, weather tight place. Unless protected from weather or other moisture sources, do not leave unused membrane on the roof overnight or when roofing Work is not in progress.
11. Store rolled sheet materials (e.g., roofing membranes, etc.) on end on pallets or other raised surface.
12. Protect liquid products and components from freezing.
13. Protect stored products from damage.

END OF SECTION

SECTION 017300
REMOVALS, CUTTING, AND PATCHING

PART 1 GENERAL

1.01 PROJECT CONDITIONS

A. Do not disturb existing structures, construction, materials or equipment unless required by the Contract.
   1. Do not cut, drill or remove structural members such as joists, beams or columns supporting construction that is to remain unless expressly required by the Contract Documents.

B. Existing Paint: If paint is believed to be lead based paint, contact NYCDOC immediately and stop work until further notice.

PART 2 PRODUCTS

2.01 MATERIALS

A. Match the appearance and performance of existing corresponding materials as closely as practicable, unless otherwise indicated.

PART 3 EXECUTION

3.01 EXAMINATION

A. Prior to cutting, drilling or removal, investigate both sides of the surface involved. Determine the exact location of structural members.

B. If unforeseen obstructions are encountered, take precautions necessary to prevent damage and obtain instructions from the NYCDOC's Representative before proceeding with the Work.

3.02 PREPARATION

A. Provide temporary shoring and other supports necessary to prevent settlement or other damage to existing construction which is to remain.

B. Prepare existing surfaces properly to receive and, where required, bond with the Work.

3.03 REMOVALS, CUTTING, AND ALTERING

A. In addition to the items indicated to be removed on the Drawings, remove existing construction superseded by the Work except items such as pipes, conduits, recessed

boxes, and ducts which are built into existing construction that is to remain. Cut off and conceal such items at face of remaining construction. Provide cover plates on recessed boxes.

B. Remove and alter existing construction as required to install and connect the Work to adjacent construction in an approved manner.

C. Cut and alter existing materials as required to perform the Work. Limit cutting to the smallest amount necessary. Core drill round holes and saw cut other openings where possible.

D. Perform cutting, drilling, and removals in a manner which will prevent damage to construction which is to remain.

E. Perform removal of items to remain the property of the State with such care as necessary to prevent damage to these items.

3.04 PATCHING

A. Patch existing construction and finishes defaced, damaged, or left incomplete due to alterations and removals. Patching, except as otherwise indicated, shall be limited to the areas which have been cut or altered. Finish patched surfaces to match existing adjacent surfaces as closely as practicable.

B. Perform patching around items penetrating existing construction in a manner that will maintain the water and fire resistive capability of the existing construction.

C. Paint patched areas and cover plates to match existing adjacent surfaces as closely as practicable using same type of paint. Painting, except as otherwise indicated, shall be limited to the areas which have been patched.

D. Where surfaces exposed by removals are to remain as exposed surfaces, paint such areas to match existing adjacent surfaces as closely as practicable using same type of paint.

3.05 REINSTALLATION

A. Where reinstallation of removed items is indicated, reinstall them to a condition equal to or better than their condition before removal.

END OF SECTION

017310
EXECUTION

PART 1 - GENERAL

1.01 Summary

A. This Section includes the following additional requirements for execution of the Work which supplement requirements in the individual Specification Sections:

1. Examination and documentation of existing conditions.
2. Existing warranties.
3. Manufacturer instructions and recommendations.
4. Preparation of substrates.
5. Structural and loading.
6. Environmental.
7. Protection.
8. Progress cleanup.
9. Remediation.

1.02 Submittals

A. Photographs of Existing Damage: Submit to Owner prior to commencement of Work in areas where existing damage is visible.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 Existing Conditions

A. Photograph Existing Damage: Prior to commencement of Work, examine areas where Work will be performed and photograph any existing conditions of building, equipment, or surrounding properties, etc. which could be misconstrued as damage resulting from construction operations. Flag damage in photographs.

B. Examination Prior to Bid: Quantities listed on the Drawings are approximate, and are provided for the Contractor's convenience only. The Contractor is responsible for verifying all quantities as indicated graphically on the Drawings, and for performing the indicated Work under the base Contract. Quantity allowances are the only quantities that shall be directly based on the quantities indicated on the Drawings.

C. Examination Prior to Commencement of Work:

1. Examine areas where Work will be performed. Determine field conditions which differ from the Contract Documents, or may adversely affect, or be affected by, the Work, including but not limited to, the following:
    a. Concealed utilities, mechanical, electrical or other systems.
    b. Points of connection to existing utilities and other systems.
    c. Indications of conflicting installations (e.g., conduit running through a beam location, etc.).
    d. Substrate conditions and other conditions affecting performance.
    e. Measurements and tolerances required for installation.
    f. Walls, floors, and roofs for suitable conditions where products and systems are to be installed.
2. Submit RFI to Architect immediately on discovery of the need for clarification of the Contract Documents caused by adverse existing conditions outside the control of the Contractor. Do not proceed with Work in the area where adverse condition exists, without the Architect's written direction.

D. Examination During the Work: The restoration assembly types and extents shown on the Drawings are indicative only. The Contractor, while in close proximity to the Work, shall visually and physically examine existing conditions, and notify the Architect if the underlying condition or extent is inconsistent with the restoration Work indicated at that location.

3.02 Existing Warranties

A. Conduct construction operations in a manner that does not invalidate or jeopardize existing warranties.

3.03 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.04 Preparation of Substrates

A. Prior to installation of new Work, perform all necessary substrate repairs to return substrate to sound condition. (For example, the substrate may be a deteriorated masonry wall which requires some repairs, in preparation for the proper installation of furring channels, as part of a stucco finish wall system.)

B. Do not install new Work over unsatisfactory substrates.

3.05 Structural and Loading

A. Provide temporary shoring, bracing, and structural support of Work in progress and existing to remain to preserve stability and prevent movement, settlement, or collapse. Retain a qualified professional engineer to design temporary shoring, bracing, and structural support as needed.

B. Conduct construction operations so no part of the Work or existing to remain is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

   1. Determine floor and roof load carrying capacities before using such areas for storage of construction materials, relocated items, debris, etc.

   2. Loading shall not exceed thirty (30) pounds per square foot on any horizontal surface, other than a slab on grade.

3.06 Environmental

A. Conduct construction operations as required to comply with environmental regulations and minimize noise, odor, dust, and possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

   1. Use products, cleaners, and installation materials that are not considered hazardous.

   2. Do not use tools or equipment that produces harmful noise levels.

3.07 Protection

A. Provide protection in compliance with all requirements of authorities having jurisdiction.

B. Maintain premises in a safe, secure and weather-tight condition.

C. Secure all objects (e.g. material, equipment, temporary facilities, partially completed Work), involved in or affected by the execution of the Work, from movement due to winds at all times.

D. Maintain existing services, systems and facilities which are to remain, keep in service, and protect against damage during construction operations.

E. Maintain fire protection facilities in service.

F. Provide final protection and maintain conditions that ensure installed Work will not be subject to damage or deterioration.

G. Contractor is solely responsible for any damage or injuries caused by or during the execution of the Work.

3.08 Progress Cleanup

A. General:

1. Comply with manufacturer's instructions and recommendations for progress cleanup of finish surfaces. Do not use tools, materials, or agents that might damage finished surfaces.
2. Clean Project site, Work areas, and common areas daily, or more frequently if needed, to maintain free of waste materials and debris.
3. Coordinate progress cleanup for joint-use areas where more than one installer has worked.
4. Immediately clean exposed finish surfaces when inadvertently contacted by wet or fluid materials used in the Work, to prevent contamination, staining, defacing, or other damage.

B. Work in Progress: Maintain areas where Work is in progress to the level of cleanliness necessary for proper execution of the Work.

1. Remove liquid spills quickly.
2. Remove excess materials, droppings, and debris.
3. Remove debris from concealed spaces before enclosing the space.
4. Keep all weep holes clear and functioning.
5. Leave all areas broom clean.
6. Keep installed Work clean.
7. Dry-brush newly installed masonry at end of each workday.

C. Completed Work Areas:

1. Remove tools and equipment from completed Work areas.
2. Clean, protect and provide maintenance of completed Work areas to keep clean through the remainder of the construction period.
3. Adjust and lubricate operable components to ensure operability without damaging effects.
4. Clean adjacent structures and improvements of dust, dirt, and debris caused by construction operations, returning them to the condition existing before operations began.
5. Where temporary facilities (e.g. scaffolds, etc.) will no longer be available to access completed Work areas, the Contractor may proceed with final cleanup. However, if these areas become dirtied by Contractor's subsequent operations, Contractor is responsible to re-perform final cleanup at time of Project closeout.

3.09 Remediation

A. Promptly repair existing structures, surfaces, fixtures, facilities, streets, curbs, driveways, walks, terraces, and trees, etc. damaged or removed by construction operations, or where demolition was performed in excess of that required.

1. Return all items to the condition in which they existed prior to commencement of construction operations.
2. Remove and replace items that are exposed to view if they cannot be repaired without visible evidence of repair.
3. In the event local jurisdiction requires repairs to be accomplished with its own labor and materials, Contractor shall bear the expense of such work.

B. Repair or remove and replace defective construction. Construction that does not comply with the requirements of the Contract Documents is considered defective construction.

1. Remove and replace construction that is exposed to view if it cannot be repaired without visible evidence of repair.
2. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
3. Remove and replace chipped, scratched, or broken glass and other damaged transparent or reflective surfaces.

C. Touch-up or restore finishes damaged or defaced during construction operations so that no evidence remains of correction Work; where necessary refinish entire unit, or provide new units. Items which cannot be refinished in the field shall be returned to the shop for refinishing, and later reinstalled.

D. Restore permanent facilities used during construction to the condition in which they existed prior to commencement of construction operations.

END OF SECTION

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SECTION 017700
CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 CONTRACT CLOSEOUT INSPECTIONS

A. The following 3 inspections will be made in addition to the normal inspections to ensure that all Contract requirements are met and that the Work is complete and acceptable. The purpose of each of these inspections is to furnish the Contractor a written list of Contract exceptions, omissions, and incompletions so that the Work can be progressed to timely completion in accordance with the Contract Documents.
   1. Detailed Inspection: The "Detailed Inspection" will be made when the Work is substantially complete. A copy of the detailed inspection list will be furnished to the Contractor. When this inspection progresses over any length of time, copies of the list will be furnished as the inspection progresses so that the Contractor may proceed with the required Work without delay.
   2. Final Inspection: The Contractor will be advised by letter of the date and time of final inspection. A copy of the final inspection list containing all incomplete or unsatisfactory items and the time allowed to complete the Work will be furnished to the Contractor.
   3. Joint Inspection for Physical Completion: The joint inspection for physical completion may be made to verify completion of the exception items listed on the final inspection list so that the physical completion date may be established.

1.02 FINAL CLEANING

A. Perform final cleaning prior to joint inspection for physical completion. Leave the premises in a neat, unobstructed condition, the work areas broom clean (except where more thorough cleaning is specified), and everything in perfect repair and adjustment.

B. Clean site; sweep paved areas, rake clean landscaped surfaces.

C. Remove tools, equipment, waste and surplus materials, rubbish, and construction facilities from the premises as soon as possible upon completion of the Work.

1.03 PROJECT RECORD DOCUMENTS

A. Maintain on site, 2 sets of the following record documents; record actual revisions to the Work:
   1. Contract Drawings. (also known as "As-Built" drawings)
   2. Project Manual.
   3. Addenda.
   4. Change Orders and other modifications to the Contract.
   5. Reviewed shop drawings, product data, and samples.

B. Store record documents separate from documents used for construction.

C. Record information concurrent with construction progress.

D. Project Manual: Legibly mark and record in Part 2 of each Section of the Specifications, a description of the actual products installed, including the following:
   1. Manufacturer's name and product model and number.
   2. Product substitutions or alternates utilized.
   3. Changes made by addenda and modifications.

E. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:
   1. Measured depths of foundations in relation to finish (first) (main) floor datum.
   2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
   3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
   4. Field changes of dimension and detail.
   5. Details not on original Contract Drawings.

F. Upon completion of the work, create electronic versions of the project record documents. Black and white documents are to be scanned into TIFF format using CCIT Group 4 compression. Documents with color, which include black line documents with color notations, are to be scanned into TIFF format using a minimum of 8 colors and "packbit" compression.
   1. The scanned images are to be put on a compact disc (CD) using ISO 9660 format. Name the electronic files with the same name as the drawing. Create a folder on the CD for each trade and one for Shop Drawings.
   2. Label the CD with the project number, name, and title as it appears on the project manual cover. If there is more than one CD include notation to that effect on the label; i.e., 1 of 3, 2 of 3, 3 of 3. The project record documents and CD(s) are to be turned over to NYCDOC's Representative.

G. Applications for progress payments will not be approved if the record documents are not kept current. Application for final payment will not be approved until the project record documents are delivered to NYCDOC's Representative.

1.04 OPERATION AND MAINTENANCE DATA

A. Prepare 2 sets comprised of 8-1/2 x 11 inch text pages bound in capacity expansion binders with durable plastic covers identified with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are required. Prepare a printed Table of Contents for each volume, with each product or system description identified. Internally subdivide the

binder contents with permanent page dividers, logically organized as described below, with tab titles clearly printed under reinforced laminated plastic tabs:

Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, subcontractors, and major equipment suppliers.

Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of subcontractors and suppliers. Identify the following:

1. Significant design criteria.
2. List of equipment.
3. Parts list for each component.
4. Operating instructions.
5. Maintenance instructions for equipment and systems.
6. Maintenance instructions for finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.

Part 3: Project documents and certificates, including the following:

1. Shop drawings and product data
2. Certificates, affidavits and approvals.
3. Test reports for and including, but not limited to air and water balance reports
4. Photocopies of warranties

B. Submit one copy of completed volumes in final form 15 days prior to final inspection. This copy will be returned after final inspection, with the NYCDOC's comments. Revise content of documents as required prior to final submittal.

C. Submit 2 volumes prior to final Application for Payment.

1.05 WARRANTIES

A. In addition to the warranties outlined elsewhere in the Specifications, all Labor Warranties shall be for 2 years, starting at completion of the entire project when substantial completion is awarded.

B. Furnish warranty certification and copies of warranties that extend beyond the one year period required by the General Conditions. Warranties submitted without warranty certification will not be accepted.

1. Warranty Certification: Written certification from the warrantor that invoices for installation, service, supplies, and warranty fees have been paid in full to persons or firms due payment, and that the warranty is in effect and non-retractable due to any of the specified conditions.

C. Prepare printed Table of Contents and assemble warranty certifications and warranty copies in a binder with a durable plastic cover.

D. Deliver the binder to NYCDOC's Representative prior to final Application for Payment.

E. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within 10 days after acceptance, indicating date of acceptance as start of warranty period.

F. Applications for final payment will not be approved until the warranty certification and warranty documents are delivered to NYCDOC's Representative.

1.06 SPARE PARTS AND MAINTENANCE MATERIALS

A. Label and deliver spare parts, maintenance items, and extra materials to the Site. Place in locations as directed.
   1. Include "NOT FOR WARRANTY REPAIRS" on the labels.
   2. Obtain receipt prior to final payment.

B. Do not use the spare parts and maintenance materials required by the Contract Documents to remedy defects during the two-year period of the Labor warranty except when approved otherwise by authorized NYCDOC's Representative. In such cases, replace items used.

C. Furnish the names, business addresses, and telephone numbers of fully equipped authorized service organizations to NYCDOC's Representative.

D. Applications for final payment will not be approved until these items are delivered to the NYCDOC's Representative.

END OF SECTION

SECTION 019000
EXISTING PREMISES WORK

1.01 PROTECTION

A. General Safety Restrictions

1. The operation of the fire alarm telegraph, the interior fire alarm system, gongs, bells and telephones shall not be interfered with.
2. Nothing shall be done to in any way block the streets at or about exits, or the exits themselves.
3. There shall be no unauthorized interference with the free and unobstructed use of hallways, stairways, toilets and rooms.
4. Whenever work is carried on during facility hours use, not more than one stairway shall be closed off from free and safe use at any time, and this only after the written permission of the NYCDOC has been obtained.
5. No part of the building or premises shall be closed to the use of the occupants without the permission of the NYCDOC. When such permission has been given, erect temporary partitions and barriers wherever required to ensure the absolute safety of the occupants of the building and premises.
6. Maintain on the premises a complete file of Material Safety Data Sheets for all materials, arranged by specifications section number. The file shall be available to NYCDOC's Representative for reference at all times.

B. Precautions Against Fire

1. Take every precaution in the performance of the Work to prevent fires.
2. Smoking shall not be permitted within the premises at any time.
3. N.Y.C. Fire Department regulations shall govern the storage and use of flammable materials. Flammable materials and fire-producing equipment shall not be left unattended about the premises in locations accessible to building occupants. All polyethylene sheeting shall be flame retardant in accordance with NFPA 701.
4. Rubbish shall be removed as hereinafter specified.
5. Fire extinguishers and other protective equipment shall be provided as required by regulations.
6. During all interruptions of Work, flammable mixtures shall be stored in designated locations.

C. Fire Watch

When open flame or spark-producing tools and equipment such as heating kettles on roofs, blow torches and welding rods are being used, the Contractor shall provide fire guards to maintain a fire watch over the operation of these items at all times during the use and until all materials have cooled sufficiently to no longer constitute

a fire hazard. Provide additional fire guards required by Fire Department as determined by the Local Fire Department inspector after Work is under way.

D. Asbestos, Lead Paint and Other Hazardous Conditions

1. Contractor is to stop work and immediately notify the NYCDOC of any suspected contaminated areas including but not limited to asbestos, lead paint, PCB caulking, PCB containing ballasts or mercury containing light blubs, encountered during the course of work.

E. Temporary Maintenance of Hazardous Conditions

1. Upon receipt of the Notice to Proceed, carefully inspect all existing work which is required to be repaired, altered or removed. Any such work which is found to be weakened, structurally unsafe or otherwise hazardous, shall be immediately put in a safe condition and so maintained until such time as the permanent work in connection therewith is completed.
2. Any restrictions regarding sequence of operations and locations of work do not apply to the elimination of hazardous conditions; all parts of the premises will be available at all times for the performance of such work.

F. Protection of Property

1. The Contractor shall be responsible for all damage to all new and existing work on the premises due to the Contractor's operations, and shall provide and maintain adequate protection against such damage.
2. The premises shall not be used as a work shop to the detriment of any portion thereof.
3. Any furniture and equipment shall not be used as workbenches; neither shall materials and furniture be piled thereon without proper protection. All furniture shall be protected by drop cloths or 6-mil polyethylene sheeting. The sheeting shall not be removed until clean-up is complete.
4. Provide decking on floors, steps, platforms, pavements and roofs where subject to damage from heavy traffic.
5. Provide protection of existing roofing and flashing and limit traffic to prevent any damage to the existing work. As a minimum provide a protective compressible layer of polyisocyanurate roof insulation board, 1” minimum thickness, over the existing membrane, and cover this cushion layer with a layer of hard protective board.
   Where there is a warranty in effect the protection shall be acceptable to the roofing manufacturer such that the existing roof warranty is not jeopardized. Obtain the manufacturer’s written approval of the protection methods and submit the approval letter to the NYCDOC prior to beginning work on the roof.
6. Protect doors and door jambs when conveying rubbish and materials.
7. Provide and maintain barricades to confine dust to work areas.

8. Provide watertight enclosures over openings at roof and walls; provide watertight protection where tank houses, bulkheads and other roof structures are removed; remove temporary waterproofing protection for installation of new permanent work.
9. All damage to adjoining work due to failure to provide adequate protection shall be corrected by the Contractor at the Contractor's expense.
10. After completion of the Work, the Contractor shall thereafter protect Work until it is accepted.

G. Protection of Building Occupants

1. The Contractor shall be responsible for all injury to persons due to the Contractor's operations and shall provide and maintain adequate protection against such injury.
2. Provide guards, rails, barricades, fences, sidewalk sheds, catch-platforms, decking, night lighting, and all other items as required by New York City Building Laws and as further required to provide adequate protection.
3. Provide barricades around work areas as required to prevent unauthorized persons from entering therein.
4. Provide plumbing and temporary drainage as required to keep all pits, trenches and other excavations, and the adjoining areas of the premises, dry during the course of the work.
5. Prevent exposure of persons to hazardous materials, offensive odors, noxious or toxic fumes or gases. Ensure that such contaminants are not recirculated through the ventilation systems, or through windows and openings, to occupied areas. Ventilate work areas prior to re-occupancy, to make certain that odors and gases are properly dissipated. Notify NYCDOC's Representative to conduct an inspection of the affected areas prior to re-occupancy.

H. Stability and Integrity of Existing Structures

1. Shoring of members and protection of the existing structure during construction is the responsibility of the Contractor and shall comply with the requirements of the NYC Building Code.
2. The most stringent requirements of the Building Code, Contract Drawings, Specifications, or any authorities having jurisdiction shall govern this Work.
3. Coordinate Work of this Section with Work of all other Divisions so as to properly, and completely, install all Work as indicated on Drawings or specified.

1.02 NON-INTERFERENCE WITH FACILITY FUNCTIONS

A. Perform the Work in such a manner that normal facility functions may be carried on throughout the period of work with a minimum of interference. Before commencing work in any portion of the premises normally used for facility functions, meet with

NYCDOC's Representative and perfect a working agreement. Noise shall be kept to a minimum.

B. In general, the Contractor shall not use or work in rooms, corridors, stairs, or elevators designated for facility personnel.

C. NYCDOC may assign a stair for Contractor use during working hours. Refer to the Phasing Exhibit. The Contractor shall only use the stair for access to floors and shall not in any way obstruct the stair or make it unsuitable for use as an exit by occupants.

1.03 FRATERNIZATION

A. Contractor shall prohibit all contact between Contractor's employees (including Subcontractor's employees and visitors to the site) and the occupants.

1.04 WORK SCHEDULE AND PHASING

A. General:

1. All Work must be performed according to a Work schedule coordinated by the Contractor and the Department's Construction Management Unit as described in Section II, C: Construction Phasing, that will not disrupt facility activities.

   All decisions affecting the normal operation of the facility shall be coordinated with the NYCDOC's Representative.

B. Work that shall be performed only when the building is totally unoccupied shall be as follows:
   1. Structural Work critical to the integrity of the building.
   2. Any Work generating dust, offensive odors, noxious or toxic fumes or gases (including but not limited to those containing chemicals or mineral dusts listed in Section 1910.1000 - Air Contaminants, Tables Z-1, Z-2, and Z-3, OSHA Standards for General Industry, latest edition) that cannot be contained within an isolated Work area.
   3. Boiler start-up and testing.
   4. Ventilation system start-up and testing.
   5. Burning, welding, brazing, sweating

C. Voluntary Overtime Work:

When permission to perform overtime or alternate shift Work is requested by the Contractor for the Contractor's own purposes, in order to meet schedules or for the Contractor's own convenience, the Overtime Work shall be considered to have been included in the Contract Price and no increase in the Contract Price, or Extra, will be granted for the Overtime Work. Contractor shall pay all costs necessary to maintain

the construction operation including but not limited to permits, temporary heat, temporary lighting, and temporary power.

D. Mandatory Overtime Work

If at any time, in the judgment of the NYCDOC, any item of Work is behind the established construction progress schedule, or is causing a delay that will affect the contract completion date, the NYCDOC may order the Contractor to increase The Contractor's Work force or to work the Contractor's forces and the forces of any Subcontractor overtime, at the Contractor's expense, until such time as all items of work have progressed to be in accordance with the accepted construction progress schedule. The Contractor shall pay all costs necessary to maintain the construction operation including but not limited to permits, temporary heat, temporary lighting, and temporary power.

E. Ordered Premium Overtime Work:

1. The NYCDOC reserves the right to order and pay for rescheduling any regularly scheduled Work (other than that Work hereinbefore classified under Voluntary and Mandatory Overtime Provisions) as Premium Work or to add Premium Work to the regularly scheduled Work.

2. Such Premium Work will be made by Change Order of Extra Work as identified elsewhere in the Contract Documents.

3. Extra payment for Change Order of Extra Work shall be paid only for the actual difference between "regular labor rates" and "overtime labor rates," and the cost of any additional labor, material, permits, custodial and ancillary services (if any); plus an amount in accordance with the provisions of the Contract for any and all other costs, overhead, and profits that might be incurred by the Contractor, as determined by the NYCDOC.

F. Contractor's Procedure for Performing Overtime or Ordered Premium Work To Be Done Prior To Commencing Work:

1. Make immediate arrangements to provide such ancillary services, if any, as may be required by Working Men, and Community, including, but not limited to:
   a. Sanitary facilities and drinking water.
   b. Power and light.
   c. Heating, Ventilating and Air Conditioning.
   d. Fire Protection.
   e. Security.
   f. Dust Protection.
   g. Clean-up and debris removal.
   h. Obtain permit from Supervisory bureau.

G. Contractor's Procedure During Overtime and Ordered Premium Work periods:

1. Proceed expeditiously with Work.
2. Do not begin any Work in any space unless all of the required materials and labor to complete that Work are at the job when Overtime or Ordered Premium work is scheduled to begin.
3. Complete all Work in each phase by all trades that have Work to be accomplished in each phase and inside each defined area.
4. All other limitations and restrictions governing Contract Work during building use shall apply to Overtime and Ordered Premium Work.

H. Opening Permits (For Work Involving Wet Mopping & Wiping)

1. For work that must be performed on holidays, and weekends the Contractor shall obtain from the Department of Buildings an "After-Hour Work Permit", and shall arrange to schedule.

1.05 CHANGE IN LEVELS

A. Where finished floor levels are raised or lowered as a result of Work specified, the Contractor shall make corresponding adjustments to existing floor registers, trap screws, plugs, catch basins, covers to cesspools and dry wells, coal holes, fresh air inlets, grates, fences, railings, tracks and all other work adversely affected by the change in levels, as required to restore proper relationship between these articles and the new floor surface.

1.06 WATER

A. Refer to Section II, A: Construction Services, #5.

1.07 ELECTRIC CURRENT

A. Refer to Section II, A: Construction Services, #5.

1.08 STORAGE SPACE

A. Storage space, if available, will be designated or assigned by the NYCDOC. Interior space will be assigned for storage of material liable to damage by weather. Provide any additional protection required and assume all responsibility for damage to materials. Do not store or temporarily leave materials in locations other than those assigned for storage.

1.09 MECHANICAL WORK

A. The removing of sanitary, heating and ventilating and electric work, including plumbing fixtures, pipes, metal ducts, radiators, lighting fixtures, wires, bells, telephones, and other incidental removals, and the repairing, altering, extending and replacing of such work will be done by the Contractor, as required for the completion of the Work.

B. All work damaged, disturbed or otherwise affected by the alterations shall be repaired.

1.10 MOVING OF FURNITURE, ARTICLES, AND FIXTURES

A. When the moving of furniture, shades, clocks, pictures, maps, plaster casts and other articles or fixtures is made necessary in the carrying on of the alterations, repair work, painting, cutting of openings through or removing of existing walls and partitions, or for any other such reason, the removing, resetting and relocating together with the necessary repairing, shall be carefully done as a part of this Contract.

B. Existing window shades, toilet accessories and other appliances shall be replaced and left in good condition; those which cannot be replaced shall be left in care of the DOC Maintenance.

C. All removed work shall be protected.

1.11 TEMPORARY DUST PARTITIONS AND BARRIERS

A. Dust Partitions (non-Fire-rated)

Provide temporary dust-tight partitions and doors complying with all requirements of the City of New York City Building Code and all authorities having jurisdiction.

1. Partitions shall extend tightly between walls and partitions, and tightly from floor to ceiling, at locations indicated on the Drawings.
2. Partitions shall be of 2"x4" stud framing, 16" on center with 2"x 4" sill and cap members. Framing shall be entirely covered both sides with 5/8", gypsum wall boards. Provide 3" sound attenuation mineral fire blankets between studs. Both sides of the partition shall be finished with 1/4" x 2" tempered hardboard batten strips over all joints, horizontal and vertical.
3. Provide continuous neoprene gasketing at juncture of Partition with walls, floor and ceilings or underside of structure.
4. Provide at least one, hollow metal door and frame assembly in each partition, where required for access. Door shall be 36" wide by 84" high and each door shall be equipped with hardware as specified in Section 08710 - Finish Hardware: 1-1/2 pairs of butts; a closer; pulls (2 required); rim latch operable by knob-release from work area, key-operated from the other side (furnish three (3) keys); and sill protection sweep.

B. Dust Partitions (Fire-rated)

1. Construct same as in A., above, except provide for 1-hour fire-rated construction: use Type X gypsum board; use 1-hour rated steel door and frame.

C. Dust Barriers

1. Construct of PVC piping framework, telescoping, with holes and pegs to allow adjustment of heights. Cover framework completely with polyethylene film, 6-mils minimum thickness, with flap for access. Install at doorways to form vestibule between work area and other areas. Tape junctures to obtain dust-tight barrier. Construct in manner to provide easy assembly and disassembly.
2. Closet doors, cabinets, drawers, etc. which remain in the work area during demolition shall, at minimum, be sealed with duct tape (or equivalent) at all openings where dust may penetrate. As an alternative, the Contractor may completely cover the object and all openings in one layer of 6-mil polyethylene sheeting, sealed on all edges to prevent the penetration of dust.
3. The Contractor shall continuously inspect adjacent non-work areas and ensure that these areas are free of any dust or debris generated by the work.

1.12 REMOVAL OF RUBBISH

A. Remove all rubbish (e.g., dirt, refuse, empty containers and packages, removed materials that become property of Contractor) from the premises as the work. No rubbish of any kind shall be stored in any rooms, halls, passageways or yards and no accumulation of rubbish shall be allowed to remain in or about the premises at any time during the course of the work for more than 24 hours.

B. Should the Contractor fail to keep the building, premises and surrounding sidewalks and streets clean and free from rubbish resulting from the Work, then NYCDOC may have such rubbish removed by others in accordance with the terms of the Contract. In such event, there shall be withheld from any payment to the Contractor a sum determined by NYCDOC sufficient to cover the cost of removal by other parties.

1.13 CLEAN-UP

A. Daily Cleaning

1. The site shall be left in a condition which is acceptable to the DOC.
2. The Contractor shall provide daily wet mopping of floors subject to construction dust in all areas affected by the Work.
3. All vertical and horizontal surfaces shall be cleaned and have a polished appearance and have no accumulation of dust, dirt, marks, streaks, smudges or fingerprints. All lighting fixtures and related work shall be clean.

B. Upon completion of the Work, the Contractor shall provide thorough clean-up, performed by professional cleaning service, of all areas affected by the Work as follows:

1. In general, clean-up requirements are limited to the removal of all rubbish, spatters, stains, smears, finger marks, foot tracks, from finish surfaces and the broom cleaning of floors, yards, sidewalks, and other areas on the premises that are affected by the Work.
2. Where work that causes the dissemination of dust has been performed, clean-up operations shall include, in addition to the operations hereinbefore specified, the washing of windows, the mopping of floors and the dusting and washing of walls, sills, furniture, and other surfaces, and the HEPA vacuuming of these same surfaces, all as required to restore work areas to the same state of cleanliness existing before work began.
3. In performing dust-creating work, provide dust enclosures and foot mats to minimize the spread of dust and foot marks. Refer to Art. 1.11 of this Section.
4. This final clean-up is in addition to the required daily removal of rubbish.

C. Wet Wiping and HEPA Vacuuming

The Contractor shall provide wet wiping, and HEPA vacuuming by professional cleaning service, of all surfaces (including furniture) in all areas affected by the Work, immediately prior to the releasing of the areas for facility use.

END OF SECTION

024119
SELECTIVE DEMOLITION

PART 1 - GENERAL

1.01 Summary

A. This Section includes the following:

1. Demolition and removal of selected portions of building or structure.
2. Salvage of existing items to be placed in storage and/or reinstalled.

B. This Section excludes hazardous material remediation which is contained in the following Sections:

1. 028200 – Asbestos Removal for asbestos remediation.

C. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).

1.02 Definitions

A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.

B. Remove and Salvage: Items indicated on Drawings for removal and salvage. Detach items from existing construction in a manner to prevent damage, and deliver as indicated in this Section.

C. Remove and Reinstall: Items indicated on Drawings for removal and reinstallation (e.g., fixtures, equipment, building elements, etc.). Detach items from existing construction in a manner to prevent damage, prepare them for reuse, and reinstall them where indicated.

D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.03 Quality Assurance

A. Comply with the following:

1. ANSI/ASSE A10.6 "Safety Requirements for Demolition Operations."
2. NFPA 241 "Standard for Safeguarding Construction, Alterations and Demolition Operations."

1.04 Project Conditions

A. Explosives: Use of explosives is prohibited.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 General

A. Examination:

1. Prior to commencement of Work:
    a. Document existing damage, and determine if adverse existing conditions exist as per Section 017310 (Execution).
    b. Verify that utilities have been disconnected and capped where needed to accommodate specific selective demolition.
2. If in the progress of the Work unanticipated mechanical, electrical, structural, or other elements that conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict.
    a. Promptly submit an accurate and complete written report detailing conflicting elements to Architect.
    b. Pending receipt of directive from Architect or Owner, rearrange selective demolition schedule as necessary to continue progress of overall Work without delay.

B. Shoring, Bracing and Structural Support:

1. Provide interior and exterior shoring, bracing, and structural supports to preserve stability and prevent movement, settlement or collapse of construction and finishes to be selectively demolished and adjacent facilities to remain.
    a. Retain a qualified professional engineer to design temporary shoring, bracing, and structural support as needed.
    b. Strengthen or add new supports when required during progress of selective demolition.
    c. If safety of structure appears to be endangered, cease operations immediately, notify Owner and Architect, and take precautions to support structure until determination is made for continuing operations.

C. Demolish and remove existing construction only to the extent required by new construction and as indicated.

1. At any one time, remove only that portion of the existing construction that can be immediately protected so that building interior remains watertight and weathertight.

2. Where selective demolition converges with existing construction to remain:
    a. Comply with Section 017300 (Removals, Cutting, and Patching).
    b. Conduct operations in a manner to protect adjacent and surrounding surfaces and material to remain from damage. Do not damage substrates to remain.
    c. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces.
    d. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
    e. Remove residual mortar, adhesives, or other matter, from material to remain, in preparation for tie-in of new Work. (For example, where deficient brick has been removed, remove mortar around perimeter of area in preparation for new brick and mortar.)
3. Where whole units are being removed for replacement (e.g., masonry units, sills, lintels, wall panels, etc.), cut out whole units from joint to joint in a manner to permit replacement of full size units, and carefully remove without damaging surrounding construction.
4. Do not use cutting torches until Work area is cleared of flammable materials. At concealed spaces (e.g., duct and pipe chases, etc.), verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations. Maintain adequate ventilation when using cutting torches.

3.02 Removed and Reinstalled Items

A. Carefully remove items, which will be reinstalled in the Work, from existing construction in a manner to prevent damage.

B. Clean removed items.

C. Label items to include the following information:
    1. Date removed.
    2. Item number, if applicable.
    3. Description.
    4. Location (where removed).

D. Pack or crate items. Identify contents of containers.

E. Protect items from damage in handling, transport and storage.

F. Reinstall items in locations indicated. Comply with installation requirements for new products and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

3.03 Concrete Demolition

A. Where required, perform concrete demolition as follows:

1. Concrete Spall Demolition:

a. Do not impact reinforcing steel to remain with any tools. Use only hand tools at locations immediately surrounding embedded reinforcing steel.

b. Remove loose or deteriorated concrete to achieve sound condition. Acceptable tools include power "chipping" hammer (15 lbs max. weight) or hand tools.

c. Cut rectilinear perimeter at minimum depth, as indicated on Drawings. Acceptable tools include power driven grinder with diamond blade and vacuum attachment for dust collection.

3.04 Masonry Demolition

A. Where required, perform masonry unit and wall demolition as follows:

1. Cut perimeter of area to be removed in a manner to protect adjacent material to remain from damage.

a. At head joints, short bed joints or end of long cuts, acceptable tools include power oscillating mortar removal tools or hand tools.

b. At long cuts, acceptable tools include power driven grinder with diamond blade and vacuum attachment for dust collection, or hand tools.

2. Remove mass of masonry in small sections. Acceptable tools include electric demolition “chipping” hammer (15 lbs max. weight), power driven grinder with diamond blade and vacuum attachment for dust collection, or hand tools.

3.05 Mortar Joint Demolition

A. Where required, rake mortar joint in a manner to protect masonry units from damage. Acceptable tools include:

1. At head joints, short bed joints or end of long cuts, acceptable tools include power oscillating mortar removal tools or hand tools.

2. At long cuts, acceptable tools include power driven grinder with diamond blade and vacuum attachment for dust collection, or hand tools.

B. Where mortar embedded units (e.g., masonry units, precast architectural concrete units, CMU units, stone units, etc.) have been removed, remove mortar, loose particles and debris from existing surrounding units, in preparation for replacement units.

3.06 Roofing Demolition

A. Where required, remove all existing components of roofing system and accessories to expose substrate.

3.07 Joint Sealant Removal

A. Where existing sealant is indicated to be replaced, perform selective demolition as follows:

1. Remove sealant (and backings as applicable), residue of sealant and primer, and other contaminants capable of interfering with adhesion of new sealant to joint substrates.
2. Remove only that portion of existing sealant (and backing, as applicable) that can be installed the same working day.

END OF SECTION

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SECTION 028200 - ASBESTOS REMOVAL

PART 1 - GENERAL

1.01 Scope of Work

A. This asbestos abatement Project will consist of the removal and disposal of asbestos-containing materials (ACM) at Rikers Island Correctional Facility North Infirmary Command (NIC) Building, 15-00 Hazen Street, East Elmhurst, NY.

B. The work shall include but not be limited to the removal of the following Asbestos-Containing materials:

Floor/Level	Description of ACM Material	Approximate Quantity (SF/LF/Unit)
Roof "A" Perimeter/ East End	Perimeter Roof Flashing	625 LF or 1,720 SF

C. The Contractor shall be aware of all conditions of the Project and is responsible for verifying quantities and locations of all Work to be performed. Failure to do so shall not relieve the Contractor of its obligation to furnish all labor and materials necessary to perform the Work.

D. All Work shall be performed in strict accordance with the Project Documents and all governing codes, rules, and regulations. Where conflicts occur between the Project Documents and applicable codes, rules, and regulations, the more stringent shall apply.

E. Working hours shall be as required and approved by the Owner. Asbestos abatement activities including, but not limited to, work area preparation, gross removal activities, cleaning activities, waste removal, etc. may need to be performed during 'off-hours' (including nights and weekends). In addition, multiple mobilizations may be required to perform the work identified in this project. The Contractor shall coordinate and schedule all Work with the facility and Owner's representative.

1.02 Special Job Conditions

A. Any special job conditions, including Variances obtained by the Owner, are described below.

1. All roofing materials, caulks, sealants, flashings, etc. in the areas indicated shall be removed completely down to the substrate so the surface is free and clear of all residues and made suitable for replacement materials. In cases where multiple layers are present, Contractor shall remove all layers along with any associated materials. All selective demolition necessary to access the asbestos-containing materials shall be performed by the Asbestos Contractor following NYSDOL ICR-56 regulations. All debris generated by the selective demolition process (mortar, concrete block, etc.) shall be treated and disposed of as asbestos contaminated waste.
2. The Contractor shall file a valid ACP-7 notification form.
3. The Contractor shall file a 1-22(b) variance application along with the ACP-7 form to accommodate phased work that requires a DOB permit. The Asbestos Contractor shall hire a NYSDOL certified asbestos project designer to develop the ACP-9 along with all supporting documentation (i.e. color coded drawings, phasing plan, etc.).
4. The Contractor shall maintain temporary protection to keep the building watertight throughout the performance of the work. Damage resulting from improper temporary protection will be the responsibility of the Contractor.
5. All entrances/egresses to the building shall be maintained with scaffolding and a protective roof and temporary lighting per OSHA regulations.
6. Any suspect ACM identified during construction may be sampled and analyzed for asbestos content by the environmental consultant at the Owner's request.

1.03 Permits and Compliance

A. The Contractor shall assume full responsibility and liability for compliance with all applicable Federal, State, and local laws, rules, and regulations pertaining to Work practices, protection of Workers, authorized visitors to the site, persons, and property adjacent to the Work.

B. Perform asbestos related Work in accordance with New York State Industrial Code Rule 56 (herein referred to as Code Rule 56), New York City Department of Environmental Protection Asbestos Control Program Title 15, Chapter 1 of the Rules of New York City (herein referred to as NYC DEP regulations), 40 CFR 61, and 29 CFR 1926. Where more stringent requirements are specified, adhere to the more stringent requirements.

C. The Contractor is responsible for providing the Asbestos Inspection Report (ACP7) filing to NYC DEP as well as all Asbestos Abatement Permit applications with supporting documentation, including the Work Place Safety Plan and any other applicable documents as may be required by NYC DEP. Any Asbestos Abatement Permit supporting documentation previously submitted and/or reviewed by NYC DEP are included as an appendix of this specification.

D. The Contractor is responsible for obtaining any Asbestos Project Conditional Completion (ACP20) forms upon completion of each phase of asbestos abatement or as otherwise may be required during the course of the project as well as the Asbestos Project Completion (ACP21) form. The Contractor shall be responsible to submit the A-TR1

form to NYC DEP and any other applicable documents as may be required by NYC DEP.

E. The Contractor must maintain current licenses pursuant to New York State Department of Labor, New York City Department of Environmental Protection Asbestos Control Program, New York City Department of Sanitation, and New York State Department of Environmental Conservation for all Work related to this Project, including the removal, handling, transport, and disposal of asbestos containing materials.

F. The Contractor must have and submit proof upon request that any persons employed by the Contractor to engage in or supervise Work on any asbestos Project have valid NYS and NYC asbestos handling and supervisor certificates pursuant to Code Rule 56 and NYC DEP regulations.

G. The Contractor shall comply fully with any Variance secured from regulatory agencies by the Owner in the performance of the Work. Any Variance applications previously submitted are included as an appendix of this specification.

H. The Contractor shall be responsible for obtaining all Variances as may be required for the Project or as requested by the Owner, including variances necessary to obtain NYC Department of Buildings Work Permits prior to completion of all asbestos abatement activities. Approval of the Owner is required prior to submission of a Variance application to any regulatory agency.

I. Failure to adhere to the Project Documents shall constitute a breach of the Contract and the Owner shall have the right to and may terminate the Contract provided, however, the failure of the Owner to so terminate shall not relieve the Contractor from future compliance.

1.04 Submittals

A. Pre-Work Submittals: Within 7 days prior to the pre-construction conference, the Contractor shall submit electronic copies of the documents listed below for review and approval prior to the commencement of asbestos abatement activities:

1. Contractor license issued by New York State Department of Labor.
2. A statement by an authorized representative of the company stating that they have a Respiratory Protection Program and it will be in effect for the duration of the project.
3. A copy of the Negative Exposure Assessment that will be utilized for the project. If an NEA will not be utilized, provide a statement by an authorized representative of the company stating that an NEA will not be used for the project.
4. Progress Schedule:
    a. Show the complete sequence of abatement activities and the sequencing of Work within each building or building section.

b. Show the dates for the beginning and completion of each major element of Work including substantial completion dates for each Work Area, building, or phase.

4. Project Notifications: As required by Federal, State, and NYC DEP regulatory agencies together with proof of transmittal (i.e. certified mail return receipt).
5. Building Occupant Notification: As required by regulatory agencies.
6. Abatement Work Plan: Provide plans that clearly indicate the following:
   a. All Work Areas/containments numbered sequentially.
   b. Locations and types of all decontamination enclosures.
   c. Entrances and exits to the Work Areas/containments.
   d. Type of abatement activity/technique for each Work Area/containment.
   e. Number and location of negative air units and exhaust. Also provide calculations for determining number of negative air pressure units.
   f. Proposed location and construction of storage facilities and/or field office.
   g. Location of water and electrical connections to building services.
   h. Waste transport routes through the building to the waste storage container.
7. Safety data sheets for all materials to be utilized for the abatement work, including but not limited to: spray glue, amended water, foam/viscous liquid, etc.
8. Disposal Site/Landfill Permit from applicable regulatory agency.
9. NYS Department of Environmental Conservation Waste Transporter Permit.
10. Approved NYC DEP Asbestos Abatement Permits and Variances.

B. On-Site Submittals: Refer to Part 3.1.C for all submittals, documentation, and postings required to be maintained on-site during abatement activities.

C. Project Close-out Submittals: Within 30 days of the completion of each abatement phase, the Contractor shall submit electronic copies of the documents listed below for review and approval prior to the Contractor's final payment.

1. Originals of all waste disposal manifests, seals, and disposal logs.
2. OSHA compliance air monitoring records conducted during the Work.
3. Daily progress log, including the entry/exit log.
4. A list of all Workers used in the performance of the Project, including name, NYS DOL and NYC DEP certification numbers and type of certification (i.e. supervisor, asbestos handler, etc.).
5. For each Worker used in the performance of the Project, submit the Worker's Acknowledgment Statement.
6. Disposal Site/Landfill Permit from applicable regulatory agency.
7. Project notifications, amended notifications, Work Place Safety Plan, A-TRU Asbestos Abatement Permit, Variances, Asbestos Project Conditional Completion (ACP20) forms, Asbestos Project Completion (ACP21) form.

1.05 Pre-Construction Conference

A. Prior to start of preparatory Work under this Contract, the Contractor shall attend a pre-construction conference attended by Owner, Facility Personnel, and Environmental Consultant.

B. Agenda for this conference shall include, but not necessarily be limited to:

1. Contractor's scope of Work, Work plan, and schedule to include number of workers and shifts.
2. Contractor's safety and health precautions including protective clothing and equipment and decontamination procedures.
3. Environmental Consultant's duties, functions, and authority.
4. Contractor's Work procedures including:
    a. Methods of job site preparation and removal methods.
    b. Respiratory protection.
    c. Disposal procedures.
    d. Cleanup procedures.
    e. Fire exits and emergency procedures.
5. Contractor’s required pre-work and on-site submittals, documentation, and postings.
6. Contractor's plan for twenty-four (24) hour Project security both for prevention of theft and for barring entry of unauthorized personnel into Work Areas.
7. Temporary utilities.
8. Handling of furniture and other moveable objects.
9. Storage of removed asbestos containing materials.
10. Waste disposal requirements and procedures, including use of the Owner supplied waste manifest and container seals.

C. In conjunction with the conference the Contractor shall accompany the Owner on a pre-construction walk-through documenting existing condition of finishes and furnishings, reviewing overall Work plan, location of fire exits, fire protection equipment, water supply and temporary electric tie-in.

1.06 Applicable Standards and Regulations

A. The Contractor shall comply with the following codes and standards, except where more stringent requirements are shown or specified:

B. Federal Regulations:

1. 29 CFR 1910.1001, "Asbestos" (OSHA)
2. 29 CFR 1910.1200, "Hazard Communication" (OSHA)
3. 29 CFR 1910.134, "Respiratory Protection" (OSHA)
4. 29 CFR 1910.145, "Specification for Accident Prevention Signs and Tags" (OSHA)
5. 29 CFR 1926, "Construction Industry" (OSHA)
6. 29 CFR 1926.1101, "Asbestos, Tremolite, Anthophyllite, and Actinolite" (OSHA)
7. 29 CFR 1926.500 "Guardrails, Handrails and Covers" (OSHA)

8. 40 CFR 61, Subpart A, "General Provisions" (EPA)
9. 40 CFR 61, Subpart M, "National Emission Standard for Asbestos" (EPA)
10. 49 CFR 171-172, Transportation Standards (DOT)

C. New York State Regulations:

1. 12 NYCRR, Part 56, "Asbestos", Industrial Code Rule 56 (DOL) (amended March 21, 2007).
2. 6 NYCRR, Parts 360, 364, Disposal and Transportation (DEC)
3. 10 NYCRR, Part 73, "Asbestos Safety Program Requirements" (DOH)

D. Local Regulations:

1. New York City Department of Environmental Protection Asbestos Control Program Title 15, Chapter 1 of the Rules of New York City
2. New York City Department of Sanitation Title 16, Chapter 8 of the Rules of New York City

E. Standards and Guidance Documents:

1. American National Standard Institute (ANSI) Z88.2-80, Practices for Respiratory Protection
2. ANSI Z9.2-79, Fundamentals Governing the Design and Operation of Local Exhaust Systems
3. EPA 560/585-024, Guidance for Controlling Asbestos Containing Materials in Buildings (Purple Book)
4. EPA 530-SW-85-007, Asbestos Waste Management Guidance
5. ASTM Standard E1368 “Standard Practice for Visual Inspection of Asbestos Abatement Projects.”

1.07 Notices

A. The Contractor shall provide notification of intent to commence asbestos abatement activities as indicated below.

1. At least ten (10) Working days prior to beginning abatement activities, send written notification to:

U.S. Environmental Protection Agency
National Emissions Standards for Hazardous Air Pollutants (NESHAPS) Coordinator
26 Federal Plaza
New York, NY 10007

2. At least ten (10) days prior to beginning abatement activities send written notification to:

New York State Department of Labor
Division of Safety and Health, Asbestos Control Program

3. At least seven (7) days prior to beginning abatement activities provide an electronic Asbestos Project Notification (ACP7) to New York City Department of Environmental Protection Asbestos Control Program in accordance with NYC DEP regulations.

B. The Contractor is required to send notifications to U.S. Environmental Protection Agency and New York State Department of Labor via mail or package delivery service that will provide proof of delivery and receipt.

C. The Contractor shall be responsible for maintaining current project filings with regulatory agencies for the duration of the project.

D. The Contractor shall post and/or provide Building Occupant Notification at least 10 days prior to beginning abatement activities as required by Code Rule 56.

E. The Contractor shall post the Asbestos Abatement Notice prior to beginning abatement activities as required by NYC DEP regulations. Also post a floor plan as required by NYC DEP regulations.

1.08 Project Monitoring and Air Sampling

A. The Owner shall engage the services of an Environmental Consultant (the Consultant) who shall serve as the Owner's Representative in regard to the performance of the asbestos abatement Project and provide direction as required throughout the entire abatement Project period.

B. The Contractor is required to ensure cooperation of its personnel with the Consultant for the air sampling and Project monitoring functions described in this section. The Contractor shall comply with all direction given by the Consultant during the course of the Project.

C. The Consultant shall provide the following administrative services:

1. Review and approve or disapprove all submittals, shop drawings, schedules, and samples.
2. Assure that all notifications to governmental agencies by the Contractor are submitted in a timely manner and are correct in content.

D. The Consultant shall staff the Project with a trained and certified person(s) to act on the Owner's behalf at the job site. This individual shall be designated as the Abatement Project Monitor (APM).

1. The APM shall be on-site at all times the Contractor is on-site. The Contractor shall not be permitted to conduct any Work unless the APM is on-site (except for inspection of barriers and negative air system during non-working days).
2. The APM shall have the authority to direct the actions of the Contractor verbally and in writing to ensure compliance with the Project documents and all regulations. The APM shall have the authority to Stop Work when gross Work practice deficiencies or unsafe practices are observed, or when ambient fiber concentrations outside the removal area exceed .01 f/cc or background level.
    a. Such Stop Work order shall be effective immediately and remain in effect until corrective measures have been taken and the situation has been corrected.
    b. Standby time required to resolve the situation shall be at the Contractor's expense.
3. The APM shall provide the following services:
    a. Inspection of the Contractor's Work, practices, and procedures, including temporary protection requirements, for compliance with all regulations and Project specifications including provisions required by Variances, the Work Place Safety Plan and Asbestos Work Permit.
    b. Provide abatement Project air sampling as required by applicable regulations and the Owner. Sampling will include background, work area preparation, asbestos handling, and final cleaning and clearance air sampling.
    c. Verify that all Workers used in the performance of the Project are certified by the appropriate regulatory agency.
    d. Monitor the progress of the Contractor's Work, and report any deviations from the schedule to the Owner.
    e. Monitor, verify, and document all waste load-out operations.
    f. Verify that the Contractor is performing personal air monitoring daily, and that results are being returned and posted at the site as required.
    g. The APM shall maintain a log on site that documents all project related and Consultant and Contractor actions, activities, and occurrences.

4. The following minimum inspections shall be conducted by the APM. Additional inspections shall be conducted as required by Project conditions. Progression from one phase of Work to the next by the Contractor is only permitted with the written approval of the APM.
    a. Pre-Construction Inspection: The purpose of this inspection is to verify the existing conditions of the Work Areas and to document these conditions.
    b. Pre-Commencement Inspection: The purpose of this inspection is to verify the integrity of each containment system prior to disturbance of any asbestos containing material. This inspection shall take place only after the Work Area is fully prepped for removal.
    c. Work Inspections: The purpose of this inspection is to monitor the Work practices and procedures employed on the Project and to monitor the continued integrity of the containment system. Inspections within the removal areas shall be conducted by the APM during all preparation,

removal, and cleaning activities at least twice every Work shift. Additional inspections shall be conducted as warranted.

d. Pre-Encapsulation Inspection: The purpose of this inspection is to ensure the complete removal of Asbestos Containing Material (ACM), from all surfaces in the Work Area prior to encapsulation.

e. Visual Clearance Inspection: The purpose of this inspection is to verify that: all materials in the scope of work have been properly removed; no visible asbestos debris/residue remains; no pools of liquid or condensation remains; and all required cleanings are complete. This inspection shall be conducted before final air clearance testing.

f. Post-Clearance Inspection: The purpose of this inspection is to ensure the complete removal of ACM, including debris, from the Work Area after satisfactory final clearance sampling and removal of all isolation and critical barriers and equipment from the Work Area.

g. Punch List Inspection: The purpose of this inspection is to verify the Contractor's certification that all Work has been completed as contracted and the existing condition of the area prior to its release to the Owner.

E. The Consultant shall provide abatement Project air sampling and analysis as required by applicable regulations. Sampling will include background, work area preparation, asbestos handling, and final cleaning and clearance air sampling.

1. Unless otherwise required by applicable regulations, the Consultant shall have samples analyzed by Phase Contrast Microscopy (PCM). Results shall be available at the Project site within 24 hours of completion of sampling.
2. Samples shall be collected as required by applicable regulations and these specifications. If PCM air sample analysis results exceed the satisfactory clearance criteria, then TEM analysis of the entire set of clearance air samples may be used, provided that a standard NIOSH/ELAP accepted laboratory analysis method is utilized that shall report each air sample result in fibers per cubic centimeter.
3. If the air sampling during any phase of the abatement project reveals airborne fiber levels at or above 0.01 fibers/cc or the established background level, whichever is greater, outside the regulated Work Area, Work shall stop immediately and corrective measures required by applicable regulations shall be initiated. Notify all employers and occupants in adjacent areas. The Contractor shall bear the burden of any and all costs incurred by this delay.
4. At the completion of each abatement phase, the Environmental Consultant shall provide the ACP15 Project Monitors Report to DEP.

1.09 Contractor Air Sampling

A. In addition to the requirements of OSHA 1926.1101, the Contractor shall be required to perform personal air monitoring every Work shift in each Work Area during which abatement activities occur in order to determine that appropriate respiratory protection is being worn and utilized.

B. The Contractor shall conduct air sampling that is representative of both the 8-hour time weighted average and 30-minute short-term exposures to indicate compliance with the permissible exposure and excursion limits.

C. The Contractor's laboratory analysis of air samples shall be conducted by an NYS DOH ELAP approved laboratory.

D. Results of personnel air sample analyses shall be available, verbally, within forty-eight (48) hours of sampling and shall be posted upon receipt. Written laboratory reports shall be delivered and posted at the Work site within five (5) days. Failure to comply with these requirements may result in all work being stopped until compliance is achieved.

1.10 Project Supervisor

A. The Contractor shall designate a full-time Project Supervisor who shall meet the following qualifications:

1. The Project Supervisor shall hold New York State DOL and New York City DEP certification as an Asbestos Supervisor.
2. The Project Supervisor shall meet the requirements of a "Competent Person" as defined by OSHA 1926.1101 and shall have a minimum of one year experience as a supervisor.
3. The Project Supervisor must be able to speak, read, and write English fluently, as well as communicate in the primary language of the Workers.

B. If the Project Supervisor is not on-site at any time whatsoever, all Work shall be stopped. The Project Supervisor shall remain on-site until the Project is complete. The Project Supervisor shall be removed from the Project if so requested by the Owner.

C. The Project Supervisor shall maintain the bound Daily Project Log that also includes the entry/exit logs as required by applicable regulations and section 2.03 of the specifications.

D. The Project Supervisor shall be responsible for the performance of the Work and shall represent the Contractor in all respects at the Project site. The Supervisor shall be the primary point of contact for the Asbestos Project Monitor.

1.11 Medical Requirements

A. Before exposure to airborne asbestos fibers, provide Workers with a comprehensive medical examination as required by 29 CFR 1910.1001, and 29 CFR 1926.1101.

1. This examination is not required if adequate records show the employee has been examined as required by 29 CFR 1910.1001, and 29 CFR 1926.1101 within the past year.

2. The same medical examination shall be given on an annual basis to employees engaged in an occupation involving asbestos fibers and within thirty (30) calendar days before or after the termination of employment in such occupations.

1.12 Training

A. As required by applicable regulations, prior to assignment to asbestos Work instruct each employee with regard to the hazards of asbestos, safety and health precautions, and the use and requirements of protective clothing and equipment.

B. Establish a respirator program as required by ANSI Z88.2 and 29 CFR 1910.134, and 29 CFR 1926.1101. Provide respirator training and fit testing.

1.13 Respiratory Protection

A. Select respirators from those approved by the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services.

B. Respirators shall be individually fit-tested to personnel under the direction of an Industrial Hygienist on a yearly basis. Fit-tested respirators shall be permanently marked to identify the individual fitted, and use shall be limited to that individual. Fit-test records shall be maintained on site for each employee.

C. Where fiber levels permit, and in compliance with regulatory requirements, Powered Air Purifying Respirators (PAPR) are the minimum allowable respiratory protection permitted to be utilized during gross removal operations of OSHA Class I or OSHA Class II friable ACM.

D. No respirators shall be issued to personnel without such personnel participating in a respirator training program.

E. High Efficiency Particulate Air (HEPA) respirator filters shall be approved by NIOSH and shall conform to the OSHA requirements in 29 CFR 1910.134 and 29 CFR 1926.1101.

F. A storage area for respirators shall be provided by the Contractor in the clean room side of the personnel decontamination enclosure where they will be kept in a clean environment.

G. The Contractor shall provide and make available a sufficient quantity of respirator filters so that filter changes can be made as necessary during the work day. Filters will be removed and discarded during the decontamination process. Filters cannot be reused. Filters must be changed if breathing becomes difficult.

H. Filters used with negative pressure air purifying respirators shall not be used any longer than one eight (8) hour work day.

I. Any authorized visitor, Worker, or supervisor found in the Work Area not wearing the required respiratory protection shall be removed from the Project site and not be permitted to return.

J. The Contractor shall have at least two (2) Powered Air Purifying Respirators stored on site designated for authorized visitors use. Appropriate respirator filters for authorized visitors shall be made available by the Contractor.

1.14 Delivery and Storage

A. Deliver all materials to the job site in original packages with containers bearing manufacturer's name and label.

B. Store all materials at the job site in a suitable and designated area.

1. Store materials subject to deterioration or damage away from wet or damp surfaces and under cover.
2. Protect materials from unintended contamination and theft.
3. Storage areas shall be kept clean and organized.

C. Remove damaged or deteriorated materials from the job site. Materials contaminated with asbestos shall be disposed of as asbestos debris as herein specified.

1.15 Temporary Utilities

A. Shut down and lock out all electrical power to the asbestos Work Areas.

B. Provide temporary 120-240 volt, single phase, three wire, 100 amp electric service with Ground Fault Circuit Interrupters (GFCI) for all electric requirements within the asbestos Work Area.

1. Where available, obtain from Owner's existing system. Otherwise provide power from other sources (i.e. generator).
2. Provide temporary wiring and "weatherproof" receptacles in sufficient quantity and location to serve all HEPA equipment and tools.
3. Provide wiring and receptacles as required by the Environmental Consultant for air sampling equipment.
4. All power to the Work Area shall be brought in from outside the area through GFCI's at the source.

C. Provide temporary lighting with "weatherproof" fixtures for all Work Areas including decontamination chambers.

1. The entire Work Area shall be kept illuminated at all times.

2. Provide lighting as required by the Environmental Consultant for the purposes of performing required inspections.

D. All temporary devices and wiring used in the Work Area shall be capable of decontamination procedures including HEPA vacuuming and wet-wiping.

E. Utilize domestic water service, if available, from Owner's existing system. Provide hot water heaters with sufficient capacity to meet Project demands.

PART 2 - PRODUCTS

2.01 Protective Clothing

A. Provide personnel utilized during the Project with disposable protective whole body clothing, head coverings, gloves and foot coverings. Provide disposable plastic or rubber gloves to protect hands. Cloth gloves may be worn inside the plastic or rubber for comfort, but shall not be used alone. Make sleeves secure at the wrists and make foot coverings secure at the ankles by the use of tape, or provide disposable coverings with elastic wrists or tops.

B. Provide sufficient quantities of protective clothing to assure a minimum of four (4) complete disposable outfits per day for each individual performing abatement Work.

C. Eye protection and hard hats shall be provided and made available for all personnel entering any Work Area.

D. Authorized visitors shall be provided with suitable protective clothing, headgear, eye protection, and footwear whenever they enter the Work Area.

2.02 Signs and Labels

A. Provide bilingual (English-Spanish) warning signs and barrier tapes at all approaches to asbestos Work Areas. Locate signs at such distance that personnel may read the sign and take the necessary protective steps required before entering the area.

1. Provide danger signs in vertical format conforming to 29 CFR 1926.1101, minimum 20" x 14" displaying the following legend.

DANGER
ASBESTOS CANCER AND LUNG DISEASE
HAZARD
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING
ARE REQUIRED IN THIS AREA

2. Provide 3" wide yellow barrier tape printed with black lettered, "DANGER ASBESTOS REMOVAL". Locate barrier tape across all corridors, entrances and access routes to asbestos Work Area. Install tape 3' to 4' AFF.

B. Provide asbestos danger labels affixed to all asbestos materials, scrap, waste, debris and other products contaminated with asbestos.

1. Provide asbestos danger labels of sufficient size to be clearly legible, displaying the following legend:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

2. Provide the following asbestos labels, of sufficient size to be clearly legible, for display on waste containers (bags or drums) which will be used to transport asbestos contaminated material in accordance with United States Department of Transportation 49 CFR Parts 171 and 172: (Note: Include “RQ” for friable asbestos waste only.)

RQ, (WASTE) ASBESTOS, 9, NA2212, PGIII

3. Generator identification information shall be affixed to each waste container indicating the following printed in indelible ink:

Generator Name
Facility Name
Facility Address

2.03 Daily Project Log

A. Provide a Daily Project Log. The log shall contain on title page the Project name, name, address and phone number of Owner; name, address and phone number of Environmental Consultant; name, address and phone number of Abatement Contractor; emergency numbers including, but not limited to local Fire/Rescue department and all other requirements.

B. All entries into the log shall be made in non-washable, permanent ink and such pen shall be strung to or otherwise attached to the log to prevent removal from the log-in area. Under no circumstances shall pencil entries be permitted.

C. All persons entering and exiting the Work Area shall sign the log and include name, social security number, and time.

D. The Project Supervisor shall maintain entry log records and ensure that they are recorded in accordance with the provisions of NYC DEP regulations.

2.04 Scaffolding and Ladders

A. Provide all scaffolding and/or staging as necessary to accomplish the Work of this Contract. Scaffolding may be of suspension type or standing type such as metal tube and coupler, tubular welded frame, pole or outrigger type or cantilever type. All scaffolding shall be designed and constructed in accordance with OSHA, New York City Building Code, and any other applicable federal, state and local government regulations. Whenever there is a conflict or overlap of the above references the most stringent provisions are applicable.

B. Provide scaffolding and ladders as required by the Environmental Consultant for the purposes of performing required inspections.

2.05 Surfactant (Amended Water)

A. Wet all asbestos-containing materials prior to removal with surfactant mixed and applied in accordance with manufacturer's printed instructions.

2.06 Encapsulant

A. Encapsulant shall be tinted or pigmented so that application when dry is readily discernible.

B. Only encapsulants rated as acceptable or marginally acceptable on the basis of Battelle Columbus Laboratory test procedures and rating requirements developed under the 1978 USEPA Contract shall be used for lockdown encapsulation.

C. The encapsulant solvent or vehicle shall not contain a volatile hydrocarbon.

D. Latex paint with solids content greater than 15 percent shall be considered a lockdown sealant for coating all non-metallic surfaces.

2.07 Foam/Viscous Liquid

A. Foam or viscous liquid shall be non-toxic, shall not require special respirator protection for handling, and shall not affect the handling and disposal of the asbestos waste.

B. Foam or vicious liquid shall leave an identifiable colored residue when it dissipates.

2.08 Disposal Bags, Drums, And Containers

A. Provide 6-mil polyethylene disposal bags printed with asbestos caution labels. Bags shall also be imprinted with U.S. Department of Transportation required markings.

B. Provide 30 or 55 gallon capacity fiber, plastic, or metal drums capable of being sealed air and water tight if asbestos waste has the potential to damage or puncture disposal bags.

Affix asbestos caution labels on lids and at one-third points around drum circumference to assure ready identification.

C. Containers and bags must be labeled accordance with 40 CFR Part 61 NESHAPS and applicable regulations. When the bags/containers are moved to the lockable hardtop dumpster from the waste decontamination system washroom, the bags must also be appropriately labeled with the date they are moved on the bag/container in waterproof markings.

D. Labeled ACM waste containers or bags shall not be used for non-ACM waste or trash. Any material placed in labeled containers or bags, whether turned inside out or not shall be handled and disposed of as ACM waste.

2.09 Hepa Vacuum Equipment

A. All dry vacuuming performed under this contract shall be performed with High Efficiency Particulate Absolute (HEPA) filter equipped industrial vacuums conforming to ANSI Z9.2.

B. Provide tools and specialized equipment including scraping nozzles with integral vacuum hoods connected to a HEPA vacuum with flexible hose.

2.10 Power Tools

A. Any power tools used to drill, cut into, or otherwise disturb asbestos material shall be manufacturer equipped with HEPA filtered local exhaust ventilation.

2.11 Polyethylene Sheeting

A. All polyethylene (plastic) sheeting used on the Project (including but not limited to sheeting used for critical and isolation barriers, fixed objects, walls, floors, ceilings, waste container) shall be at least 6-mil fire retardant sheeting.

B. Decontamination enclosure systems shall utilize at least 6-mil opaque fire retardant plastic sheeting. At least 2 layers of 6-mil reinforced fire retardant plastic sheeting shall be used for the flooring.

PART 3 - EXECUTION

3.01 General Requirements

A. Should visible emissions or water leaks be observed outside the Work Area, immediately stop Work and institute emergency procedures per applicable regulations. Should there be elevated fiber levels outside the Work Area, immediately stop Work and institute emergency procedures per applicable regulations. All costs incurred in decontaminating

such non-Work Areas and the contents thereof shall be borne by the Contractor, at no additional cost to the Owner.

B. Medical approval, fit test reports, Worker Acknowledgments, and NYS DOL/NYC DEP certificates shall be on site prior to admittance of any Contractor's employees to the asbestos Work Area.

C. The following submittals, documentation, and postings shall be maintained on-site by the Contractor during abatement activities at a location approved by the Abatement Project Monitor:

1. Contractor license issued by New York State Department of Labor.
2. Certification, Worker Training, Medical Surveillance, Acknowledgments:

    a. NYS DOL and NYC DEP Asbestos Handler certification cards for each person employed in the removal, handling, or disturbance of asbestos.
    b. Evidence that Workers have received proper training required by the regulations and the medical examinations required by OSHA 29 CFR 1926.1101.
    c. Documentation that Workers have been fit tested specifically for respirators used on the Project.
    d. Worker's Acknowledgments: Statements signed by each employee that the employee has received training in the proper handling of asbestos containing materials; understands the health implications and risks involved; and understands the use and limitations of the respiratory equipment to be used.

3. Daily OSHA personal air monitoring results.
4. NYS Department of Health ELAP certification for the laboratory that will be analyzing the OSHA personnel air samples.
5. NYS Department of Environmental Conservation Waste Transporter Permit.
6. Project documents (specifications and drawings.)
7. Notifications, Variances, Asbestos Work Permit, Work Place Safety Plan, ACP15, ACP20/21. Ensure that the most up-to-date notifications and Variances are on-site.
8. Applicable regulations.
9. Safety Data Sheets of supplies/chemicals used on the Project.
10. Approved Abatement Work Plan.
11. List of emergency telephone numbers.
12. Magnahelic manometer semi-annual calibration certification.
13. Waste Disposal Log.
14. Daily Project Log.

D. The following documentation shall be maintained on-site by the Abatement Project Monitor during abatement activities:

1. Contractor license issued by New York State Department of Labor.
2. Air Sample Log.

3. Air sample results.
4. ACP15 Project Monitors Reports.
5. Project Monitor Daily Log
6. Asbestos Survey Report.
7. A copy of ASTM Standard E1368 “Standard Practice for Visual Inspection of Asbestos Abatement Projects.”

E. The Work Area must be vacated by building occupants prior to decontamination enclosure construction and Work Area preparation.

F. All demolition necessary to access asbestos containing materials for removal must be conducted within negative pressure enclosures by licensed asbestos handlers. Demolition debris may be disposed of as construction and demolition debris provided the Abatement Project Monitor determines that it is not contaminated with asbestos and there has been no disturbance of ACM within the enclosure. If the demolition debris is determined to be contaminated or ACM has been disturbed, it must be disposed of as asbestos waste.

3.02 Personnel Decontamination Enclosure

A. Provide personnel decontamination enclosure contiguous to the Work Area or as per Variance. The decontamination enclosure shall be attached to the Work Area and not located within it unless isolation barriers are installed. If the decontamination chamber is accessible to the public it shall be fully framed and sheathed to prevent unauthorized entry.

B. Access to the Work Area will be from the clean room through an air-lock to the shower and through an air lock to the equipment room. Each airlock shall be a minimum of three feet from door to door. Additional air locks shall be provided as required by applicable regulations for remote decontamination enclosures.

C. The decontamination enclosure ceiling and walls shall be covered with one layer of opaque 6-mil polyethylene sheeting. Two layers of reinforced polyethylene sheeting shall be used to cover the floor.

D. The entrance to the clean room shall have a lockable door. Provide suitable lockers for storage of Worker's street clothes. Storage for respirators along with replacement filters and disposable towels shall also be provided.

E. Provide a temporary shower with individual hot and cold water supplies and faucets. Provide a sufficient supply of soap and shampoo. There shall be one shower for every six Workers. The shower room shall be constructed in such a way so that travel through the shower chamber shall be through the shower. The shower shall not be able to be bypassed.

F. Shower water shall be drained, collected and filtered through a system with at least a 5.0 micron particle size collection capability containing a series of several filters with

progressively smaller pore sizes to avoid rapid clogging of the system. The filtered waste water shall then be discharged in accordance with applicable codes and the contaminated filters disposed of as asbestos waste.

G. The equipment room shall be used for the storage of tools and equipment. A walk-off pan filled with water shall be located in the Work Area outside the equipment room for Workers to clean foot coverings when leaving the Work Area. A labeled 6-mil plastic ACM waste bag for collection of contaminated clothing shall be located in this room.

H. The personal decontamination enclosure shall be cleaned and disinfected minimally at the end of each Work shift and as otherwise directed by the Asbestos Project Monitor.

3.03 Waste Decontamination Enclosure

A. Provide a waste decontamination enclosure contiguous to the Work area or as per Variance. The decontamination enclosure shall be attached to the Work Area and not located within it unless isolation barriers are installed. If the decontamination chamber is accessible to the public it shall be fully framed and sheathed to prevent unauthorized entry.

B. The waste decontamination enclosure system shall consist of a holding area, air lock and washroom. The airlock shall be a minimum of three feet from door to door. The entrance to the holding area shall have a lockable door.

C. The decontamination enclosure ceiling and walls shall be covered with one layer of opaque 6-mil polyethylene sheeting on walls and ceiling. Two layers of reinforced polyethylene sheeting shall be used to cover the floor.

D. Where there is only one egress from the Work Area, the holding area of the waste decontamination enclosure system may branch off from the personnel decontamination enclosure equipment room, which then serves as the waste wash room.

E. The waste wash room water shall be drained, collected, and filtered through a system with at least a 5.0 micron particle size collection capability containing a series of several filters with progressively smaller pore sizes to avoid rapid clogging of the system. The filtered waste water shall then be discharged in accordance with applicable codes and the contaminated filters disposed of as asbestos waste.

F. In small asbestos Projects where only one egress from the Work Area exists, the shower room may be used as a waste washroom. In this instance, the clean room shall not be used for waste storage, but shall be used for waste transfer to carts, which shall immediately be removed from this enclosure.

3.04 Work Area Entry and Exit Procedures

A. Access to and from the asbestos Work Area is permitted only through the personnel decontamination enclosure unless otherwise stipulated in a Variance.

B. Workers shall sign the entry/exit log upon every entry and exit.

C. The following procedures shall be followed when entering the Work Area:

1. Before entering the Work Area, Workers shall proceed to the clean room, remove all street clothes, and don protective clothing, equipment, and respirators.
2. Workers shall proceed from the clean room through the shower room and the equipment room and into the Work Area.

D. The following procedures shall be followed when exiting the Work Area:

1. Before leaving the Work Area, gross asbestos contamination will be removed by brushing, wet cleaning and/or HEPA vacuuming.
2. In the equipment room, Workers shall remove disposable clothing, but not respirators, and shall place clothing in plastic disposal bags for disposal as contaminated debris prior to entering the shower room.
3. Workers shall shower thoroughly while wearing respirators then wash respirator with soap and water prior to removal.
4. Upon exiting the shower, Workers shall don new disposable clothing if the Work shift is to continue or street clothes to exit area. Under no circumstances shall Workers enter public non-Work Areas in disposable protective clothing.

E. If remote decontamination enclosures are permitted by applicable regulations or a Variance, workers shall wear two disposable suits for all phases of Work. Workers exiting the work area shall HEPA vacuum the outer suit, enter the airlock, remove the outer suit and then place it back into the Work Area. A clean second suit shall be donned before exiting the airlock and proceeding to the decontamination enclosure or another work area.

3.05 Work Area Preparation

A. Asbestos danger signs shall be posted at all approaches to the asbestos Work Area. Post all emergency exits as emergency exits only on the Work Area side, post with asbestos caution signs on the non-Work Area side. Provide all non-Work Area stairs and corridors accessible to the asbestos Work Area with warning tapes at the base of stairs and beginning of corridors. Warning tapes shall be in addition to caution signs.

B. Shut down and lock out the building heating, ventilating, and air conditioning systems. Electrical systems and circuits shall also be shut down unless permitted to remain active per applicable regulations and appropriately protected and labeled. Existing lighting sources shall not be utilized. Provide temporary electric power and lighting as specified herein.

C. All surfaces and objects within the Work Area shall be pre-cleaned using HEPA vacuuming and/or wet-wiping methods. Dry sweeping and any other methods that raise dust shall be prohibited. ACM shall not be disturbed during pre-cleaning.

D. Movable objects within the Work Area shall be HEPA vacuumed and/or wet-wiped and removed from the Work Area.

E. All non-movable equipment in the Work Area shall be completely covered with 2 layers of polyethylene sheeting, at least 6-mil in thickness, and secured in place with duct tape and/or spray adhesive.

F. Provide enclosure of the asbestos Work Area necessary to isolate it from unsealed areas of the building in accordance with the approved asbestos Work plan and as specified herein.

G. Provide critical barriers by sealing off all openings including but not limited to windows, diffusers, grills, electrical outlets and boxes, doors, floor drains, and any other penetrations of the Work Area enclosure, using 2 layers of at least 6-mil polyethylene sheeting.

H. Provide isolation barriers by installing temporary framing and sheathing at openings larger than 32 square feet forming the limits of the asbestos Work Area. Sheathing thickness must be a minimum of 3/8 inch and all sheathing shall be caulked and the Work Area side sealed with two layers of 6-mil polyethylene sheeting.

I. Isolation barriers shall be installed at all elevator openings in the Work Area. Elevators running through the regulated abatement work area shall be shut down or isolated as per applicable regulations. Elevator controls shall be modified so that elevators bypass the Work Area.

J. Provide two layers of 6-mil polyethylene sheeting over all floor, wall, and ceiling surfaces. Isolation barriers shall also be covered with two layers (for a total of four layers). Sheeting shall be secured with spray adhesive and then sealed with duct tape. All joints in polyethylene sheeting shall overlap 12" minimum. Carpeting left in place shall be covered with 3/8 inch plywood sheathing prior to plasticizing.

K. Unless otherwise specified for removal, the Contractor shall either protect all fiberglass insulation on piping, ductwork, tanks, etc. in the Work Area using two layers of six mil polyethylene or remove the insulation as asbestos containing waste. If the Contractor elects to remove the fiberglass insulation, he shall be responsible for reinsulation if reinsulation of removed ACM is part of the Contract or Project.

L. Frame out emergency exits. Provide double layer 6-mil polyethylene sheeting and tape seal opening. Post as emergency exits only and mark with photoluminescent paint or signage. Provide a cutting tool on the Work Area side of exit.

M. Remove all items attached to or in contact with ACM only after the Work Area enclosure is in place. HEPA vacuum and wet wipe with amended water all removed items prior to their removal from the Work Area and before the start of asbestos removal operations.

N. Suspended ceiling tiles shall only be removed after Work Area preparation is complete. If possible, non-contaminated ceiling tiles shall be HEPA vacuumed and removed from the Work Area before asbestos removals begin. Contaminated ceiling tiles shall be disposed of as asbestos waste.

3.06 Negative Air Pressure Filtration System

A. Provide a portable asbestos filtration system that develops a minimum pressure differential of negative 0.02 in. of water column within all full enclosure areas relative to adjacent unsealed areas and that provides a minimum of 4 air changes per hour in the Work Area during abatement and 6 air changes for non-friable flooring and/or mastic removal.

B. Such filtration systems must be made operational after critical and isolation barriers are installed but before wall, floor, and ceilings are plasticized and shall be operated 24 hours per day during the entire Project until the final cleanup is completed and satisfactory results of the final air samples are received from the laboratory.

C. The system shall include a series of pre-filters and filters to provide High Efficiency Particulate Air (HEPA) filtration of particles down to 0.3 microns at 100% efficiency and below 0.3 microns at 99.9% efficiency. Provide sufficient replacement filters to replace pre-filters every 2 hours, secondary pre-filters every 24 hours, and primary HEPA filters every 600 hours of operation.

D. A minimum of one additional filtration unit of at least the same capacity as the primary unit(s) shall be installed and fully functional to be used during primary unit (s) filter changing and in case of primary failure.

E. If the containment area includes either the entire floor of the building or an area greater than 15,000 sq. ft. on any floor, install a negative air cut off switch as required by NYC DEP regulations.

F. Upon electric power failure or shut-down of any filtration unit, all abatement activities shall stop immediately and only resume after power is restored and all filtration units are fully operating. For shut-downs longer than one half hour, all openings into the Work Area, including the decontamination enclosures, shall be sealed.

G. The Contractor shall provide a manometer to verify negative air pressure. Manometers shall be read twice daily and recorded within the Daily Project Log.

H. There shall be at least a 4 hour settling period after the Work Area is fully prepared and the negative filtration units have been started to ensure integrity of the barriers.

I. Once installed and operational, the Contractor's Supervisor shall conduct daily inspections of the Work Area to insure the airtight integrity of the enclosure and operation of the negative air system. Findings shall be recorded within the Daily Project Log. Inspections shall also be conducted on days when no abatement activities are in progress.

3.07 Removal of Asbestos-Containing Materials

A. Asbestos-containing materials shall be removed in accordance with the Contract Documents and the approved Asbestos Work Plan. Only one type of ACM shall be abated at a time within a Work Area. Where there are multiple types of ACM requiring abatement, applicable regulations procedures for sequential abatement shall be followed.

B. Sufficiently wet asbestos materials with a low pressure, airless fine spray of surfactant to ensure full penetration prior to material removal. Re-wet material that does not display evidence of saturation.

C. One Worker shall continuously apply amended water while ACM is being removed.

D. Perform cutting, drilling, abrading, or any penetration or disturbance of asbestos containing material in a manner to minimize the dispersal of asbestos fibers into the air. Use equipment and methods specifically designed to limit generation of airborne asbestos particles. All power operated tools used shall be provided with HEPA equipped filtered local exhaust ventilation.

E. Upon removal of ACM from the substrate, the newly exposed surfaces shall be HEPA vacuumed and/or wet cleaned. Surfaces must be thoroughly cleaned using necessary methods and any required solvents to completely remove any adhesive, mastic, etc.

F. All removed material shall be placed into 6-mil plastic disposal bags or other suitable container upon detachment from the substrate. ACM is not permitted to lie on the floor for any period of time.

G. Large components shall be wrapped in two layers of 6-mil polyethylene sheeting. Sharp components likely to tear disposal bags shall be placed in fiber drums or boxes and then wrapped with sheeting.

H. Power or pressure washers are not permitted for asbestos removal or clean-up procedures unless approved in a Variance.

I. All open ends of pipe and duct insulation not scheduled for removal shall be encapsulated using lag cloth.

J. All construction and demolition debris determined by the Environmental Consultant to be contaminated with asbestos shall be handled and disposed of as asbestos waste.

K. The use of metal shovels, metal dust pans, etc. are not permitted inside the work area.

3.08 Equipment and Waste Container Decontamination And Removal Procedures

A. External surfaces of contaminated containers and equipment shall be cleaned by wet cleaning and/or HEPA vacuuming in the Work Area before moving such items into the waste decontamination enclosure system airlock by persons assigned to this duty. The persons in the Work Area shall not enter the airlock. No gross removal operations are permitted when waste transfer is in progress.

B. The containers and equipment shall be removed from the airlock by persons stationed in the washroom during waste removal operations. The external surfaces of containers and equipment shall be cleaned a second time by wet cleaning.

C. The cleaned containers of asbestos material and equipment are to be dried of any excessive pooled or beaded liquid, placed in uncontaminated 6-mil plastic bags or sheeting, as the item's physical characteristics demand, and sealed airtight.

D. The clean recontainerized items shall be moved into the airlock that leads to the holding area. Workers in the washroom shall not enter this airlock.

E. Containers and equipment shall be moved from the airlock and into the holding area by persons dressed in clean personal protective equipment, who have entered from the holding area.

F. The cleaned containers of asbestos material and equipment shall be placed in water tight carts with doors or tops that shall be closed and secured. These carts shall be held in the holding area pending removal. The carts shall be wet cleaned and/or HEPA vacuumed at least once each day.

G. The exit from the decontamination enclosure system shall be secured to prevent unauthorized entry.

H. Where the waste removal enclosure is part of the personnel decontamination enclosure, waste removal shall not occur during shift changes or when otherwise occupied. Precautions shall be taken to prevent short circuiting and cycling of air outward through the shower and clean room.

3.09 Work Area Decontamination, Cleaning, And Clearance Procedures

A. Following completion of gross abatement and after all accumulations of asbestos waste materials have been containerized, the following decontamination procedures shall be followed unless modified by a Variance.

B. First Cleaning:

1. All bagged asbestos waste and unnecessary equipment shall be decontaminated and removed from the Work Area.
2. All surfaces in the Work Area shall be wet cleaned. A wet-purpose shop vacuum may be used to pick up excess liquid, and may either be decontaminated prior to removal from the Work Area or disposed of as asbestos waste.
3. The Abatement Project Monitor shall conduct a visual inspection of the Work Area for cleanliness and completion of abatement.
4. The Contractor shall then apply a thin coat of encapsulant to all surfaces in the Work Area that were not the subject of removal. In no event shall encapsulant be applied to any surface that was the subject of removal prior to obtaining satisfactory air monitoring results. Encapsulants shall be pigmented or tinted to provide an indication for completeness of coverage. The Abatement Project Monitor shall determine adequacy of coverage.
5. After the encapsulant has been applied and the required waiting/settling and drying time has elapsed, the first layer of polyethylene sheeting shall then be removed and bagged.

C. Second Cleaning:

1. All surfaces in the Work Area shall be HEPA vacuumed and then wet cleaned.
2. The Abatement Project Monitor shall conduct a second visual inspection of the Work Area for cleanliness.
3. After the required waiting/settling and drying time has elapsed, the second layer of polyethylene sheeting shall be removed and bagged

D. Third Cleaning:

1. All surfaces in the Work Area shall be HEPA vacuumed and then wet cleaned.
2. The Abatement Project Monitor shall conduct a third visual inspection of the Work Area for cleanliness.
3. After the required waiting/settling and drying time has elapsed, aggressive final clearance air sampling shall then be conducted by the Environmental Consultant provided no visible asbestos debris/residue; pools of liquid, or condensation remains.
4. Upon receipt of satisfactory final clearance air sampling results, the negative air pressure equipment can then be shut down and the isolation and critical barriers removed. Following this, the decontamination enclosures shall be removed.

E. After isolation and critical barriers are removed, the Abatement Project Monitor and Contractor's Supervisor shall inspect the Work Area for cleanliness. If necessary, additional cleaning shall be performed by the Contractor as directed by the Abatement Project Monitor.

F. As a result of any visual inspection by the Asbestos Project Monitor or should air sampling results indicate high fiber levels, the Contractor will clean or reclean the affected areas at no additional expense to the Owner.

3.10 Tent Enclosures

A. Tent enclosures may only be used where specifically permitted by applicable regulations or a Variance.

B. The Contractor shall restrict access to the immediate area where tent removal procedures are taking place using barrier tape and/or construction barriers. Caution signs shall be posted.

C. Personnel and waste decontamination enclosures shall be constructed. Configuration shall be as required by Project size.

D. The Work Area shall be precleaned. All objects and equipment that will remain in the restricted area during abatement shall be sealed with two layers of 6-mil polyethylene and tape.

E. The tent shall be a single use barrier constructed with a rigid frame and at least two layers of six mil polyethylene unless one layer of six mil polyethylene is otherwise permitted by applicable regulations. All seams shall be sealed airtight using duct tape and/or spray adhesive.

F. The tent shall be constructed with at least one airlock for worker/waste egress.

G. A monometer shall be used for all enclosures.

H. Negative air shall be maintained at four (4) air changes per hour for non-friable and glove bag abatement tent enclosure work areas.

I. OSHA compliance air monitoring is required per section 1.09.

J. ACM removal shall follow procedures defined in section 3.07.

K. Waste material shall be placed in properly labeled 6-mil plastic bags or other appropriate containers. The outside of the bags or containers shall be wet wiped and/or HEPA vacuumed and shall then be placed in a second bag/container before being transported to the waste storage container. All transportation of waste bags and containers outside the Work Area shall be in watertight carts. These carts shall be held in the holding area pending removal. The carts shall be wet cleaned and/or HEPA vacuumed at least once each day.

L. Following completion of gross abatement and after all accumulations of asbestos waste materials have been containerized, the following decontamination procedures shall be followed.

1. All bagged asbestos waste and unnecessary equipment shall be decontaminated and removed from the Work Area.
2. All surfaces in the Work Area shall be wet cleaned. A wet-purpose shop vacuum may be used to pick up excess liquid, and shall be decontaminated prior to removal from the Work Area.
3. The Asbestos Project Monitor shall conduct a visual inspection of the Work Area for cleanliness and completion of abatement.
4. After the waiting/settling and drying time requirements have elapsed, aggressive final clearance air sampling shall then be conducted by the Environmental Consultant.
5. Upon receipt of satisfactory final clearance air sampling results, the tent shall be collapsed into itself, placed in suitable disposal bags, and transported to the waste decontamination enclosure. Isolation and critical barriers shall then be removed.

3.11 Glovebag Removal

A. Glovebag removals may only be used as specifically permitted by applicable regulations or a Variance. Glovebags may only be used on piping.

B. In addition to conformance with applicable regulations and Variances, glovebag removals are only permitted to be conducted within full containments or tent enclosures complying with these specifications.

C. The Contractor shall restrict access to the immediate area where tent/glovebag removal procedures are taking place using barrier tape and/or construction barriers. Caution signs shall be posted.

D. Personnel and waste decontamination enclosures shall be constructed. Configuration shall be as required by Project size.

E. Glovebag removals shall utilize commercially available glovebags of at least 6- mil thickness. Use shall be in accordance with the manufacturer's instructions and the following minimum requirements:

1. The sides of the glovebag shall be cut to fit the size pipe being removed. Tools shall be inserted into the attached tool pocket.
2. The glovebag shall be placed around the pipe and the open edges shall be folded and sealed with staples and duct tape. The glovebag shall also be sealed at the pipe to form a tight seal.
3. Openings shall be made in the glovebag for the wetting tube and HEPA vacuum hose. The opening shall be sealed to form a tight seal.

4. All glovebags shall be smoke tested by the Asbestos Project Monitor under negative pressure using the HEPA vacuum before removal operations commence. Glovebags that do not pass the smoke test shall be resealed and then retested.
5. After first wetting the materials to be removed, removal may commence. ACM shall be continuously wetted. After removal of the ACM, the piping shall be scrubbed or brushed so that no visible ACM remains. Open ends of pipe insulation shall be encapsulated.
6. After the piping is cleaned, the inside of the glovebag shall be washed down and the wetting tube removed. Using the HEPA vacuum, the glovebag shall be collapsed and then twisted and sealed with tape with the ACM at the bottom of the bag.
7. A disposal bag shall be placed around the glovebag that is then detached from the pipe. The disposal bag is then sealed and transported to the decontamination enclosure.

F. After glovebag removals are complete, containment/tent decontamination procedures shall be followed.

3.12 Removals of Exterior Non-Friable ACM

A. Except as modified by this section, removal of exterior non-friable ACM shall conform to all provisions of this specification.

B. Unless Variances have been otherwise obtained, removals shall be conducted in accordance with the provisions of applicable regulations.

C. The Work Area shall be the area from which ACM materials are being removed and shall extend 25 feet from the perimeter of the removal area.

D. Non-certified Workers are not allowed in the Work Area until the Work Area is cleared by the Asbestos Project Monitor.

E. Personnel and waste decontamination enclosures shall be constructed at a location in accordance with the approved Work Plan and applicable regulations. Unless located outside the Work Area, decontamination enclosures are not permitted to be constructed on the roof.

F. All openings (including but not limited to operable windows, doors, hatches, vents, ducts, and grilles) one story above, one story below, and within 25 feet of the work area shall be sealed with two layers of six mil polyethylene.

G. The removal of the ACM may require the use of scrapers, solvents, mastic removal chemicals, or other methods/procedures to ensure complete removal.

H. The Contractor is required to provide temporary protection of the building (i.e. roof, window openings, construction joints, etc.) at the end of each Work shift so as to maintain the building in a watertight condition.

I. Dumpsters used for waste storage shall be lined with two layers of six mil polyethylene and shall have a hard top. Where open-top dumpsters are permitted by a Variance, the top shall be closed with polyethylene flaps that are sealed at the end of each work shift.

J. Personal protective equipment, including respirators, shall be utilized and worn during all removal operations until the Work Area is cleared by the Asbestos Project Monitor.

K. If air samples collected during abatement indicate any airborne asbestos fiber concentration(s) at or above 0.01 f/cc, Work shall be stopped immediately and Work methods shall be altered to reduce the airborne asbestos fiber concentration(s).

L. Following completion of gross abatement and after all accumulations of asbestos waste materials have been containerized, the following decontamination procedures shall be followed:

1. All surfaces in the Work Area shall be HEPA vacuumed and then wet cleaned.
2. The Asbestos Project Monitor shall conduct a visual inspection of the Work Area for cleanliness prior to conducting final air clearance.
3. Upon satisfactory results, the isolation and critical barriers shall be removed. Following this, the decontamination enclosures shall be removed.

3.13 Non-Friable Flooring and/or Mastic Removals

A. The following procedures may only be used for the removal of non-friable flooring and/or mastic materials using manual and chemical methods. These procedures shall not apply to beadblaster use or other abrasive abatement methods.

B. The Contractor shall restrict access to the immediate area where removals are taking place using barrier tape and/or construction barriers. Caution signs shall be posted.

C. Personnel and waste decontamination enclosures shall be utilized and shall be constructed at a location in accordance with the approved Work Plan.

D. The Work Area shall be prepared per applicable regulations.

E. Negative air shall be maintained at six (6) air changes per hour.

F. OSHA compliance air monitoring is required per section 1.09.

G. ACM removal shall follow procedures defined in section 3.07.

H. Waste material shall be placed in properly labeled 6-mil plastic bags or other appropriate containers. The outside of the bags or containers shall be wet wiped and/or HEPA vacuumed before being passed into the airlock for double- bagging. The bags or containers shall then be transported to the waste storage container. All transportation of waste bags and containers outside the Work Area shall be in watertight carts.

I. Following completion of gross abatement and after all accumulations of asbestos waste materials have been containerized, the following decontamination procedures shall be followed.

1. All bagged asbestos waste and unnecessary equipment shall be decontaminated and removed from the Work Area.
2. All surfaces in the Work Area shall be wet cleaned. A wet-purpose shop vacuum may be used to pick up excess liquid, and shall be decontaminated prior to removal from the Work Area.
3. The Asbestos Project Monitor shall conduct a visual inspection of the Work Area for cleanliness and completion of abatement.
4. The Contractor shall then apply a thin coat of encapsulant to all non-removal surfaces covered with plastic in the Work Area. In no event shall encapsulant be applied to any surface that was the subject of removal prior to obtaining satisfactory air monitoring results. Encapsulants shall be pigmented or tinted to provide an indication for completeness of coverage. The Asbestos Project Monitor shall determine adequacy of coverage.
5. After the encapsulant has been applied and the required waiting/settling and drying time has elapsed, aggressive final clearance air sampling shall then be conducted by the Environmental Consultant.
6. Upon receipt of satisfactory final clearance air sampling results, the isolation and critical barriers shall be removed. Following this, the decontamination enclosures shall be removed.

3.14 Restoration of Utilities, Firestopping, and Finishes

A. If final inspection is required by NYC DEP regulations or Variance, the Contractor shall be responsible to submit the A-TR1 form to NYC DEP.

B. After final clearance, remove locks and restore electrical and HVAC systems. All temporary power shall be disconnected, power lockouts removed and power restored. All temporary plumbing shall be removed.

C. Finishes damaged by asbestos abatement activities including, but not limited to, plaster/paint damage due to duct tape and spray adhesives, and floor tile lifted due to wet or humid conditions, shall be restored prior to final payment.

1. Finishes unable to be restored shall be replaced under this Contract.
2. All foam and expandable foam products and materials used to seal Work Area openings shall be completely removed upon completion of abatement activities.

D. All penetrations (including, but not limited to, pipes, ducts, etc.) through fire rated construction shall be firestopped using materials and systems tested in accordance with ASTM E814 on Projects where reinsulation is part of the required work.

PART 4 - DISPOSAL OF ASBESTOS WASTE

4.01 Transportation and Disposal Site

A. The Contractor's Hauler and Disposal Site shall be approved by the Owner.

B. The Contractor shall give twenty-four (24) hour notification prior to removing any waste from the site. Waste shall be removed from the site only during normal working hours unless otherwise specified.

C. All waste generated as part of the asbestos project shall be removed from the site within ten (10) calendar days after successful completion of all asbestos abatement work.

D. Upon arrival at the Project Site, the Hauler must possess and present to the Environmental Consultant a valid New York State Department of Environmental Conservation Part 364 Asbestos Hauler's Permit and any New York City required permit/license. The Environmental Consultant may verify the authenticity of the hauler's permit with the proper authority.

E. The Hauler, with the Contractor and the Environmental Consultant, shall inspect all material in the transport container prior to taking possession and signing the asbestos waste shipment records.

F. Unless specifically approved by the Owner, the Contractor shall not permit any off-site transfers of the waste or allow the waste to be transported or combined with any other off-site asbestos material. The Hauler must travel directly to the disposal site as identified on the notifications with no unauthorized stops.

4.02 Waste Storage Containers

A. All waste containers shall be fully enclosed and lockable (i.e. enclosed dumpster, trailer, etc.). No open containers will be permitted on-site (i.e. open dumpster with canvas cover, etc.) unless specifically permitted by a Variance. When asbestos contaminated waste must be kept on the work site overnight or longer, it shall be double bagged and stored in accordance with Federal, State, and local laws, including New York City Department of Sanitation Title 16, Chapter 8 of the Rules of New York City.

B. The Environmental Consultant shall verify that the waste storage container and/or truck tags (license plates) match that listed on the New York State Department of Environmental Conservation Part 364 permit. Any container not listed on the permit shall be removed from the site immediately.

C. The container shall be plasticized and sealed with two (2) layers of 6-mil polyethylene.

Once on site, it shall be kept locked at all times, except during load out. The waste

container shall not be used for storage of equipment or contractor supplies.

D. While on-site, the container shall be labeled with EPA Danger signage:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

E. The New York State Department of Environmental Conservation Asbestos Hauler's Permit number shall be stenciled on both sides and back of the container.

F. The container is not permitted to be loaded unless it is properly plasticized, has the appropriate danger signage affixed, and has the permit number appropriately stenciled on the container.

G. Before an enclosed container is removed from the Project Site for transportation to the Disposal Site, the door(s) shall also be locked. .

H. The Owner may initiate random checks at the Disposal Site to insure that the procedures outlined herein are complied with.

4.03 Asbestos Waste Shipment Records

A. An asbestos waste shipment record shall be utilized.

B. The asbestos waste shipment record shall be completed by the Contractor and verified by the Environmental Consultant that all the information and amounts are accurate and the proper signatures are in place.

C. The shipment record(s) shall have the appropriate signatures of the Contractor and the Hauler representatives prior to any waste being removed from the site.

D. Copies of the completed waste shipment record(s) shall be retained by the Environmental Consultant and the Contractor and shall remain on site for inspection.

E. Upon arrival at the Disposal Site, the waste shipment record(s) shall be signed by the Disposal Facility operator to certify receipt of ACM covered by the waste shipment record(s).

F. The Disposal Facility operator shall return the original asbestos waste shipment record(s) to the Contractor.

G. The Contractor shall forward copies of the asbestos waste shipment records to the Owner within 14 days of the waste container being removed from the site. Failure to do so may result in payment being withheld from the Contractor.

H. Originals of all waste shipment records shall be submitted by the Contractor to the Owner with the final close-out documentation.

END OF SECTION 028200

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SECTION 030100 -CONCRETE RESTORATION

PART 1 - GENERAL

1.01 Summary

A. This Section includes restoration of concrete roof deck.

B. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Manufacturer Approved Installer Credentials: Prior to pre-installation conference, submit installer credentials issued by manufacturer of concrete restoration products.

1.03 Quality Assurance

A. Comply with the following, except where exceeded by the requirements in this Section:

1. ACI 224 "Cracking."
2. ACI 503 "Adhesives for Concrete."
3. ACI 546 "Repair of Concrete."

1.04 Project Conditions

A. Weather Condition Limitation: Proceed with concrete restoration Work only when existing and forecasted weather conditions will permit Work to be performed in accordance with manufacturers' recommendations and warranty requirements.

PART 2 - PRODUCTS

2.01 General

A. Product Source Limitation: Concrete restoration products are intended to be installed as a warranted system. Use only compatible products from the same manufacturer without exception, unless authorized in writing by Architect, and approved in advance by manufacturer.

B. Product Callout Abbreviations Key: Concrete coating product callouts (e.g. 2-CB-T) include the following abbreviations:

2.....2 coats

3.....3 coats

4.....4 coats

A.....Aggregate Finish

S .....Smooth Finish

T .....Textured Finish

CB .....Crack bridging

NCB .....Non-crack bridging

UV.....UV resistant

NUV.....Not UV resistant

C. In some cases, a listed product has a companion product (i.e. a product which is a slightly modified version of a listed product) associated with it, designated by enclosing brackets ("[ ]"). Where applicable, companion products are recommended by the manufacturer for better adapting to certain conditions (e.g. temperature, pot life).

2.02 Repair Mortars

A. Concrete Deck Repair Mortar

1. BASF System:

Bonding Agent:	MasterEmaco P 124	BASF
Repair Mortar:	MasterEmaco T 1060 [MasterEmaco T 1061]	BASF

OR

2. Sika System:

Repair Mortar:	SikaQuick 1000	Sika

Note: Prime concrete with scrub coat, per Manufacturer's Recommendations.

3. Or approved equal

B. Structural Concrete Repair Mortar (Troweled)

1. MasterEmaco N 400 [MasterEmaco N 400 RS] BASF

2. Or approved equal

C. Structural Concrete Repair Mortar (Formed)

1. MasterEmaco S 440 MC [MasterEmaco S 440] BASF

2. Or approved equal

2.03 Patching/Leveling Compounds

A. Resin Patching/Leveling Compound

1. Siplast System:

Resin:	Pro Paste Resin	Siplast
Aggregate:	N/A	
Mix:	N/A	

OR

2. Soprema System:

Resin:	Alsan RS Repair Mortar Resin	Soprema
Aggregate:	Alsan RS Repair Mortar Powder	Soprema
Mix:	1:9 resin to aggregate ratio by weight	

3. Or approved equal

2.04 Cementitious Grout

Cementitious Grout (Non-Shrink)

1. MasterFlow 928 BASF
2. SikaQuick 1000 Sika

3. Or approved equal

PART 3 - EXECUTION

3.01 General

A. Comply with Section 017310 (Execution).

B. All concrete restoration work shall be sealed and coated as indicated on drawings, or as otherwise directed by Architect.

3.02 Preparation

A. Final concrete surface preparation for Concrete Repairs (before application of bonding agent):

1. After marking out the repair perimeter and removing the concrete to the extent indicated on drawings, and before applying any bonding agent, prepare the concrete substrate surfaces as follows:

a. Follow ICRI Technical Guidelines, in compliance manufacturer's instructions for particular substrate conditions.

b. Mechanically remove an additional 1/8" -3/8" from all concrete substrate surfaces, up to the bottom of the sawcut.

c. Roughen sawcut surfaces to remove smooth finish.

d. Achieve a concrete surface profile (CSP) in the range from ICRI-CSP 5 to ICRI-CSP 10, on all substrate surfaces, unless otherwise specifically indicated by manufacturer.

B. Concrete Coating Preparation: Perform surface preparation and cleaning, following ICRI Technical Guidelines, in compliance with manufacturer's instructions for particular substrate conditions.

1. For finish (non-traffic) coatings: ICRI-CSP 2

2. For traffic coating (e.g. balcony floors, parking decks): ICRI-CSP 6

END OF SECTION 030100

SECTION 033000 – CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.01 Summary

A. This Section includes cast-in-place concrete, and related formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishing.

B. Related Sections:

1. 014000 (Quality Requirements).

2. 014339 (Mockups, and Physical Quality Assurance Aids).

3. 016100 (Product Requirements).

4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Concrete Design Mixtures: Written report in compliance with NYC Department of Buildings requirements for each type and strength of concrete mixture. Submit in time as indicated by authorities, or no later than fifteen (15) business days prior to start of Work, whichever is sooner.

1.03 Quality Assurance

A. Comply with the following:

1. ACI 301 "Specifications for Structural Concrete Buildings."

2. ACI 318 "Building Code Requirements for Reinforced Concrete" as amended by authorities having jurisdiction.

3. ACI 117 "Tolerances for Concrete Construction."

1.04 Project Conditions

A. Comply with ACI 306 "Cold Weather Concreting" for cold weather protection.

B. Comply with ACI 305 "Hot Weather Concreting" for hot weather protection.

PART 2 - PRODUCTS

2.01 Concrete Materials

A. Concrete

1. Comply with the following:

a. Portland Cement: ASTM C150, Type as required.

b. Fly Ash: ASTM C618, Type C or F. Limit use of fly ash in concrete mix design to not exceed 25% of cement content by weight.

c. Aggregates:

1) For normal weight concrete: ASTM C33, except local aggregates of proven durability may be used when accepted in advance in writing by Architect.

d. Water: ASTM C 94, potable.

e. Air Entraining Admixture: ASTM C260. Use air entraining admixture in all concrete, providing not less than 4% or more than 8% entrained air for concrete exposed to freezing and thawing, and from 2% to 4% for other concrete. No more than 4% to 7% for lightweight fire-rated interior slabs.

f. Water Reducing Admixture: ASTM C494, type as required to suit project conditions.

g. Only use admixtures which have been tested and accepted in mix designs, unless otherwise approved in advance in writing by Architect.

2.02 Reinforcing Materials

A. Deformed Reinforcing Bar (Epoxy Coated)

1. Comply with ASTM A775, Grade 60, unless otherwise indicated.

B. Welded Wire Reinforcement (Epoxy Coated)

1. Comply with ASTM A884

2.03 Bonding Agent

A. Bonding Agent

1. MasterEmaco P 124 BASF

2. Instralok W.R. Meadows

3. Cretelox ChemMasters

4. Or approved equal

2.04 Concrete Design Mixtures

A. Required concrete strengths are indicated on the Drawings.

B. Design mixtures in compliance with NYC Department of Buildings requirements including, but not limited to, those indicated on Drawings.

C. If not in conflict with, or covered by the requirements of the authorities, prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both.

2.05 Concrete Mixing

A. Job Site Mixing: Use drum type batch machine mixer, mixing not less than 1 1/2 minutes for one cubic yard or smaller capacity. Increase mixing time at least 15 seconds for each additional cubic yard or fraction thereof.

B. Ready Mix Concrete: ASTM C94.

PART 3 - EXECUTION

3.01 Formwork

A. Design, erect, shore, brace and maintain formwork to support vertical, lateral, static and dynamic loads, and construction loads that might be applied, until structure can support such loads.

B. Construct so that concrete members and structures are of correct size, shape, alignment, elevation and position.

C. Provide openings in formwork to accommodate Work of other trades.

D. Clean and adjust forms prior to concrete placement. Apply form release agents or wet forms, as required. Retighten forms during concrete placement if required to eliminate leaks.

3.02 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.03 Embedded Items

A. Place and secure anchorage devices and other embedded items required or adjoining Work that is attached to or supported by cast-in-place concrete. Use setting diagrams, templates and instructions provided by others for locating and setting.

3.04 Reinforcement

A. Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.

B. Do not cut or puncture moisture barrier. Repair damage and reseal moisture barrier before placing concrete.

3.05 Joints

A. Comply with Section 079200 (Joint Sealants).

B. Provide construction, isolation, and control joints as indicated, and as required to stabilize differential settlement and random cracking.

1. Locate construction joints so as not to impair strength and appearance of structure.

2. Construct joints true to line with faces perpendicular to surface plane of concrete.

3.06 Concrete Placement

A. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.

B. Consolidate placed concrete using mechanical vibrating equipment with hand rodding and tamping, so that concrete is worked around reinforcement and other embedded items and into forms.

3.07 Concrete Finishing

A. Unless otherwise noted on Drawings, finish concrete as follows:

1. Vertical Surfaces: Provide a smooth finish for exposed concrete surfaces and surfaces that are to be covered with a coating or covering material applied directly to concrete. Remove fins and projections, patch defective areas with cement grout, and rub smooth.

2. Horizontal Surfaces:

a. General:

1) Comply with ACI 302 "Guide for Concrete Floor and Slab Construction" recommendations for screeding, re-straightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.

2) Comply with ASTM E1155 to establish flatness and levelness as indicated below.

b. Scratch Finish: Apply scratch finish to monolithic slab surfaces to receive concrete floor topping or mortar setting beds for tile, and other bonded applied cementitious finish flooring material.

1) After leveling, while still plastic, roughen surface before final set to produce a profile amplitude of 1/4" in one direction.

2) Plane surface to tolerance for floor flatness (Ff) of 15 and floor levelness (Fl) of 13.

3) Slope surfaces uniformly to drain where required.

c. Float Finish: Apply float finish to monolithic slab surfaces to receive trowel finish; or to slab surfaces to be covered with membrane waterproofing.

1) Plane surface to tolerance for floor flatness (Ff) of 18 and floor levelness (Fl) of 15.

d. Trowel Finish: After applying a float finish, apply trowel finish to monolithic slab surfaces that are exposed to view or are to be covered with resilient flooring, paint or other thin film coating.

1) Consolidate concrete surfaces by finish troweling, free of trowel marks, uniform in texture and appearance.

2) Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.

3.08 Concrete Protection and Curing

A. Protection: Protect concrete from physical damage or reduced strength due to weather extremes during mixing, placement and curing.

B. Curing: Comply with ACI 308 "Standard Practice for Concrete Curing." Do not use membrane curing compound unless approved by Architect. Approval will only be considered in areas where concrete is not to receive applied coating or toppings.

END OF SECTION 033000

SECTION 034500 - PRECAST ARCHITECTURAL CONCRETE

PART 1 - GENERAL

1.01 Summary

A. This Section includes precast concrete window sills and other building elements.

B. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Samples:

1. Precast Architectural Concrete: Representative of finished exposed face of precast architectural concrete showing the full range of colors and textures indicated, 12" square and of actual thickness.

C. Pre-construction Test Reports:

1. Anchorage (to Backup) Pull-out Test Reports.

D. Certification of Concrete Properties: Obtain from manufacturer written certification of concrete properties including compressive strength, air content, and absorption for each type and strength of concrete mixture. Submit no later than fifteen (15) business days prior to manufacturing.

E. Shop Drawings: For each unit type showing profile, cross sections, reinforcement, exposed faces, typical dimensions, lifting loops, anchorage to structure, and design loads.

1.03 Quality Assurance

A. Comply with MNL 117 "Manual for Quality Control for Plants and Production of Architectural Precast Concrete Products."

1.04 Tests and Inspections

A. Pre-construction Testing:

1. Anchorage (to Backup) Pull-out Testing:

a. Performance Models: Construct performance models of anchorage into existing backup construction. Individual models must be constructed for each anchor and

backup construction configuration required for precast architectural concrete installation, at locations determined by Architect.

b. Testing: Perform pull-out tests on each anchorage performance model.

1) Arrange for Architect to be present at testing, provide five (5) business days' notice.

2) Reconfigure anchorage as necessary until satisfactory test results are obtained.

c. Test Reports: Reports must include date of test, location, products used, test method, and test results stating whether anchorage to backup construction complies, or does not comply with load requirements indicated on Shop Drawings, including the applicable factor of safety.

d. Acceptance: Obtain Architect's written acceptance of test results before proceeding with precast architectural concrete installation Work.

PART 2 - PRODUCTS

2.01 Precast Architectural Concrete

A. Precast Architectural Concrete

1. Comply with the following:

a. Concrete Materials:

1) Portland Cement: ASTM C 150 Type I or III (white).

2) Coarse Aggregate: Granite, quartz, or limestone.

3) Fine Aggregate: ASTM C 33 manufactured sand unless otherwise specified.

4) Color: Non-fading, resistant to lime and other alkalis.

5) Water: Potable.

6) Concrete strength (f'_c) per ASTM C 1194 must be minimum 6000 psi.

7) Absorption per ASTM C 1195 maximum 6%.

8) Air Content per ASTM C 173 between 4% and 6%.

b. Reinforcement: Reinforce as required for safe handling and structural stress. Minimum coverage 2" for bars 5/8" or larger and 1 1/2" for smaller bars.

c. Hoisting Loops: Provide stainless steel hoisting loops for precast architectural concrete units too large to be handled manually. Loops must be cast integrally with the unit, and must not penetrate any exposed surface of any unit.

2. Acceptable Manufacturers: Following is a list of acceptable manufacturers of precast architectural concrete products:

a. David Kucera, Inc.

b. Essex Works

c. Towne House Restorations

d. Vestacast

e. Or approved equal

2.02 Reinforcing

A. Deformed Reinforcing Bars (Epoxy Coated)

1. Comply with ASTM A 775

B. Welded Wire Fabric (Epoxy Coated)

1. Comply with ASTM A 884

2.03 Mortar

A. Comply with Section 040513 (Masonry Mortar).

2.04 Anchors and Accessories

A. Dowel

1. 406 Stone Anchor — Hohmann & Barnard
   Stainless steel
2. Or approved equal

B. Plastic Bearing Shims

1. #185-P — Heckmann Building Products, Inc.
   Non-staining molded from copolymer plastic with high compressive strength
2. Or approved equal

PART 3 - EXECUTION

3.01 Removal of Existing Precast Architectural Concrete Units

A. Comply with Section 024119 (Selective Demolition).

B. Support and protect remaining construction formerly supported by removed units.

C. Remove mortar, loose particles and debris from existing masonry surrounding units, in preparation for replacement.

3.02 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.03 Installation of Precast Architectural Concrete Units

A. Prepare existing construction by installing flashing, and embedded accessories, where indicated on Drawings.

B. Lift precast architectural concrete units with suitable lifting devices at points provided by the manufacturer, and set level, plumb, square and true within the allowable tolerances. Provide temporary supports and bracing as required to maintain position, stability and alignment as units are being permanently connected.

C. Install and connect precast architectural concrete units as shown on Drawings and on approved Shop Drawings.

D. Tool exposed mortar joints to match surrounding mortar joints.

E. Seal vertical and top horizontal joints. Sealant color to match precast concrete, unless otherwise indicated.

END OF SECTION 034500

SECTION 040120 -UNIT MASONRY RESTORATION

PART 1 - GENERAL

1.01 Summary

A. This Section includes brick and concrete masonry unit removal and replacement, parging (plastering) and repointing of mortar joints.

B. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Samples:

1. Brick: For each type of brick to be incorporated in the Work. Sample sets should be in the form of straps or panels containing not less than 4 units.
2. CMU: For each type of CMU to be incorporated in the Work.

C. Special Inspection Reports.

D. Product Test Reports:

1. Brick Test Reports (On-demand).
2. CMU Test Reports (On-demand).

E. Field Quality Control Test Reports:

1. Pourable Grout Field Test Reports: If not in conflict with special inspections, submit within 24 hours after test is conducted.

1.03 Quality Assurance

A. Comply with ACI 530.1/ASCE 6/TMS 602 "Building Code Requirements for Masonry Structures."

1.04 Tests and Inspections

A. Special Inspections: Comply with special inspection requirements of authorities having jurisdiction including, but not limited to, those indicated on Drawings.

B. Product Testing:

1. Brick Testing: Comply on-demand by Architect:
    a. Test Specimens: Provide test specimen of the brick masonry units.
    b. Testing: Test each type and grade of brick per ASTM C 67. If coefficient of variation of compression samples tested exceeds 12%, obtain compressive strengths by multiplying average compressive strengths by (1 - 1.5) x [(0.01 x coefficient of variation) - 0.12].
    c. Test Reports: Reports shall include date of test, products used, test method, and test results.

PART 2 - PRODUCTS

2.01 Brick

A. Brick

1. Face Brick (Unglazed): Comply with ASTM C 216.
    a. Solid brick units (less than 25% core area) with face to fit condition indicated for common bond, headers, coining, lintels, arches, corners, and other special ground, cut, or sawed shapes where required to complete masonry restoration Work.
    b. Provide uncored units with all exposed surfaces finished, for sills, caps and similar applications resulting in exposure of brick surfaces which otherwise would be concealed from view.
    c. Size to be determined as an average measurement of the existing brick in each of the brick's dimensions.
    d. Type: FBS
    e. Grade: SW (severe weathering)
    f. Compressive Strength: 6000 psi
2. Face Brick (Glazed): Comply ASTM C 1405.
    a. Solid brick units (less than 25% core area) with glazed face to fit condition indicated for common bond, headers, coining, lintels, arches, corners, and other special ground, cut, or sawed shapes where required to complete masonry restoration Work.
    b. Provide uncored units with all exposed surfaces finished, for sills, caps and similar applications resulting in exposure of brick surfaces which otherwise would be concealed from view.
    c. Size to be determined as an average measurement of the existing brick in each of the brick's dimensions.
    d. Class: Exterior
    e. Grade: S (select)
    f. Type: I (single faced)

3. Concealed Brick: Comply with ASTM C 62.
    a. Solid brick units of the same unit dimensions as face brick.
    b. Grade:
        1) Brick Concealed Below Grade: Grade SW.
        2) Brick Concealed in Inner Wythe or Interior of Wall: Grade MW.
    c. Other properties shall be compatible with face brick.

2.02 Anchorage

A. Comply with Section 040519 (Masonry Anchorage and Reinforcing).

2.03 Mortar

A. Comply with Section 040513 (Masonry Mortar).

2.04 Masonry Accessories

A. Compressible Filler (Neoprene)

1. NS-Closed Cell Neoprene Sponge — Hohmann & Barnard
2. Or approved equal

B. **Weep Slot (Louvered)**

1. 343 Louvered Weep Hole — Hohmann & Barnard
2. Or approved equal

PART 3 - EXECUTION

3.01 Removal and Replacement of Masonry Units

A. Removal:

1. Comply with Section 024119 (Selective Demolition) for masonry unit removal.

B. Preparation: Brush, vacuum or rinse masonry units and surrounding masonry to remove dust, dirt and loose debris. Allow to dry before proceeding unless pre-wetting is required below. Do not use wire brush or implements that mark or damage exposed surfaces.

C. Pre-wetting High Absorption Brick Masonry:

1. Wet high absorption brick units and surrounding masonry before laying.

2. Allow units to absorb water so they are damp, but not wet (dry on the surface) at time of laying.

D. Bonding and Coursing Pattern:

1. Set masonry units in the bond pattern indicated, or if none is indicated, in running bond.
2. Where rebuilding existing construction, match and fit replacement units into existing bonding and coursing pattern; maintain joint width to match existing.
3. Bond wythes of composite masonry together using bonding system shown on Drawings.
4. Do not traverse existing expansion joints with rebuilt masonry construction.

E. Fitting and Cutting:

1. Cut exposed masonry units, where necessary, in a manner to produce clean, sharp unchipped edges. Avoid the use (by proper layout) of less than half size units.
2. Build other Work into masonry Work as shown on Drawings, fitting masonry units around other Work.

F. Mortar Bedding:

1. Lay solid units as follows:
   a. Fully bed unit in mortar.
   b. Butter ends of units with sufficient mortar to completely fill head joints and shove into place.
   c. Do not deeply furrow bed joints or slush head joints.
2. Lay hollow units as follows:
   a. Fully bed face shells in mortar.
   b. Fully bed webs in mortar in all courses in piers, columns, pilasters, and in grouted walls (including starting course).
   c. Fully bed entire units including areas under cells at starting course on footings where cells are not grouted.
   d. Butter ends of units with sufficient mortar to fill head joints and shove into place.
3. Fill collar joints between wythes in solid composite walls, unless otherwise shown on Drawings:
   a. Where accessible from above, after each course is laid, fill the vertical, longitudinal collar joint between wythes solidly with mortar.
   b. Where not accessible from above, solidly fill collar joints by parging face of wythe already in place and shoving units of other wythe into place.
4. Keep wall cavities clean of mortar droppings.

G. Jointing:

1. Do not mortar joints where other joint treatment is indicated on Drawings (e.g., sealant joints).
2. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated. For glazed units, use a non-metallic jointer.
3. Cut joints flush for masonry walls to receive plaster, parging, or other direct-applied finishes (other than paint), unless otherwise indicated.

H. Curing: Cure mortar by maintaining in a damp condition for not less than 72 hours.

3.02 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.03 Anchorage

A. Anchoring to Structural Members:

1. Anchor masonry to structural members where masonry abuts or faces new or existing structural members.
2. Provide an open space not less than 1 inch in width between masonry and structural member, unless otherwise indicated.

B. Wall Ties and Anchors:

1. Install wall ties and anchors as shown on Drawings.
2. Unless otherwise indicated on Drawings, install ties within 6 inches to 10 inches at sides of openings and 8 inches at underside of opening (e.g. below window sill)

3.04 Reinforcing

A. Place reinforcement accurately spaced and at locations shown on Drawings, secured against displacement, and spliced by lapping, unless otherwise indicated, per ACI 530.

B. Provide temporary formwork and shores as required for support of reinforced masonry elements.

3.05 Parging

A. Where required, parge cavity wall face of backup wythe in a single coat approximately 3/8 inch thick. Trowel face of parge coat smooth.

B. Where required, parge exterior faces of masonry below-grade walls in two (2) uniform coats to a total thickness of 3/4 inch.

1. Use a steel-trowel finish to produce a smooth, flat, dense surface. Form a wash at top of parging and a cove at bottom.
2. Damp-cure parging for at least 24 hours and protect parging until cured.

3.06 Repointing

A. Removal of Existing Mortar Joint: Comply with Section 024119 (Selective Demolition).

B. Preparation: Brush, vacuum or rinse joint substrates to remove dust, dirt and loose debris. Allow to dry before proceeding unless pre-wetting is required below. Do not use wire brush or implements that mark or damage exposed surfaces.

C. Pre-wetting High Absorption Brick Masonry:

1. Wet high absorption brick units and surrounding masonry before laying.
2. Allow masonry to absorb water and become damp, but not wet (dry on the surface) at time of pointing.

D. Pointing (For Filling Prepared Mortar Joints):

1. Apply first layer of pointing mortar to areas where existing mortar was removed to depths greater than surrounding areas until a uniform depth is formed.
2. Apply mortar in lifts (layers) not greater than 1/4", unless otherwise shown on Drawings.
3. Fully compact the mortar in each layer and allow to become thumbprint hard before applying the next layer.

E. Tooling:

1. Remove mortar fins and smears before tooling joints.
2. Fully compact mortar. Where existing masonry has rounded edges recess mortar slightly from face. Do not spread mortar over edges onto exposed masonry surfaces. Do not feather edge mortar.
3. When mortar is thumbprint hard, tool joints to match original appearance of joints, unless otherwise indicated. For glazed units, use a non-metallic jointer. Remove excess mortar from edge of joint by brushing.
4. Stipple joints lightly with a soft bristle brush to expose aggregate, if necessary to match appearance of original mortar.

F. Curing: Cure mortar by maintaining in a damp condition for not less than 72 hours.

3.07 Protection

A. Protect newly laid masonry from exposure to precipitation, excessive drying, freezing, soiling, backfill and other harmful elements.

B. Hot Weather Requirements: Comply with hot weather construction requirements per ACI 530.1/ASCE 6/TMS 602.

3.08 Cleanup

A. After mortar is thoroughly set and cured, remove matter accumulated during construction and wash down masonry as follows:

1. Remove large mortar particles by hand with wooden paddles and non metallic scrap hoes or chisels.
2. Wash Down:
    a. Test wash down methods on sample panels before proceeding with wash down of masonry surfaces.
    b. Wash down brick masonry in accordance with: Brick Industry Association Technical Notes on Brick Construction, No.20, June 2006, “Cleaning New Masonry: Bucket and Brush Hand Cleaning”

END OF SECTION 040120

SECTION 040513 - Masonry Mortar

PART 1 - GENERAL

1.01 Summary

A. This Section includes masonry mortar materials.

B. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).

1.02 Submittals

A. Product Data Sheets: For each product specified in Part 2 - Products.

B. Mix Design:

1. Proportions of ingredients for each type of mortar specified.
2. Where Pre-blended (Pre-bagged with Aggregates) mortars are specified, Manufacturer shall provide material certificates including description of mortar type indicating proportion or property specification, and conformance with ASTM C270 and ASTM C1714.

C. Samples:

1. Mortar Components: Dry samples (minimum 4 oz.) of each component.
    a. Cement.
    b. Lime.
    c. Pigment (color).
    d. Sand (aggregate) samples.
2. Scuffed Mortar (showing exposed aggregate): For each mortar expected to be incorporated in the Work. Samples shall be fully cured and scuffed (showing exposing aggregate), 6 inch long x 1/2 inch wide strips set in aluminum or plastic channels.
3. Tooled-only Mortar: For each mortar expected to be incorporated in the Work. Samples shall be fully cured and tooled-only (unscuffed), 6" long x 1/2" wide, set in aluminum or plastic channels.

D. Special Inspection Reports.

E. Field Quality Control Test Reports:

1. Mortar Test Reports: If not in conflict with special inspections, submit within 24 hours after test is conducted.

1.03 Quality Assurance

A. Comply with the following:

1. Brick Institute of America (BIA)
2. National Concrete Masonry Association (NCMA)

1.04 Tests and Inspections

A. Special Inspections: Comply with special inspection requirements of authorities having jurisdiction including, but not limited to, those indicated on Drawings.

1.05 Project Conditions

A. Cold Weather Protection:

1. Provide protection when ambient air temperature is below 40° F, or is expected to fall below 40° F within 48 hours after completion of Work, as follows:
   a. 40° F to 32° F:
      1) Heat sand or mixing water to produce mortar temperatures between 40° F and 120° F.
      2) Protect from rain or snow; completely cover with weather-resistive membrane for 24 hours.
   b. 32° F and Below: No Work permitted.
2. Do not lower freezing point of mortar by use of antifreeze, calcium chloride, or other additives.

PART 2 - PRODUCTS

2.01 General

A. Refer to Drawings for color and texture of exposed mortars.

B. Pigmented Portland cement-lime should be used to achieve the required color in exposed mortars.

C. Use aggregates (sand) that match color and grain size of original aggregates as closely as possible.

D. All mortars specified shall comply with ASTM C 270, type as indicated.

E. Mortar components shall comply with the following:

1. Portland cement: ASTM C 150, Type I or Type II; gray or non-staining white. Portland cement for use with limestone shall contain no more than 0.60 percent total alkali when tested according to ASTM C 114.
2. Hydrated Lime: ASTM C 207, Type S
3. Aggregates (for mortar): ASTM C 144
4. Coloring Agent (Pigments): Alkali stable as approved by in writing by Architect.
5. Admixtures: None, unless approved in writing by Architect.
6. Water: Potable

2.02 Mortar

A. **Mortar: ASTM C 270 Type N**

1. Pre-blended (Pre-bagged with Aggregates)
   a. Spec-Joint 46 Custom Color (Type N) Edison Coatings, Inc.
   b. Spec Mix Pre-blended PCL Sand Color (Type N) Spec Mix, Inc.

B. **Mortar: ASTM C 270 Type S**

1. Pre-blended (Pre-bagged with Aggregates)
   a. Spec-Joint 46 Custom Color (Type S) Edison Coatings, Inc.
   b. Spec Mix Pre-blended PCL Sand Color (Type S) Spec Mix, Inc.

2.03 Mortar Mixing

A. Measuring: Measure all ingredient materials in a dry condition by volume or equivalent weight. Do not measure by shovel.

B. Mixing: Mix materials in a clean mechanical batch mixer.

1. Thoroughly mix cement, lime, pigment, and aggregate materials together before adding any water.
2. Mix again adding only enough water to produce a damp, unworkable mix which will retain its form when pressed into a ball. Let mortar stand in this dampened condition for 1-1 1/2 hours to allow for pre-hydration.
3. Add remaining water in small portions until mortar of desired consistency is reached. Use mortar within 1 hour of final mixing. Do not re-temper or use partially hardened material.

PART 3 - EXECUTION

3.01 General

A. Comply with Contract Documents for mortaring requirements (e.g. mortar bedding and jointing, repointing mortar joints, and parging (plastering) masonry walls).

END OF SECTION 040513

SECTION 040519 - MASONRY ANCHORAGE AND REINFORCING

PART 1 - GENERAL

1.01 Summary

A. This Section includes anchors and fastening systems for masonry.

B. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).
5. 030100 (Concrete Restoration).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Samples:

1. Anchors and Fasteners: For each type to be incorporated in the Work.

C. Pre-construction Test Reports:

1. Anchorage Pull-out Test Reports.

D. Certificates:

1. ICC-ES (Evaluation Service) Report s, for each adhesive or capsule anchor specified.

1.03 Quality Assurance

A. Comply with ACI/CRSI Adhesive Anchor Installer Certification Program requirements for all adhesive anchor installers.

1.04 Tests and Inspections

A. Testing:

1. Performance Models: Construct performance models of anchorage into existing substrate material. Individual models shall be constructed for each anchor and substrate material configuration required for the Work, at locations determined by Architect.
2. Pre-construction Testing:
    a. Perform tensile proof load pull-out tests (herein referred to as “pull-out tests”) on each anchorage performance model.

1) Arrange for Architect to be present at testing, provide five (5) business days' notice.

b. Testing: Three (3) of each type and size of drilled-in anchor shall be proof loaded by the independent testing laboratory.

1) Strength Design Testing (LRFD): Test in accordance with values indicated in manufacturer's design manual.

2) Allowable Stress Design Testing (ASD): Test in accordance with manufacturer's allowable stress recommendations, multiplied by a factor of safety of 1.5.

3. Construction Pull-out Testing:

a. Testing: 10% of each type and size of drilled-in anchor shall be proof loaded by the independent testing laboratory. Adhesive anchors and capsule anchors shall not be torque tested unless otherwise directed by the Engineer. If any of the tested anchors fail to achieve the specified torque or proof load within the limits as defined on the Drawings, all anchors of the same diameter and type as the failed anchor shall be tested, unless otherwise instructed by the Engineer.

1) Tension testing should be performed in accordance with ASTM E488.

2) Retest as necessary until satisfactory results are obtained.

b. Test Reports: Reports shall include date of test, location, products used, test method, and test results stating whether anchorage complies, or does not comply with the manufacturer's listed allowable load capacity.

c. Acceptance: Obtain Architect or Engineer's written acceptance of test results before proceeding with installation Work.

d. Anchor type, diameter and minimum embedment shall be as shown on the Drawings or approved Shop Drawings.

B. Special Inspection:

1. Periodic special inspection must be performed where required in accordance with related ICC-ES Report (ICC-ESR), per table below.
2. ICC-ES Report (ICC-ESR) numbers listed are for reference only. Verify ICC-ESR with anchor manufacturer.

Manufacturer	Product	ICC-ES Report
ITW Red Head	Trubolt+ Anchor	ICC-ESR 2427
Hilti	HIT-HY 270 Injection Adhesive	ICC ESR 4143
Hilti	HIT-HY 200 Injection Adhesive	ICC-ESR 3187
Hilti	Kwik Bolt Tension Zone (KB-TZ)	ICC-ESR 1917

Hilti	HIT-RE 500 V3	ICC-ESR 3814
Powers Fasteners	AC100+ Gold (Concrete)	ICC-ESR 2582
Powers Fasteners	AC100+ Gold (CMU/Brick)	ICC-ESR 3200
Powers Fasteners	Power Stud+ SD4 Expansion Anchor	ICC-ESR 2502
Simpson Strong-Tie	AT Anchoring Adhesive	ICC-ESR 1958
Simpson Strong-Tie	AT-XP Anchoring Adhesive (Concrete)	UES ER 263
Simpson Strong-Tie	AT-XP Anchoring Adhesive (CMU)	UES ER 281
Simpson Strong-Tie	Strong Bolt 2	ICC-ESR 3037
Simpson Strong-Tie	ET-HP Anchoring Adhesive	ICC-ESR 3638

PART 2 - PRODUCTS

2.01 General

A. Product Source Limitation: Where products are intended to be installed as a system (warranted or otherwise) use only compatible products from the same manufacturer without exception, unless authorized in writing by Architect and, for warranted systems, approved in advance by manufacturer.

B. Anchoring systems: must comply with:

1. Steel components: must be either AISI Type 304 or AISI Type 316, as indicated on Drawings.
2. Plate steel: must be AISI Type 304 or AISI Type 316, and comply with ASTM A240 - “Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications”.
3. Wire: must be AISI Type 304 or AISI Type 316, and comply with ASTM A580 - “Standard Specification for Stainless Steel Wire”.

C. Where low temperature limits are listed for products, the listed value refers to minimum air and surface temperature at time of application and for a period required by manufacturer.

D. Reinforcing bar couplers: Where reinforcing bars are to be coated, couplers must be coated to match.

E. Steel shims: must be either AISI Type 304 or AISI Type 316, and be of the same material grade as the bolts or superior.

F. Steel bolts: must be either AISI Type 304 or AISI Type 316, and comply with ASTM F593 - "Standard Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs.

G. Steel nuts: must be AISI Type 304 or AISI Type 316, and comply with ASTM F594 – "Standard Specification for Stainless Steel Nuts". Nut material shall be the same grade as the bolts or superior. Nuts shall be furnished with the bolt and meet the dimensional requirements of ANSI to conform with bolt.

H. Steel washers: must be AISI Type 304 or AISI Type 316, and comply with ASME B18.21.1 "Washers: Helical Spring-Lock, Tooth Lock, and Plain Washers (Inch Series)". Washer material must be the same grade as the bolts or superior.

I. Horizontal joint reinforcement: must be AISI Type 304 or AISI Type 316, and comply with ASTM A580 - "Standard Specification for Stainless Steel Wire".

J. Plain steel reinforcing bars: must comply with ASTM A615 - "Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement", Grade 60, unless otherwise indicated.

K. Galvanized steel reinforcing bars: must comply with ASTM A767 - "Standard Specification for Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement", Grade 60, unless otherwise indicated.

L. Epoxy coated steel reinforcing bars: must comply with ASTM A775 - "Standard Specification for Epoxy-Coated Steel Reinforcing Bars", Grade 60, unless otherwise indicated.

2.02 Expansion Anchors

A. Expansion Anchor		
1.	Kwik Bolt TZ SS 304 304 Stainless steel	Hilti
2.	Power-Stud+ SD4 Wedge Expansion Anchor Stainless steel	Powers Fasteners
3.	Strong Bolt 2 Stainless steel	Simpson Strong-Tie
4.	Or approved equal	

2.03 Adhesive Anchorage Systems

A. Anchorage Adhesive:		
For Concrete Substrates:		
1.	HIT-HY 200-A Hybrid Mortar Short working time, Low temperature limit: 14° F	Hilti
2.	AT-XP High-Strength Acrylic Adhesive Low temperature limit: 14° F	Simpson Strong-Tie

3.	Or approved equal	
For Brick Substrates:		
4.	HIT-HY 270 Hybrid Mortar Low temperature limit: 41° F	Hilti
5.	AT Acrylic Adhesive Low temperature limit: 0° F	Simpson Strong-Tie
6.	Or approved equal	
B. Threaded Rod w/ Nut and Washer		
1.	HAS-R 304 Anchor Rod Stainless steel	Hilti
2.	ATR Threaded Rod Stainless steel	Simpson Strong-Tie
	Note: Provide nut and washer per Manufacturer's recommendation.	
3.	Or approved equal	
C. Threaded Rod		
1.	HAS-R 304 Anchor Rod Stainless steel	Hilti
2.	ATR Threaded Rod Stainless steel	Simpson Strong-Tie
3.	Or approved equal	
D. Screen Tube		
1.	HIT-SC Composite Mesh Sleeve	Hilti
2.	Acrylic Adhesive (AT) Screen Tube Stainless steel. Used for non-stone applications.	Simpson Strong-Tie
3.	Epoxy Adhesive (SET and ET-HP) Screen Tube Carbon steel. Used for stone applications.	Simpson Strong-Tie
4.	Or approved equal	

2.04 Veneer Anchoring Systems

A. Veneer Anchor (To Masonry/Concrete)			
1.	Tie:	345-SV Veneer Anchor 12-gauge; stainless steel	Hohmann & Barnard
	Pencil Rod:	Continuous Wire 9-gauge; stainless steel	Hohmann & Barnard

	Fastener:	BL-523 Brass Expansion Bolt Stainless steel bolt, brass sleeve	Hohmann & Barnard
2.	Or approved equal		

B. Veneer Anchor (To Structural Steel)			
1.	Anchor Plate:	DW-10HS Anchor 12-gauge; stainless steel	Hohmann & Barnard
	Tie:	Byna-Lok Wire Tie 3/16"; stainless steel	Hohmann & Barnard
	Pencil Rod:	Continuous Wire 9-gauge; stainless steel	Hohmann & Barnard
	Note: Adhere anchor plate to structural steel with power-actuated fasteners. See section 2.09A in this section for specified powder-actuated fasteners.		
2.	Or approved equal		

2.05 Stone Anchoring Systems

A. Stone Anchors			
1. Hohmann & Barnard Stone Anchors:			
	Metal Anchor:	300 Series and 400 Series Stone Anchors Min. 1/4" thick; stainless steel; Verify in detail drawings	Hohmann & Barnard
	Note: Refer to detail drawings for anchor shapes and profiles.		
	Fastener:	BL-523 Brass Expansion Bolt Stainless steel bolt, brass sleeve	Hohmann & Barnard
2. Or approved equal			

2.06 Fasteners

A. Powder Actuated Fasteners		
1.	X-U Universal Knurled Shank Fastener (w/ Top Hat)	Hilti

2.	8mm Head CSI Drive Pin (w/ Top Hat)	Powers
3.	PDPAT-62K Pin (w/ Top Hat)	Simpson Strong-Tie
4.	Or approved equal	

B. Hammer Drive Anchor		
1.	HMH SS 304 Nail-In Anchor Stainless steel	Hilti
2.	ZamacNailin Zamac alloy body, stainless steel nail	Powers
3.	Zinc SS Nailon Pin Drive Anchor Zamac alloy body, stainless steel nail	Simpson Strong-Tie
4.	Or approved equal	

2.07 Horizontal Joint Reinforcement

A. Horizontal Joint Reinforcement (Truss Type / 2 side rods)		
1.	120 Truss-Mesh Stainless steel wire: 9 gauge side rods, 9 gauge cross rods	Hohmann & Barnard
2.	Or approved equal	

2.08 Accessories

A. Butyl Tape	
1.	Comply with ASTM C 771.

B. Flashing Cement		
1.	MBR Flashing Cement	Johns Manville
2.	Or approved equal	

PART 3 - EXECUTION

3.01 General

A. Install anchors of type and diameter indicated, at locations shown on the Drawings.

B. Where length of anchor is not indicated on the Drawings, follow manufacturer's recommendations and obtain approval in writing from Architect prior to proceeding.

3.02 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.03 Post-Installed Anchors

A. Anchor capacity used in design shall be based on the technical data published by Manufacturer or such other method as approved by the Structural Engineer of Record. Substitution requests for alternate products must be approved in writing by the Structural Engineer of Record prior to use. Contractor shall provide calculations demonstrating that the substituted product is capable of achieving the performance values of the specified product including an ICC-ES Report showing compliance with the relevant building code, seismic use, load resistance, installation category, in-service temperature, installation temperature, etc.

B. Contractor shall arrange an anchor manufacturer’s representative to provide on-site anchor installation training for all of their anchoring products specified. Contractor shall submit documented confirmation that all of the contractor’s personnel installing anchors have received the required training prior to the commencement of work.

C. Anchor capacity is dependent upon spacing between adjacent anchors and proximity of anchors to edge of concrete. Install anchors in accordance with spacing and edge clearances indicated in the manufacturer’s design manual.

END OF SECTION 040519

SECTION 051200 - STRUCTURAL STEEL RESTORATION

PART 1 - GENERAL

1.01 Summary

A. This Section includes structural steel and miscellaneous steel members.

B. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).
5. 040519 (Masonry Anchorage and Reinforcing).
6. 099713 (Steel Coatings).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

1.03 Quality Assurance

A. Comply with the following:

1. AISC "Code of Standard Practice for Steel Buildings and Bridges."
2. AISC "Specifications for the Design, Fabrication, and Erection of Structural Steel for Buildings" including "Commentary" as amended authorities having jurisdiction.
3. AWS D1.1 / D1.1M “Structural Welding Code – Steel”

1.04 Tests and Inspections

A. Special Inspections: Comply with special inspection requirements of authorities having jurisdiction including, but not limited to, those indicated on Drawings.

B. Pre-Construction Testing:

1. Steel Coupon Testing:
    a. Test Specimen: Where welding to existing steel is indicated, provide test specimen, in the form of a steel coupon, for each different steel substrate.
    b. Testing: Test for appropriate welding electrode to be used.
    c. Test Reports: Reports shall include date of test, test specimen identification, preparation method, and recommended electrode to be used in the Work.

PART 2 - PRODUCTS

2.01 Steel Members and Shapes

A. Steel Plate

1. Comply with ASTM A 36.

B. Steel Shim

1. Comply with ASTM A 36.

C. Steel Angle

1. L-Shape; Comply with ASTM A 36.

2. Comply with ASTM A 500, Grade B.

D. Steel Pipe

1. Comply with ASTM A 53, Type E or S, Grade B

2.02 Fasteners

A. Bolt Fastener

1.	Bolt:	Carbon steel; Comply with ASTM F 3125.
	Nut:	Carbon steel; Comply with ASTM A 563.
	Washer:	Carbon steel; Comply with ASTM A 436.

B. Refer to Section 040519 (Masonry Anchorage and Reinforcing) for adhesive anchors and expansion anchors.

PART 3 - EXECUTION

3.01 Fabrication

A. Comply with AISC and approved Shop Drawings. Mark and match mark units for field assembly.

B. Provisions for Other Work: Fabricate structural steel members to provide holes for securing other Work and for passage of other Work through steel framing as indicated. Field cutting or burning of holes will not be permitted.

C. Connections: As shown on approved Shop Drawings.

1. Except as otherwise indicated, comply with ASTM A307 for field connection welding.
2. Except as otherwise indicated, fabricator shall design welded connections to be stressed to less than 50% capacity.

D. Splices shall be designed to develop the full capacity of the member at the point of the splice. Beam splices shall be welded, full moment connections. Notify Architect in writing before performing splices, provide five (5) business days' notice.

E. Comply with AWS Code for procedures, appearance, and quality of welds. Minimum size fillet weld shall be 1/4".

3.02 Shop Painting

A. Comply with Section 099713 (Steel Coatings).

3.03 Erection

A. Comply with AISC and approved Shop Drawings.

END OF SECTION 051200

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SECTION 053100 – STEEL DECKING

PART 1 - GENERAL

1.01 Summary

A. This Section includes steel decking and related accessories.

B. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Shop Drawings (Delegated Design): Showing layout and types of deck panels, panel side and end details, anchorage details, reinforcing channels, sump pans, cut deck openings, conditions requiring closure panels, special jointing, supplementary framing, accessories, and attachments to other construction. Shop Drawings and supporting calculations shall bear the seal of a qualified professional engineer.

1.03 Quality Assurance

A. Comply with:

1. SDI "Design Manual for Floor Decks and Roof Decks"
2. AWS D1.1 “Structural Welding Code – Steel” and AWS D1.3 “Structural Welding – Sheet Steel”

1.04 Performance Requirements

A. Structural Characteristics: Calculate structural characteristics of steel deck according to AISI "North American Specification for the Design of Cold-Formed Steel Structural Members."

B. Uplift Resistance of Roof Decking: Comply with class 1-90 rating in accordance with Factory Mutual (FM) Data Sheet 1-28

1.05 Tests and Inspections

A. Special Inspections: Comply with special inspection requirements of authorities having jurisdiction including, but not limited to, those indicated on Drawings.

PART 2 - PRODUCTS

2.01 Roof Decking

A. **Steel Roof Deck**

1. Fabricate panels, without top-flange stiffening grooves, to comply with SDI "Specifications and Commentary for Steel Roof Deck," and with the following:
   a. Galvanized Steel Sheet: ASTM A 653 / A 653M, Structural Steel (SS), Grade 33, G90 zinc coating.
   b. Deck Profile: Indicated on Drawings.
   c. Profile Depth: Indicated on Drawings.
   d. Design Uncoated Steel Thickness: Indicated on Drawings.
2. Acceptable Manufacturers:
   a. United Steel Deck, Inc.
   b. Bowman / E.G. Smith, Division Cyclops Corp.
   c. Nucor Corp.; Vulcraft Group
   d. Or approved equal

2.02 Accessories

A. General:

1. All steel sheet (sheet metal) accessories shall be commercial quality, ASTM A 653 / A 653M, Structural Steel (SS), Grade 33, G90 zinc coating. Uncoated thickness shall be 0.0478" minimum (18 gage) unless otherwise indicated. Profile shall be as indicated or required for application
2. Fabricate any miscellaneous sheet steel accessories which may not be listed but are required for a complete installation.

B. **Metal Closures**

1. Fabricate tight fitting steel sheet closures, for open uncovered ends of cells or ribs and sides of decking, cell raceways, and openings between decking and other construction.

C. **Flexible Closure Strips**

1. Vulcanized, closed-cell, synthetic rubber.

D. **Joint Cover Plates**

1. Fabricate steel sheet joint cover plates for end-abutting deck units and at changes in direction. Form to match contour of deck units and approximately 6" wide.

E. **Mechanical Fasteners**

1. Corrosion-resistant, low-velocity, power-actuated or pneumatically driven carbon-steel fasteners; or self-drilling, self-threading screws.

F. **Side-Lap Fasteners**

1. Corrosion-resistant, hexagonal washer head; self-drilling, carbon-steel screws, No. 10 minimum diameter.

G. **Galvanizing Repair Coating**

1. Comply with ASTM A780 and Military Specification MIL-P-21035 (Ships), with dry film containing a high zinc content (minimum of 94 percent zinc dust by weight).

PART 3 - EXECUTION

3.01 Installation

A. Placement:

1. Place deck panels on supporting frame and adjust to final position with ends accurately aligned and bearing on supporting frame before being permanently fastened. Do not stretch or contract side-lap interlocks.
2. Place deck panels flat and square and fasten to supporting frame without warp or deflection.
3. Do not place deck units on concrete supporting structure until concrete has cured and is dry.

B. Fitting: Cut and neatly fit deck panels and accessories around openings and other work projecting through or adjacent to deck.

C. Additional Reinforcement and Support:

1. Comply with Section 051200 (Structural Steel) for miscellaneous steel shapes.
2. Provide additional reinforcement at closures as required for strength, continuity of deck, and support of other work.

D. Fastening: Unless otherwise indicated, minimum fastening requirements are as follows:

1. Roof Deck Units:
   a. Fasten roof deck units to steel supporting members by not less than 5/8" diameter fusion welds spaced not more than 12" on center at every support, and at closer spacing where required for lateral and uplift force resistance.

b. Side laps are to be welded with a maximum spacing of 36” on center. In addition, secure deck to each supporting member in ribs where side laps occur.

c. Tack weld at 4’-0” on center for fastening end closures.

2. Fastening Accessories: Space welds not more than 12” apart with at least one at each corner.

E. Welding: Comply with AWS requirements and procedures for manual shielded metal arc welding, appearance and quality of welds, and methods used in correcting welding work. Use welding washers where recommended by deck manufacturer.

F. Metal Closures: Install tight fitting metal closures at open uncovered ends of cells or ribs and sides of decking, cell raceways, and openings between decking and other construction.

G. Joint Cover Plates: Install joint cover plates at abutting ends and changes in direction of floor deck units, except where taped joints are required.

H. Pour Stops and Girder Fillers: Install steel sheet pour stops and girder fillers to supporting structure according to SDI recommendations unless otherwise indicated.

I. Miscellaneous Roof Deck Accessories: Install ridge and valley plates, finish strips, end closures, and reinforcing channels according to deck manufacturer's written instructions.

3.02 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.03 Touch-up Galvanizing

A. Prepare and touch up galvanizing on scarred areas, welds and rust spots on deck top, bottom and edge surfaces with galvanized repair coating according to ASTM A 780 and manufacturer’s written instructions.

END OF SECTION 053100

SECTION 055000 - METAL FABRICATIONS

PART 1 - GENERAL

SCHEDULE 0 - SUMMARY

A. Section Includes:
   1. Metal ladders and metal ships' ladders.

SCHEDULE 1 - SUBMITTALS

A. Product Data: For the following:
   1. Metal ladders and metal ships' ladders.

B. Shop Drawings: Show fabrication and installation details. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items. Provide Shop Drawings for the following:
   1. Metal ladders and metal ships' ladders.

C. Delegated-Design Submittal: For ladders including analysis data signed and sealed by the qualified professional engineer licensed in the State of New York and responsible for their preparation.

SCHEDULE 2 - INFORMATIONAL SUBMITTALS

A. Qualification Data: For professional engineer's experience with providing delegated-design engineering services of the kind indicated, including documentation that engineer is licensed in the jurisdiction in which Project is located.

B. Mill Certificates: Signed by stainless steel manufacturers, certifying that products furnished comply with requirements.

C. Welding certificates.

D. Paint Compatibility Certificates: From manufacturers of topcoats applied over shop primers, certifying that shop primers are compatible with topcoats.

E. Research Reports: For post-installed anchors.

SCHEDULE 3 - QUALITY ASSURANCE

A. Welding Qualifications: Qualify procedures and personnel in accordance with the following:

1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."

SCHEDULE 4 - FIELD CONDITIONS

A. Field Measurements: Verify actual locations of walls, floor slabs, decks, and other construction contiguous with metal fabrications by field measurements before fabrication.

PART 2 - PRODUCTS

SCHEDULE 0 - PERFORMANCE REQUIREMENTS

A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design ladders.

SCHEDULE 1 - METALS

A. Metal Surfaces, General: Provide materials with smooth, flat surfaces unless otherwise indicated. For metal fabrications exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.

B. Steel Plates, Shapes, and Bars: ASTM A36/A36M.

C. Rolled-Steel Floor Plate: ASTM A786/A786M, rolled from plate complying with ASTM A36/A36M or ASTM A283/A283M, Grade C or D.

D. Abrasive-Surface Floor Plate: Steel plate with abrasive granules rolled into surface
   1. Source Limitations: Obtain floor plate from single source from single manufacturer.

E. Steel Pipe: ASTM A53/A53M, Standard Weight (Schedule 40) unless otherwise indicated.

SCHEDULE 2 - FASTENERS

A. General: Unless otherwise indicated, provide Type 304 stainless steel fasteners.

B. Post-Installed Anchors: chemical anchors.
   1. Material for Exterior Locations and Where Stainless Steel Is Indicated: stainless steel bolts, ASTM F593 and nuts, ASTM F594.

SCHEDULE 3 - MISCELLANEOUS MATERIALS

A. Shop Primers: Provide primers that comply with Section 099117 "Steel Coatings"

B. Shop Primer for Galvanized Steel: Primer formulated for exterior use over zinc-coated metal and compatible with finish paint systems indicated.

C. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.

D. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.

SCHEDULE 4 - FABRICATION, GENERAL

A. Shop Assembly: Preassemble items in the shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.

B. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.

C. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.

D. Form exposed work with accurate angles and surfaces and straight edges.

E. Weld corners and seams continuously to comply with the following:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
2. Obtain fusion without undercut or overlap.
3. Remove welding flux immediately.
4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing.

F. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners or welds where possible. Where exposed fasteners are required, use Phillips flat-head (countersunk) fasteners unless otherwise indicated. Locate joints where least conspicuous.

G. Fabricate seams and other connections that are exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.

H. Cut, reinforce, drill, and tap metal fabrications as indicated to receive finish hardware, screws, and similar items.

I. Provide for anchorage of type indicated; coordinate with supporting structure. Space anchoring devices to secure metal fabrications rigidly in place and to support indicated loads.

SCHEDULE 5 - METAL LADDERS

A. General:

1. Comply with ANSI A14.3

B. Steel Ladders:
1. Siderails: Continuous, steel flat bars, with eased edges; size as indicated on Drawings.
2. Rungs: 3/4-inch diameter galvanized steel bars.
3. Fit rungs in centerline of siderails; plug-weld and grind smooth on outer rail faces.
4. Provide nonslip surfaces on top of each rung, either by coating rung with aluminum-oxide granules set in epoxy-resin adhesive or by using a type of manufactured rung filled with aluminum-oxide grout.
5. Provide nonslip surfaces on top of each rung by coating with abrasive material metallically bonded to rung.
6. Source Limitations: Obtain nonslip surfaces from single source from single manufacturer.
7. Galvanize and prime exterior ladders, including brackets.

SCHEDULE 6 - METAL SHIPS' LADDERS

A. Provide metal ships' ladders where indicated. Fabricate of open-type construction with channel or plate stringers and pipe and tube railings unless otherwise indicated. Provide brackets and fittings for installation.

1. Treads shall be not less than 5 inches exclusive of nosing or less than 8-1/2 inches including the nosing, and riser height shall be not more than 9-1/2 inches.
2. Fabricate ships' ladders including railings from steel.
3. Fabricate treads from pressure-locked steel bar grating. Limit openings in gratings to no more than 1/4" in least dimension.
4. Fabricate treads abrasive-surface floor plate.
5. Comply with applicable railing requirements in Section 055100 Metal Grating Stairs.

B. Galvanize and prime exterior steel ships' ladders including treads and railings.

SCHEDULE 7 - GENERAL FINISH REQUIREMENTS

A. Finish metal fabrications after assembly.

B. Finish exposed surfaces to remove tool and die marks and stretch lines, and to blend into surrounding surface.

SCHEDULE 8 - STEEL FINISHES

A. Galvanizing: Hot-dip galvanize items as indicated to comply with ASTM A153/A153M for steel and iron hardware and with ASTM A123/A123M for other steel and iron products.

1. Do not quench or apply post galvanizing treatments that might interfere with paint adhesion.

B. Preparation for Shop Priming Galvanized Items: After galvanizing, thoroughly clean galvanized surfaces of grease, dirt, oil, flux, and other foreign matter, and treat with metallic phosphate process.

C. Preparation for Shop Priming: Prepare surfaces to comply with SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."

PART 3 - EXECUTION

SCHEDULE 0 - INSTALLATION, GENERAL

A. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.

B. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.

C. Field Welding: Comply with the following requirements:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
2. Obtain fusion without undercut or overlap.
3. Remove welding flux immediately.
4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.

D. Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction. Provide threaded fasteners for use with concrete and masonry inserts, toggle bolts, through bolts, lag screws, wood screws, and other connectors.

SCHEDULE 1 - REPAIRS

A. Touchup Painting:

1. Immediately after erection, clean field welds, bolted connections, and abraded areas. Paint uncoated and abraded areas with same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.

a. Apply by brush or spray to provide a minimum 2.0-mil dry film thickness.

2. Cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint are specified in Section 099117 "Steel Coatings”

B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A780/A780M.

END OF SECTION 055000

SECTION 055100 - METAL GRATING STAIRS

GENERAL

SUMMARY

A. Section Includes:

Industrial Class stairs with steel-grating treads.
Steel railings and guards attached to metal stairs.

COORDINATION

A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written instructions to ensure that shop primers and topcoats are compatible with one another.

B. Coordinate installation of anchorages for metal stairs and railings.

1. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry.
Deliver such items to Project site in time for installation.

C. Coordinate locations of hanger rods and struts with other work so they do not encroach on required stair width and are within fire-resistance-rated stair enclosure.

D. Schedule installation of railings and guards so wall attachments are made only to completed walls.

1. Do not support railings and guards temporarily by any means that do not satisfy structural performance requirements.

SUBMITTALS

A. Product Data: For metal grating stairs and the following:

1. Gratings.
Shop primer products.

B. Shop Drawings:

Include plans, elevations, sections, details, and attachment to other work.
Indicate sizes of metal sections, thickness of metals, profiles, holes, and field joints.
Include plan at each level.

Indicate locations of anchors, weld plates, and blocking for attachment.

C. Delegated-Design Submittal: For stairs and railings including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

INFORMATIONAL SUBMITTALS

A. Qualification Data: For professional engineer's experience with providing delegated-design engineering services of the kind indicated, including documentation that engineer is licensed in New York State.

B. Welding certificates.

C. Paint Compatibility Certificates: From manufacturers of topcoats applied over shop primers, certifying that shop primers are compatible with topcoats.

QUALITY ASSURANCE

A. Installer Qualifications: Fabricator of products.

B. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."

DELIVERY, STORAGE, AND HANDLING

A. Store materials to permit easy access for inspection and identification.

1. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers.

Protect steel members and packaged materials from corrosion and deterioration.

Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures.

Repair or replace damaged materials or structures as directed.

PRODUCTS

PERFORMANCE REQUIREMENTS

B. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design stairs and railings including attachment to building construction.

B. Structural Performance of Stairs: Metal stairs shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

Uniform Load: 100 lbf/sq. ft.
Concentrated Load: 300 lbf applied on an area of 4 sq. in.
Uniform and concentrated loads need not be assumed to act concurrently.
Stair Framing: Capable of withstanding stresses resulting from railing and guard loads in addition to loads specified above.
Limit deflection of treads, platforms, and framing members to L/360.

C. Structural Performance of Railings and Guards: Railings and guards, including attachment to building construction, shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

1. Handrails and Top Rails of Guards:

Uniform load of 50 lbf/ft. applied in any direction.
Concentrated load of 200 lbf applied in any direction.
Uniform and concentrated loads need not be assumed to act concurrently.

METALS

A. Metal Surfaces: Provide materials with smooth, flat surfaces unless otherwise indicated. For components exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.

B. Steel Plates, Shapes, and Bars: ASTM A36/A36M.

C. Rolled-Steel Floor Plate: ASTM A786/A786M, rolled from plate complying with ASTM A36/A36M or ASTM A283/A283M, Grade C or D.

D. Steel Bars for Grating Treads: ASTM A36/A36M or steel strip, ASTM A1011/A1011M or ASTM A1018/A1018M.

E. Steel Tubing for Railings and Guards: [ASTM A513/A513M].
1. Provide galvanized finish for exterior installations and where indicated.

F. Steel Pipe for Railings and Guards: ASTM A53/A53M, Type F or Type S, Grade A, Standard Weight (Schedule 40), unless another grade and weight are required by structural loads.

G. Provide galvanized finish for exterior installations and where indicated.

FASTENERS

A. General: Provide Type 304 stainless-steel fasteners.

1. Select fasteners for type, grade, and class required.

B. Post-Installed Anchors: chemical anchors capable of sustaining, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing according to ASTM E488/E488M, conducted by a qualified independent testing agency.

MISCELLANEOUS MATERIALS

A. Welding Electrodes: Comply with AWS requirements.

B. Shop Primers: Provide primers that comply with Section 099117 "Steel Coatings"

C. Universal Shop Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79 and compatible with topcoat.

1. Use primer containing pigments that make it easily distinguishable from zinc-rich primer.

D. Shop Primer for Galvanized Steel: Primer formulated for exterior use over zinc-coated metal and compatible with finish paint systems indicated.

E. Galvanizing Repair Paint: High-zinc-dust-content paint complying with ASTM A780/A780M and compatible with paints specified to be used over it.

F. Nonmetallic, Shrinkage-Resistant Grout: ASTM C1107/C1107M, factory-packaged, nonmetallic aggregate grout; recommended by manufacturer for [interior] [exterior] use; noncorrosive and nonstaining; mixed with water to consistency suitable for application and a 30-minute working time.

FABRICATION, GENERAL

A. Provide complete stair assemblies, including metal framing, hangers, railings, guards, clips, brackets, bearing plates, and other components necessary to support and anchor stairs and platforms on supporting structure.

1. Join components by welding unless otherwise indicated.
Use connections that maintain structural value of joined pieces.

B. Assemble stairs and railings in shop to greatest extent possible.

1. Disassemble units only as necessary for shipping and handling limitations.
Clearly mark units for reassembly and coordinated installation.

C. Cut, drill, and punch metals cleanly and accurately.

1. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated.

Remove sharp or rough areas on exposed surfaces.

D. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.

E. Form exposed work with accurate angles and surfaces and straight edges.

F. Weld connections to comply with the following:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.

Obtain fusion without undercut or overlap.
Remove welding flux immediately.
Weld exposed corners and seams continuously unless otherwise indicated.
At exposed connections, finish exposed welds to comply with NOMMA's "Voluntary Joint Finish Standards" for Finish #4 - Good quality, uniform undressed weld with minimal splatter.

G. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners where possible.

1. Where exposed fasteners are required, use Phillips flat-head (countersunk) screws or bolts unless otherwise indicated.
Locate joints where least conspicuous.
Fabricate joints that are exposed to weather in a manner to exclude water.
Provide weep holes where water may accumulate internally.

FABRICATION OF STEEL-FRAMED STAIRS

C. NAAMM Stair Standard: Comply with NAAMM AMP 510, "Metal Stairs Manual," for Industrial Class, unless more stringent requirements are indicated.

D. Stair Framing:

1. Fabricate stringers of steel channels.

Stringer Size: As indicated on Drawings.
Provide closures for exposed ends of channel stringers.
Finish: Galvanized and shop primed.

2. Construct platforms and tread supports of steel angles headers and miscellaneous framing members as required to comply with "Performance Requirements" Article.

a. Provide closures for exposed ends of channel framing.

b. Finish: Galvanized and shop primed.

3. Weld stringers to headers; weld framing members to stringers and headers.

E. Metal Bar-Grating Stairs: Form treads and platforms to configurations shown from ADA-compliant metal bar grating; fabricate to comply with NAAMM MBG 531, "Metal Bar Grating Manual."

1. Fabricate treads and platforms from pressure-locked galvanized steel grating with 1-1/2-by-3/16-inch bearing bars at 7/16 inch o.c. and crossbars at 4 inches (100 mm) o.c.
2. Fabricate treads and platforms from pressure-locked steel grating with openings in gratings no more than 1/4 inch in least dimension.

a. Surface: Serrated.
b. Finish: Galvanized and shop primed.

3. Fabricate grating treads with cast-abrasive nosing and with steel angle or steel plate carrier at each end for stringer connections.

a. Secure treads to stringers with bolts.

4. Fabricate grating platforms with nosing matching that on grating treads.

a. Secure grating to platform framing by welding

F. Risers: Open

G. Toe Plates: Provide toe plates around openings and at edge of open-sided floors and platforms, and at open ends and open back edges of treads.

1. Material and Finish: Steel plate to match finish of other steel items.
2. Fabricate to dimensions and details indicated.

FABRICATION OF STAIR RAILINGS AND GUARDS

H. Comply with applicable requirements in Section 055213 "Pipe and Tube Railings."

I. Fabricate railings and guards to comply with requirements indicated for design, dimensions, details, finish, and member sizes, including wall thickness of member, post spacings, wall bracket spacing, and anchorage, but not less than that needed to withstand indicated loads.

1. Rails and Posts: 1-1/2-inch diameter top and bottom rails and 1-1/2-inch diameter posts.

J. Welded Connections: Fabricate railings and guards with welded connections.

1. Fabricate connections that are exposed to weather in a manner that excludes water.

a. Provide weep holes where water may accumulate internally.

2. Cope components at connections to provide close fit, or use fittings designed for this purpose.
3. Weld all around at connections, including at fittings.
4. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
5. Obtain fusion without undercut or overlap.
6. Remove flux immediately.
7. Finish welds to comply with NOMMA's "Voluntary Joint Finish Standards" for Finish #4 - Good quality, uniform undressed weld with minimal splatter as shown in NAAMM AMP 521.

K. Close exposed ends of railing and guard members with prefabricated end fittings.

L. Connect posts to stair framing by direct welding unless otherwise indicated.

M. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, end closures, flanges, miscellaneous fittings, and anchors for interconnecting components and for attaching to other work.

1. Furnish inserts and other anchorage devices for connecting to concrete or masonry work.
2. Provide type of bracket predrilled hole for exposed bolt anchorage.

N. Fillers: Provide fillers made from steel plate, or other suitably crush-resistant material, where needed to transfer wall bracket loads through wall finishes to structural supports.

1. Size fillers to suit wall finish thicknesses and to produce adequate bearing area to prevent bracket rotation and overstressing of substrate.

FINISHES

O. Finish metal stairs after assembly.

P. Galvanizing: Hot-dip galvanize items as indicated to comply with ASTM A153/A153M for steel and iron hardware and with ASTM A123/A123M for other steel and iron products.

1. Do not quench or apply post-galvanizing treatments that might interfere with paint adhesion.

2. Fill vent and drain holes that are exposed in the finished Work, unless indicated to remain as weep holes, by plugging with zinc solder and filing off smooth.

Q. Preparation for Shop Priming: Prepare uncoated ferrous-metal surfaces to comply with SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning.".

1. Exterior Stairs: SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
2. Interior Stairs: SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."

R. Apply shop primer to uncoated surfaces of metal stair components, except those with galvanized finishes and those to be embedded in concrete or masonry unless otherwise indicated. Comply with SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.

1. Stripe paint corners, crevices, bolts, welds, and sharp edges.

PART 3 - EXECUTION

EXAMINATION

A. Verify elevations of floors, bearing surfaces and locations of bearing plates, and other embedments for compliance with requirements.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

INSTALLATION OF METAL STAIRS

C. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing metal stairs to in-place construction.

1. Include threaded fasteners for concrete and masonry inserts, through-bolts, lag bolts, and other connectors.

D. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal stairs. Set units accurately in location, alignment, and elevation, measured from established lines and levels and free of rack.

E. Install metal stairs by welding stair framing to steel structure or to weld plates cast into concrete unless otherwise indicated.

1. Grouted Baseplates: Clean concrete and masonry bearing surfaces of bond-reducing materials, and roughen to improve bond to surfaces.

a. Clean bottom surface of baseplates.
b. Set steel-stair baseplates on wedges, shims, or leveling nuts.

c. After stairs have been positioned and aligned, tighten anchor bolts.
d. Do not remove wedges or shims, but if protruding, cut off flush with edge of bearing plate before packing with grout.
e. Promptly pack grout solidly between bearing surfaces and plates to ensure that no voids remain.

1) Neatly finish exposed surfaces; protect grout and allow to cure.
2) Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.

F. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.

G. Fit exposed connections accurately together to form hairline joints.

1. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations.
2. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
3. Comply with requirements for welding in "Fabrication, General" Article.

INSTALLATION OF RAILINGS

H. Adjust railing before anchoring to ensure matching alignment at abutting joints with tight, hairline joints.

1. Space posts at spacing indicated or, if not indicated, as required by design loads.
2. Plumb posts in each direction, within a tolerance of 1/16 inch in 3 feet
3. Align rails and guards so variations from level for horizontal members and variations from parallel with rake of stairs for sloping members do not exceed 1/4 inch in 12 feet
4. Secure posts, rail ends, and guard ends to building construction as follows:
a. Anchor handrail and guard ends to concrete and masonry with steel round flanges welded to rail and guard ends and anchored with post-installed anchors and bolts.

REPAIR

I. Touchup Painting: Cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint are specified in Section 099117 "Steel Coatings"

J. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A780/A780M.

END OF SECTION 055100

SECTION 055300 - BAR GRATINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes metal bar gratings.

B. Related Requirements:

1. Section 051200 "Structural Steel Framing" for structural-steel framing system components.
2. Section 055100 "Metal Stairs" for grating treads and landings of steel-framed stairs.

1.2 SUBMITTALS

A. Product Data: For the following:

1. Clips and anchorage devices for gratings.
2. Paint products.

B. Shop Drawings: Include plans, sections, details, and attachments to other work.

C. Delegated-Design Submittal: For gratings, including manufacturers' published load tables

1.3 INFORMATIONAL SUBMITTALS

A. Mill Certificates: Signed by manufacturers of stainless steel certifying that products furnished comply with requirements.

B. Welding certificates.

C. Paint Compatibility Certificates: From manufacturers of topcoats applied over shop primers certifying that shop primers are compatible with topcoats.

1.4 QUALITY ASSURANCE

A. Welding Qualifications: Qualify procedures and personnel according to the following:

1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."

1.5 FIELD CONDITIONS

A. Field Measurements: Verify actual locations of walls and other construction contiguous with gratings by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Nucor Grating, a Fisher & Ludlow, Inc.

B. Ohio Gratings, Inc.

C. Harsco Industrial, IKG.

D. Or approved equal

2.2 PERFORMANCE REQUIREMENTS

A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design gratings.

B. Structural Performance: Gratings shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
   1. Uniform load of 100 lbf/sq. ft.
   2. Limit deflection to L/360 or 1/4 inch whichever is less.

2.3 METAL BAR GRATINGS

A. Metal Bar Grating Standards: Comply with NAAMM MBG 531, "Metal Bar Grating Manual"

B. Pressure-Locked Steel Grating: Fabricated by pressing rectangular flush-top crossbars into slotted bearing bars.

   1. Bearing Bar Spacing: 7/16 inch o.c.
   2. Bearing Bar Depth: 1-1/2 inches.
   3. Bearing Bar Thickness: 3/16 inch.
   4. Crossbar Spacing: 4 inches o.c.
   5. Grating Mark: As indicated.
   6. Traffic Surface: Serrated.
   7. Steel Finish: Hot-dip galvanized with a coating weight of not less than 1.8 oz./sq. ft. of coated surface.

2.4 FERROUS METALS

A. Steel Plates, Shapes, and Bars: ASTM A36/A36M.

B. Steel Bars for Bar Gratings: ASTM A36/A36M or steel strip, ASTM A1011/A1011M or ASTM A1018/A1018M.

C. Galvanized-Steel Sheet: ASTM A653/A653M, structural quality, Grade 33 with G90 coating.

2.5 FASTENERS

A. General: Unless otherwise indicated, provide Type 304 stainless-steel fasteners.

B. Stainless-Steel Bolts and Nuts: Regular hexagon-head annealed stainless-steel bolts, nuts, and, where indicated, flat washers; ASTM F593 for bolts and ASTM F594 for nuts..

2.6 MISCELLANEOUS MATERIALS

A. Shop Primers: Provide primers that comply with Section 099117 "Steel Coatings"

B. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.

C. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D1187/D1187M.

2.7 FABRICATION

A. Shop Assembly: Fabricate grating sections in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.

B. Cut, drill, and punch material cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.

C. Form from materials of size, thickness, and shapes indicated, but not less than that needed to support indicated loads.

D. Fit exposed connections accurately together to form hairline joints.

E. Welding: Comply with AWS recommendations and the following:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
2. Obtain fusion without undercut or overlap.
3. Remove welding flux immediately.

F. Provide for anchorage of type indicated; coordinate with supporting structure. Fabricate and space the anchoring devices to secure gratings, frames, and supports rigidly in place and to support indicated loads.

1. Fabricate toeplates to fit grating units and weld to units in shop unless otherwise indicated.
2. Toeplate Height: 4 inches unless otherwise indicated.

G. Do not notch bearing bars at supports to maintain elevation.

2.8 GRATING FRAMES AND SUPPORTS

A. Fabricate from metal shapes, plates, and bars of welded construction to sizes, shapes, and profiles indicated and as necessary to receive gratings. Miter and weld connections for perimeter angle frames. Cut, drill, and tap units to receive hardware and similar items.

1. Unless otherwise indicated, fabricate from same basic metal as gratings.

B. Galvanize steel frames and supports in the following locations:

1. Exterior.
2. Interior.

2.9 STEEL FINISHES

A. Finish gratings, frames, and supports after assembly.

B. Galvanizing: Hot-dip galvanize items as indicated to comply with ASTM A153/A153M for steel and iron hardware and with ASTM A123/A123M for other steel and iron products.

1. Do not quench or apply post galvanizing treatments that might interfere with paint adhesion.

C. Shop prime gratings, frames, and supports unless otherwise indicated.

1. Shop prime with primers specified in Section 099117 "Steel Coatings"

D. Preparation for Shop Priming: Prepare surfaces to comply with SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."

E. Shop Priming: Apply shop primer to comply with SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing gratings to in-place construction. Include threaded fasteners for concrete and masonry inserts, through-bolts, lag bolts, and other connectors.

B. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing gratings. Set units accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.

C. Provide temporary bracing or anchors in formwork for items that are to be built into concrete or masonry.

D. Fit exposed connections accurately together to form hairline joints.

1. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade the surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.

E. Attach toeplates to gratings by welding at locations indicated.

F. Field Welding: Comply with AWS recommendations and the following:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
2. Obtain fusion without undercut or overlap.
3. Remove welding flux immediately.

G. Corrosion Protection: Coat concealed surfaces of aluminum that will come into contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.

3.2 INSTALLING METAL BAR GRATINGS

A. General: Install gratings to comply with recommendations of referenced metal bar grating standards that apply to grating types and bar sizes indicated, including installation clearances and standard anchoring details.

B. Attach removable units to supporting members with type and size of clips and fasteners indicated or, if not indicated, as recommended by grating manufacturer for type of installation conditions shown.

C. Attach nonremovable units to supporting members by welding where both materials are same; otherwise, fasten by bolting as indicated above.

3.3 ADJUSTING AND CLEANING

A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint and paint exposed areas with same material as used for shop painting to comply with SSPC-PA 1 requirements for touching up shop-painted surfaces.

1. Apply by brush or spray to provide a minimum 2.0-mil dry film thickness.

B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A780/A780M.

END OF SECTION 055300

SECTION 061000 - ROUGH CARPENTRY

PART 1 - GENERAL

1.01 Summary

A. This Section includes wood blocking, nailers, plywood, fasteners, and related accessories.

B. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Engineering data for power driven fasteners (set by nailing guns) of all types proposed to be used as equivalents to hammer driven nails.

C. Samples:

1. Fasteners: For each type and size of fastener to be incorporated in the Work.

D. Roofing manufacturer written approval of layout and spacing of anchors and fasteners.

1.03 Quality Assurance

A. Mill and Producers Mark:

1. Each piece of lumber shall bear a stamp by the WWPA, WCLIB or SPIB or other agency certified by ALSC, indicating type, grade, mill and grading.
2. Each piece of plywood shall bear a stamp by the APA indicating grade, thickness, span ratio, and exposure durability.

B. Pressure Preservative / Fire Hazard Classification: Each piece of lumber shall bear markings indicating treatment and fire hazard classification by ALSC accredited agency.

PART 2 - PRODUCTS

2.01 Wood Blocking and Nailers

A. **Wood Blocking**

1. Comply with PS 20-99, American Softwood Lumber Standard by US DOC.
2. Pressure treated in accordance with AWPB LP-2 treatment and kiln dried to 19 percent moisture content after treatment.
3. No. 2 or better Douglas Fir, Southern Pine or Hem Fir.

B. **Wood Nailer**

1. Comply with wood blocking requirements.

2.02 Plywood

A. **Exterior Grade Plywood**

1. Comply with PS 1-95/ ANSI A199.1, PS 2-92.
2. Exterior grade plywood. CDX for exterior.

2.03 Fasteners

A. All fasteners shall be corrosion resistant, hot-dip zinc coating complying with ASTM A 153 / ASTM A 153M, or stainless steel (Type 304).

B. Nails: Provide nails with barbed, annular ring or screw shank. Comply with ASTM F 1667 and FS FF-N-105.

C. Screws:

1. Wood Blocking to Metal: Provide No. 10 (5mm) screws with a galvanized steel washer (5/8 inch outside diameter) under screw heads.
2. Plywood to Wood: Provide screws that comply with ASTM C 1002.
3. Plywood to Metal (0.033 to 0.112 inch thick): Provide screws that comply with ASTM C 954.

PART 3 - EXECUTION

3.01 Preparation of Substrate

A. Examine substrate surfaces to receive wood and plywood.

B. Remove all existing overlay material, membrane, and accessories (e.g., nails) to expose substrate. Do not damage substrate during removal.

3.02 General Installation

A. Comply with the following:

1. AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
2. FM 1-28R, FM 1-29R & FM-49 by Factory Mutual
3. Performance Requirements in roofing specifications.

B. Do not use material with defects which impair the quality of the Work.

C. Set rough carpentry to required levels and lines, with members plumb, true to line, cut and fitted. Fit rough carpentry accurately to other construction.

D. Position fasteners and anchors in such a manner that they will not spall the underlying substrate.

E. Securely anchor and fasten rough carpentry making tight connections to substrates as indicated on Drawings and required in this Section.

F. Install fasteners without splitting wood; pre-drill material as required.

G. Take care that fasteners do not penetrate through members where opposite side wall will be exposed to view.

3.03 Blocking Installation

A. General:

1. Locate and install wood blocking and nailers where indicated and where required for support and/or attachment of other Work. Form and shim to shapes as indicated or required.
2. Where multiple layers of wood blocking, framing or nailers are required, off-set and stagger joints a minimum of 12 inches.

B. Roofs:

1. Layout blocking to achieve the following minimum requirements, unless otherwise indicated on Drawings:
    a. Set wood blocking to achieve a continuously level height around perimeters, penetrations and curbs.
    b. Wood Blocking at Perimeter Roof Edge / Gravel Stops and Penetrations:
        1) Field verify extent of wood blocking required for each roof edge / gravel stop and penetration flashing based on insulation layout.
        2) Blocking shall be a minimum of 2 inches thick. Numerous layers of wood blocking may be required to match the height of the roof insulation at the highest point.

3) Blocking shall be a minimum of 1/4 inch wider than the width of the horizontal metal flange of the perimeter roof edge / gravel stop and/or penetration flashing, to accommodate full support and attachment of the flange as required.

c. Wood Blocking at Curbs:

1) Field verify extent of wood blocking required for each curb based on insulation layout.

2) Blocking shall be a minimum of 2 inches thick. Numerous layers of wood blocking may be required to achieve a minimum roof membrane base flashing height of 8 inches above new roof surface.

3) Match the width of the curb.

2. Secure blocking as follows, unless otherwise indicated on the Drawings:

a. Size and space fasteners as required to support applied loading.

b. Obtain roofing manufacturer written approval of layout and spacing of anchors and fasteners.

c. Where feasible, install two rows of fasteners/anchors staggered.

d. Wood-to-CMU/Concrete/Masonry:

1) Comply with Section 040519 Masonry Anchorage and Reinforcing.

2) Anchor with 1/4 inch stainless steel threaded rod, nut and washer set in anchorage adhesive at 16 inches on center. Spacing shall not exceed 12 inches, within 8 feet from outside corner, each way. Stagger anchors if blocking is wider than 6 inches. Countersink bolts and nuts flush with surfaces.

3) Fill hollow cells of CMU to receive anchor with high strength grout.

e. Wood-to-Wood:

1) Fasten with nails in two rows so that spacing in any one row does not exceed 16 inches. Spacing shall not exceed 12 inches, within 8 feet from outside corner, each way. Stagger nails if blocking is wider than 6 inches.

2) Nails shall be long enough to penetrate substrate a minimum of 1-1/4 inches. Withdrawal resistance should be 100 lbs. per nail minimum.

f. Wood-to-Metal: Fasten with screws in two rows so that spacing in any one row does not exceed 16 inch centers. Spacing shall not exceed 12 inches, within 8 feet from outside corner, each way. Stagger screws if blocking is wider than 6 inches. Countersink screw heads flush with surfaces.

3.04 Plywood Installation

A. Layout plywood to achieve the following minimum requirements, unless otherwise indicated on Drawings:

1. Face grain of plywood to be at right angles to support framing. Arrange joints so that pieces do not span between fewer than three support members. Provide 1/8 inch space between sheet as at end and side joints. Stagger panel end joints. Do not use pieces that are too small to use with minimum number of joints or optimum joint arrangement.
2. Cut panels at penetrations, edges, and other obstructions of work; fit tightly against abutting construction unless otherwise indicated.
3. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements.

B. Securely attach plywood to substrate with screws in compliance with the following, unless otherwise indicated on the Drawings:

   a. Table 2304.9.1, "Fastening Schedule," in the ICC's International Building Code.

   b. ICC-ES evaluation report for fastener.

C. Coordinate plywood installation with installation of materials installed over plywood so plywood is not exposed to precipitation or left exposed at end of the workday when rain is forecast.

END SECTION 061000

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SECTION 075200 – MODIFIED BITUMINOUS MEMBRANE ROOFING

PART 1 - GENERAL

1.01 Summary

A. This Section includes modified bituminous membrane roofing systems, and related substrate restoration, insulation, vapor barriers, flashing, and accessories.

B. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).

1.02 Submittals

C. Product Data: For each product specified in Part 2 - Products.

D. Samples:

1. Initial Membrane: Sample shall be 12" square.
2. Insulation: For each type of insulation to be incorporated in the Work. Samples shall be 12" square.
3. Base Sheet: Sample shall be 12" square.
4. Cap Sheet: For each color surface cap sheet to be exposed as finished roof surface. Samples shall be 12" square.
5. Flashing: Samples shall be 12" square, and representative of color, texture, thickness, and surfacing of flashing to be incorporated in the Work.
6. Fiberglass Mesh: Sample shall be 12" square.
7. Substrate Board: Samples shall be 12" square.
8. Cover Board: Samples shall be 12" square.
9. Roof Walkway: Samples shall be 12" square.

E. Shop Drawings:

1. Deck Survey: After removal of overlaying components as indicated in the contract documents, provide deck elevation drawings completed by New York State Licensed Surveyor, signed and sealed.
2. Shop drawings to indicate:
   a. Dimensions, thickness and arrangement of insulation panels.
   b. Tapered insulation for slopes as required for fields, crickets, hips and valleys.

c. Insulation fastening patterns for corner, perimeter, and field-of-roof locations.

d. Roofing details for all roofing terminations and penetrations as required for warranted roofing system, where not otherwise indicated; include dimensions of each product specified, method of installation to the substrate, underlayment, and termination.

3. Comply with required R-Value, per Energy Conservation Construction Code of New York State.

F. Manufacturer Certification / System Letter: Prepared and signed by roofing manufacturer, listing all components of the roofing system and related R-Values. The manufacturer must certify that the system complies with wind uplift pressure resistance as specified in the "Performance Requirements" article in this Section, and will achieve the specified warranty.

G. Pre-construction Test Reports:

1. Deck Dryness Test Reports.

H. Warranty Prerequisites:

1. Sample Warranty: Prior to pre-installation conference, submit sample warranty and warranted application procedures from manufacturer.

2. Manufacturer Inspection Reports/Certifications (On-demand).

1.03 Performance Requirements

A. Wind Uplift Pressure Resistance: Roofing system shall resist wind uplift pressures at corners, perimeter, and field-of-roof in accordance with ASCE 7 and applicable building codes.

1.04 Quality Assurance

A. Pre-installation Conference: Prior to starting roofing Work, conduct an on-site conference to review the detailed requirements of the Work.

1. Attendees shall include Contractor's Project manager and superintendent, Architect's Project representative, Owner's Project representative, manufacturer's authorized representative, manufacturer approved installer. Provide seven (7) business days advance notice to attendees.

2. Agenda shall include:

a. Manufacturer approved installer credentials.

b. Sample warranties and warranted application procedures.

c. Project construction schedule.

d. Weather conditions.

e. Condition of substrate and preparation.

f. Preparation Work performed by other trades.

g. Proposed equipment.

h. Installation sequence.

i. Penetrations.

j. Mockups.

k. Tests and inspections.

1.05 Tests and Inspections

A. Pre-construction Testing:

1. Deck Dryness Test:

a. Testing: Perform deck dryness test daily, immediately prior to, and at each location of the Work in accordance with Manufacturer's recommended methods. Roof deck dryness testing should be performed by, or in the presence of Manufacturer's Representative.

b. Test Reports: Reports shall include date of test, locations, test method, and test results.

1.06 Project Conditions

A. Weather Conditions: Proceed with roofing Work only when existing and predicted weather conditions will permit Work to be performed in accordance with manufacturer's recommendations and warranty requirements.

B. Substrate Conditions:

1. Do not install roofing on wet insulation or other moist substrates.

2. Do not apply hot bitumen under a condition which would cause foaming (due to moisture).

1.07 Warranty

A. Roofing System Manufacturer's Warranty: Written form in which manufacturer agrees to furnish products and labor to repair or replace those areas of roofing system that do not comply with performance and other requirements specified in the Contract Documents during the warranty period. Manufacturer shall warranty the complete roofing system including, but not limited to all membranes, insulation, cover boards, flashing, fasteners, and embedded edge metal.

1. Warranty Period: Twenty (20) Years, No Dollar Limit (NDL), Total System Warranty.

B. Manufacturer's Inspection and Certification:

1. Coordinate inspections required by manufacturer. Provide three (3) business days' notice to manufacturer's authorized representative to inspect Work at the required milestones or intervals. No Work is to proceed until after each inspection is completed with written acceptance by manufacturer's authorized representative.
2. Upon acceptance of completed Work by manufacturer, obtain manufacturer's certification stating that the Work complies with the requirements for Warranty.

C. Contractor's Warranty: In addition to the provisions of the manufacturer's warranty, the following items shall be covered under the Contractor's warranty for the period indicated in the Supplementary General Conditions:

1. Ponding of water on any roof surface for longer than 48 hours after a rain will be considered a failure of materials and workmanship.

PART 2 - PRODUCTS

2.01 General

A. All products in this Section must be acceptable to the manufacturer of the overall roofing system.

B. Abbreviations used in product callouts (e.g. membrane types):

SBS .....Styrene-Butadiene-Styrene (modified asphalt)

M.....Mineral Surface

P .....Protected Surface

FR.....Fire Rated

CR .....Cool Roof

2.02 SBS Modified Bituminous Membrane (Hot Mopped)

A. SBS 2 Ply Membrane (Hot Mopped) Type CR/FR

1. Johns Manville System (Polyester Reinforced)

Base Ply:	Dynalastic 180 S	Johns Manville
Cap Sheet:	Dynalastic 180 FR CR	Johns Manville

OR

2. Soprema System (Polyester Reinforced)

Base Ply:	Sopralene 180 Sanded	Soprema
Cap Sheet:	Sopralene 180 FR GR SG	Soprema

OR

3. Siplast System (Fiberglass Reinforced)

Base Ply:	Paradiene 20	Siplast
Cap Sheet:	Paradiene 30 FR BW	Siplast

4. Or approved equal

2.03 Initial Roofing Membrane

A. Initial Roofing Membrane

1. Dynabase — Johns Manville
   SBS (Fiberglass Reinforced) – Hot Mopped
2. Elastophene 180 Sanded — Soprema
   SBS (Polyester Reinforced) – Hot Mopped
3. Irex 40 — Siplast
   SBS (Fiberglass Reinforced) – Hot Mopped
4. Or approved equal

2.04 Fluid Applied Flashing (PMMA)

A. Fluid Applied Flashing

1. Johns Manville System

Primer:	SeamFree PMMA Primer - Flashing	Johns Manville
Resin:	SeamFree PMMA Flashing Resin	Johns Manville
Catalyst:	SeamFree PMMA Catalyst	Johns Manville
Fleece:	SeamFree PMMA Scrim	Johns Manville

OR

2. Soprema System

Primer:	Alsan RS 276	Soprema
Resin:	Alsan RS 230 Flash	Soprema
Catalyst:	Alsan RS Catalyst Powder	Soprema
Fleece:	Alsan RS Poly	Soprema

OR

3. Siplast System

Primer:	Pro Primer W	Siplast
Resin:	Parapro 123 Flashing Resin	Siplast
Catalyst:	Pro Catalyst	Siplast
Fleece:	Pro Fleece	Siplast

4. Or approved equal

2.05 SBS Modified Bituminous Flashing (Hot Mopped)

D. Roof Membrane Flashing – SBS (2 Ply)

Hot Mopped – Type CR/FR

1. Johns Manville System (Polyester Reinforced)

Base Ply:	Dynalastic 180 S	Johns Manville
Cap Sheet:	Dynalastic 180 FR	Johns Manville

OR

2. Soprema System (Polyester Reinforced)

Base Ply:	Sopralene 180 Sanded	Soprema
Cap Sheet:	Sopralene 180 FR GR SG	Soprema

OR

3. Siplast System (Fiberglass Reinforced)

Base Ply:	Paradiene 20	Siplast
Cap Sheet:	Paradiene 40 FR BW	Siplast

4. Or approved equal

2.06 Rigid Roof Insulation

A. Polyisocyanurate Foam Board Insulation

1. ENRGY 3 — Johns Manville
2. Sopra-ISO — Soprema

3. Paratherm — Siplast

4. Or approved equal

2.07 Rigid Roof Insulation Tapered

A. Polyisocyanurate Foam Board Insulation / Tapered

1. Tapered ENRGY 3 — Johns Manville

2. Sopra-ISO Tapered — Soprema

3. Paratherm Tapered — Siplast

4. Or approved equal

2.08 Fiberglass Insulation

A. Fiberglass Insulation

1. EcoTouch PINK Fiberglas Insulation — Owens-Corning Fiberglas Corp.

    A. Surface Burning Characteristics: Maximum flame spread and smoke developed values of 25.

    B. Combustion Characteristics: Passes ASTM E 136 test.

2. Or approved equal — Knauf Fiber Glass GmbH.

3. Or approved equal — Manville Corp.

4. Or approved equal

2.09 Roof Cover Board

A. Gypsum/Cement-Based Cover Board

1. DensDeck Prime — Georgia-Pacific

2. Securock — USG

3. Or approved equal

2.10 Roof Walkway

A. Roof Walkway

1. DynaTred — Johns Manville

2. Soprawalk — Soprema

3. Paratread — Siplast

4. Or approved equal

2.11 Hot Asphalt

A. Asphalt (Hot Mopped)

1. Comply with ASTM D 312, Type IV.

2.12 Flashing Cement and Utility Mastic

A. Flashing Cement

1. MBR Flashing Cement — Johns Manville

1. Colply Modified Adhesive — Soprema

2. PA 1021 Flashing Cement — Siplast

3. Or approved equal

B. Utility Mastic

1. MBR Utility Cement — Johns Manville

2. SBS Mastic — Soprema

2. PA 828 Plastic Cement — Siplast

3. Or approved equal

2.13 Asphalt Surface Primer

A. Primer

1. Asphalt Primer — Johns Manville

3. Aquadere — Soprema

2. PA 917 LS Primer — Siplast

3. Or approved equal

2.14 Expansion Joint Cover

A. Expansion Joint Cover

1. Expand-O-Flash Expansion Joint Cover — Johns Manville
2. Paraguard Expansion Joint — Siplast
3. Or approved equal

2.15 Accessories

A. Hammer Drive Anchor

1. HMH SS 304 Metal Anchor — Hilti
2. Zamac Hammer Screw — Powers
3. Zinc Nailon Pin Drive Anchor — Simpson Strong-Tie
4. Or approved equal

B. Fasteners

1. Insulation Fasteners — Johns Manville
4. Insulation Fasteners — Soprema
2. Parafast — Siplast
3. Or approved equal

C. Fire Retardant Cant Strip

1. FesCant Plus — Johns Manville
2. Or approved equal

D. Fiberglass Mesh

1. #31 Fiberglass Membrane — Karnak
2. Or approved equal

E. All accessory products must be acceptable to the manufacturer of the overall roofing system.

PART 3 - EXECUTION

3.01 Removal

A. Comply with 024119 (Selective Demolition).

3.02 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.03 Preparation of Substrate

A. Examine substrate surfaces to receive roofing system and associated Work and conditions under which roofing will be installed. Do not proceed with roofing until unsatisfactory

B. Concrete Substrate:

1. Repair surface spalls using modified repair mortar. Follow manufacturer’s recommendations regarding storage conditions, surface preparation and protection, mixing ratio, application time, and finishing time.

2. Apply asphalt surface primer before initial membrane application per manufacturer’s recommendations.

3. Tape joints of substrate where required to prevent penetration by roofing materials.

C. Protect substrate with installation of initial roofing membrane, or by immediate installation of new roofing membrane. Expose only that portion of substrate at any one time which may be immediately protected.

3.04 Installation of Insulation

A. Comply with instructions and recommendations of insulation manufacturer and roofing system manufacturer for the installation and bonding or anchorage of insulation to substrate.

1. Clean initial membrane as recommended by manufacturer to ensure full bonding of insulation.

2. Trim surface of insulation where necessary at roof drains so completed surface is flush with ring of drain.

3.05 Roof Membrane Installation

A. Cant Strips: Install cant strips as shown on drawings per roofing manufacturers recommendations.

B. Tapered Edge Strips: Install tapered edge strips where edges of roofing do not adjoin a vertical surface, unless otherwise indicated on drawings, to raise edges of roof membrane above main roof surface.

C. Install roof membrane system according to the manufacturer's recommendations and specifications for the systems specified.

D. Seal edges of roofing to prevent flow of bitumen into building and drains. Provide envelope of roofing felt or, where envelope is not possible, provide large beads of roofing cement.

3.06 Roof Walkways

A. Walkways: Install walkway protection boards in accordance with manufacturer's instructions at locations shown on Drawings.

END OF SECTION 075200

SECTION 075600 – FLUID APPLIED ROOFING

PART 1 - GENERAL

1.01 Summary

A. This Section includes fluid applied membrane roofing systems, and related substrate restoration, primers, reinforcing mats, flashing, surfacing aggregates, and accessories.

B. Related Sections:

1. 014000 (Quality Requirements).

2. 014339 (Mockups, and Physical Quality Assurance Aids).

3. 016100 (Product Requirements).

4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Samples:

1. Membrane: Sample shall be 12" square, and representative of color, texture, thickness, and surfacing of membrane to be incorporated in the Work.

2. Insulation: Sample shall be 12” square for each type of insulation.

C. Shop Drawings:

1. Deck Survey: After removal of overlaying components as indicated in the contract documents, provide deck elevation drawings completed by New York State Licensed Surveyor, signed and sealed.

2. Shop drawings to indicate:

a. Dimensions, thickness and arrangement of insulation panels.

b. Roofing details for all roofing terminations and penetrations as required for warranted roofing system, where not otherwise indicated; include dimensions of each product specified, method of installation to the substrate, underlayment, and termination.

3. Comply with required R-Value, per Energy Conservation Construction Code of New York State.

D. Manufacturer Approved Installer Credentials: Prior to pre-installation conference, submit installer credentials issued by manufacturer of roofing products.

E. Pre-construction Test Reports:

1. Membrane Bond Strength Test Reports

2. Deck Dryness Test Reports

F. Warranty Prerequisites:

1. Sample Warranty: Prior to pre-installation conference, submit sample warranty and warranted application procedures from manufacturer.

2. Manufacturer Inspection Reports/Certifications (On-demand).

1.03 Performance Requirements

A. Wind Uplift Pressure Resistance: Roofing system shall resist wind uplift pressures at corners, perimeter, and field-of-roof in accordance with ASCE 7 and applicable building codes.

B. Cool Roof Energy Performance: Roofing systems shall conform to the following standards: Initial solar reflectance of not less than 0.70, per ASTM C1549. Thermal emittance of not less than 0.75, per ASTM C1371. Solar Reflective Index (SRI) of not less than 78, per ASTM E1980.

C. Fire Rating: Fluid applied roof system shall achieve Class A fire rating.

1.04 Quality Assurance

A. Pre-installation Conference: Prior to starting roofing Work, conduct an on-site conference to review the detailed requirements of the Work.

1. Attendees shall include Contractor’s Project manager and superintendent, Architect’s Project representative, Owner’s Project representative, manufacturer's authorized representative, manufacturer approved installer. Provide seven (7) business days advance notice to attendees.

2. Agenda shall include:

a. Manufacturer approved installer credentials.

b. Sample warranties and warranted application procedures.

c. Project construction schedule.

d. Weather conditions.

e. Condition of substrate and preparation.

f. Preparation Work performed by other trades.

g. Proposed equipment.

h. Mixing procedures.

i. Installation sequence.

j. Odor control procedures.

k. Penetrations.

l. Mockups.

m. Tests and inspections.

1.05 Tests and Inspections

A. Pre-construction Testing:

1. Membrane Bond Strength Testing:

a. Testing: Perform random tensile bond strength of membrane to substrate tests according to manufacturer’s requirements.

b. Test Reports: Reports shall include date of test, locations, test method, and test results, whether the results comply, or do not comply with performance requirements.

c. Acceptance: Obtain Architect's written acceptance of test results before proceeding with the Work.

d. Re-testing: If necessary, after additional preparation per manufacturer's recommendations, repeat testing to verify suitability of substrate preparation.

2. Deck Dryness Test:

a. Testing: Determine substrate moisture content, throughout Work, at location of application according to manufacturer’s requirements.

b. Test Reports: Reports shall include date of test, locations, test method, and test results.

B. Additional Tests: Perform Additional Tests as recommended by manufacturer.

1.06 Project Conditions

A. Weather Conditions: Proceed with roofing Work only when existing and predicted weather conditions will permit Work to be performed in accordance with manufacturer's recommendations and warranty requirements.

B. Substrate Conditions: Do not install roofing on wet or moist substrates.

1.07 Warranty

A. Roofing System Manufacturer's Warranty: Written form in which manufacturer agrees to furnish products and labor to repair or replace those areas of roofing system that do not comply with performance and other requirements specified in the Contract Documents during the warranty period. Manufacturer shall warranty the complete roofing system including, but not limited to membranes, flashing, and embedded edge metal.

1. Warranty Period: Twenty (20) Years, No Dollar Limit (NDL).

B. Manufacturer's Inspection and Certification:

1. Coordinate inspections required by manufacturer. Provide three (3) business days' notice to manufacturer's authorized representative to inspect Work at the required milestones or intervals. No Work is to proceed until after each inspection is completed with written acceptance by manufacturer.

2. Upon acceptance of completed Work by manufacturer, obtain manufacturer's certification stating that the Work complies with the requirements for Warranty.

3. Manufacturer's certification to verify that systems comply with cool roof reflectivity, fire rating and wind uplift resistance requirements.

C. Contractor's Warranty: In addition to the provisions of the manufacturer's warranty, the following items shall be covered under the Contractor's warranty for the period indicated in the Supplementary General Conditions:

1. Ponding of water on any roof surface for longer than 48 hours after rain will be considered a failure of materials and workmanship.

PART 2 - PRODUCTS

2.01 General

A. All products in this Section must be acceptable to the manufacturer of the overall roofing system, and used in accordance with manufacturer's recommendations.

B. Fluid Applied Products, by Category:

1. Membranes:

a. Kemper System (Cool Roof): Reflect 2K-FR Resin (1-component). Polyurethane.

Membrane thickness: 80 mils (w/ 165 fleece).
Minimum application air and surface temperature is 41° F.

b. Siplast System: Parapro S System (2-component).
MMA-based Acrylic.
Membrane thickness: 90 mils (40 mils).
Minimum application air and surface temperature is 23° F.

c. Sika System: Sikalastic 641 System (1-component).
Polyurethane.
Membrane thickness: 80 mils (w/ 140 fleece).
Minimum application air and surface temperature is 36° F.

d. Soprema System: Alsan RS260 LO Field (2-component).
Poly-methacrylate.
Membrane thickness: 105 mils (40 mils).
Minimum application air and surface temperature is 32° F.

C. Resin Additives: Comply with manufacturer's recommendations for use of resin additives (e.g. cold weather additive, warm weather additive) under specific project conditions.

2.02 Fluid Applied Membrane and Flashing

A. Fluid Applied Membrane

1. Kemper System:

Resin (2-Component):	Kemperol Reflect 2K-FR	Kemper
Fleece:	Kemperol Fleece 165	Kemper

2. Sika System:

Resin (1-Component):	Sikalastic 641	Sika
Fleece:	Sika Fleece 140	Sika

3. Siplast System:

Resins (2-Component):	Parapro S	Siplast

Fleece:	Pro Fleece	Siplast
Ply Sheet:	Paradiene 20 TA SA P	Siplast
Base/Ply Sheet:	Parabase	Siplast

4. Soprema System:

Resin (2-Component):	Alsan RS 260 LO Field	Soprema
Fleece:	Alsan RS Fleece	Soprema

5. Or Approved Equal

B. Fluid Applied Flashing

1. Same components and manufacturer as Fluid Applied Membrane.

2.03 Surface Primers

A. Primer (for Fluid Applied Membrane)

1. Kemper Primers:

a. For Metal, Wood, and Bituminous Substrate:

Kempertec D Primer Kemper

b. For Cementitious, and Masonry Substrate:

Kempertec EP Primer Kemper

2. Sika Primers:

a. For Metal, Wood, and Bituminous Substrate:

Sikalastic EP Primer/Sealer Sika

b. For Cementitious, and Masonry Substrate:

Sika Concrete Primer Sika

3. Siplast Primers:

a. For Metal, Wood, and Bituminous Substrate:

Pro Primer W Resin Siplast

b. For Cementitious, and Masonry Substrate:

Pro Primer T Resin Siplast

4. Soprema Primers:

a. For Metal, Wood, and Bituminous Substrate:

Alsan RS 276 Primer Soprema

b. For Cementitious, and Masonry Substrate:

Alsan RS 222 Primer Soprema

5. Or Approved Equal

2.04 Initial Membrane

A. Initial Roofing Membrane

1. Kemperol APP Cap FR Kemper

Mineral surface cap sheet

2. Mineral Surface Cap Sheet Tribuilt

3. Or Approved Equal

2.05 Patching/Leveling Compounds (for Concrete Substrate)

A. Resin Patching/Leveling Compound

1. Kemper System:

Resin: Kemperol EP Primer Kemper

Aggregate: Washed, dust free, kiln dried silica sand (size as recommended by manufacturer)

Mix: Varies with application conditions

OR

2. Sika System:

Resin: Sika Concrete Primer Sika

Aggregate: Washed, dust free, kiln dried silica sand (size as recommended by manufacturer)

Mix: 11 lb. aggregate per quart

OR

3. Siplast System:

Resin:	Pro Paste Resin	Siplast
Aggregate:	N/A	
Mix:	N/A	

OR

4. Soprema System:

Resin:	Alsan RS Paste	Soprema
Aggregate:	N/A	
Mix:	N/A	

5. Or Approved Equal

2.06 Modified Repair Mortar & Grout (for Concrete Substrate)

A. Modified Repair Mortar

1. BASF System:

Repair Mortar:	MasterEmaco T1060 [T1061]	BASF
Bonding Agent:	MasterEmaco P124	BASF

OR

5. Sika System:

Repair Mortar:	SikaQuick 1000	Sika

Note: Prime concrete with scrub coat, per manufacturer's recommendations.

2. Or approved equal

2.07 Rigid Roof Insulation

A. Polyisocyanurate Foam Board Insulation

1. ENRGY 3 — Johns Manville
2. Sopra-ISO — Soprema
3. Paratherm — Siplast
4. Or approved equal

B. Polyisocyanurate Foam Board Insulation / Tapered

1. Tapered ENRGY 3 — Johns Manville
2. Sopra-ISO — Soprema
3. Paratherm — Siplast
4. Or approved equal

2.08 Fiberglass Insulation

A. Fiberglass Insulation

1. EcoTouch PINK Fiberglas Insulation — Owens-Corning Fiberglas Corp.
    C. Surface Burning Characteristics: Maximum flame spread and smoke developed values of 25.
    D. Combustion Characteristics: Passes ASTM E 136 test.
2. Or approved equal — Knauf Fiber Glass GmbH.
3. Or approved equal — Manville Corp.
4. Or approved equal

2.09 Roof Substrate Board

A. Gypsum/Cement-Based Substrate Board

1. DensDeck Prime — Georgia-Pacific
2. Securock — USG

3. Or approved equal

2.10 Roof Cover Board

A. Gypsum/Cement-Based Cover Board

1. DensDeck Prime — Georgia-Pacific
2. Securock — USG
3. Or approved equal

PART 3 - EXECUTION

3.01 General:

A. Coordinate the installation so that each completed area is made watertight at the end of each day.

3.02 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.03 Odor Control Measures

A. Implement odor control and elimination measures prior to and during the application of the roofing materials in accordance with manufacturer’s recommendations and regulatory authorities.

3.04 Preparation of Substrate

A. Substrate conditions are to be evaluated by Contractor, Architect, and roofing manufacturer to determine the extent of repair and leveling required.

B. Unacceptable substrates, per manufacturer’s warranty requirements, shall be brought to the Architect’s attention in writing immediately upon discovery.

C. Existing concrete substrate should be prepared per manufacturer’s recommendations and in accordance with ASTM D4259. Concrete should be abraded to comply with ICRI CSP 2-4.

D. Clean, level, and repair substrate in manner recommended by roofing manufacturer. Allow time for curing of repair mortars and patching/leveling compounds, prior to application of membrane system.

E. Additional substrate preparation is required in the event pre-construction tests do not meet manufacturer's recommendations.

F. Inspection of Prepared Substrate: Provide two (2) business days written notice to Architect and roofing manufacturer to inspect fully prepared substrate. Implement additional preparation specified in writing by Architect or manufacturer. Obtain manufacturer's written acceptance prior to proceeding with Work.

3.05 Installation of Roofing System

A. Install roofing system in accordance with manufacturer's written instructions and recommendations.

END SECTION 075600

SECTION 076100 - SHEET METAL ROOFING

PART 1 - GENERAL

1.01 Summary

A. This Section includes sheet metal roofing systems, and related base sheets, flashing, anchors and accessories.

B. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Samples:

1. Sheet Metal Panel: For each type of panel. Sample shall be 12" square.
2. Sheet Metal Panel Accessories: For each type of cleat and fastener to be incorporated in the Work.
3. Sheet Metal: For each type to be incorporated in the Work. Samples shall be 12" square.
4. Underlayment Materials: For each type of be incorporated in the Work. Samples shall be 12" square.

C. Installer Qualifications (On-Demand).

D. Fabricator Qualifications: For fabricator of sheet metal panel materials and accessories. Obtain written acceptance from Architect, prior to commencement of Work.

E. Shop Drawings: Showing roof plan, large scale details of all flashing conditions, indicating thickness and dimension of parts, flashing and anchoring methods, and detail and location of joints; including joints necessary to accommodate thermal movement.

1.03 Quality Assurance

A. Installer Qualifications: A qualified install who has successfully completed a formal instructional and training program for the installation of the specified roofing/flashing systems, as evidenced by a certificate or diploma issued by a vocational training school or national roofing manufacturer attesting to successful completion of an equivalent formal training program.

B. Comply with:

1. ASTM B 370.
2. ASTM B 209.
3. ASTM B 101.
4. ASTM D 226.
5. ASTM B 32.
6. SMACNA "Architectural Sheet Metal Manual."
7. CDA
8. Revere Copper Products, Inc. "Copper & Common Sense"

1.04 Warranty

A. Contractor's Warranty: Provide a 5-year written guarantee, covering the metal roofing materials and workmanship. Should defects occur during the stated period, they shall be corrected immediately, and all damage caused by such defects shall be corrected. All corrective Work expense shall be borne by Contractor.

PART 2 - PRODUCTS

2.01 Sheet Metal

A. Copper

1. ASTM B 370, cold rolled sheet and strip copper except where soft temper is required for forming.

B. Aluminum

1. ASTM B 209, alloy as standard with manufacturer for finish required, with temper as required to suit forming operations and performance required; with smooth, flat surface.
   a. Thickness: 0.032 inch unless otherwise indicated.

2. Material Finish:
   a. Two-Coat Fluoropolymer: AAMA 2605. Fluoropolymer finish containing not less than 70 percent polyvinylidene fluoride (PVDF) resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
   b. Color: As selected by Architect from manufacturer's full range.

2. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin foam or closed-cell laminated polyethylene; minimum 1-inch thick, flexible-closure strips; cut or premolded to match sheet metal roofing profile. Provide closure strips where necessary to ensure weathertight construction.

3. Flashing and Trim: Formed from same material and with same finish as sheet metal roofing, minimum 0.018 inch thick.

2.02 Sheet Metal Panel and Accessories

A. Sheet Metal Panels

1. Acceptable Product: 20 oz. Lead Coated Copper; Maximum seam spacing: 18" transverse, 24" longitudinal.

B. Continuous Cleats

1. Acceptable Product: 20 oz. Copper

C. Cleats (Copper)

1. Acceptable Product: 16 oz. Copper (2" wide)

D. Cleats (Aluminum)

1. Acceptable Product: 0.025 inch Aluminum (2" wide)

E. Fasteners (Sheet Metal Roof)

1. Nails: "stronghold" type copper nails with large head (not less than #12 gauge)
2. Screws: Non-corrosive, 5/8 inch self-tapping screws for wood substrate
3. Anchors: lead alloy expansion shields
4. Fasteners for Aluminum Sheet: Aluminum or Series 300 stainless steel.

2.03 Underlayment Materials

A. Felt

1. Acceptable Product: 30 lb. Asphalt-Saturated Organic Felt (Type II)

B. Rosin Paper

1. Acceptable Product: Paper slip sheet
   a. Rosin sized building paper 5 lbs/square

2.04 Miscellaneous Accessories

A. Flux

1. Acceptable Product: Muriatic acid killed with zinc or paste type flux

B. Solder

1. Acceptable Product: Block tin/pig lead composition
   a. 50 / 50 tin for use with plain copper
   b. 60 / 40 for use with lead coated copper

C. Sealant

1. Acceptable Product: Type 2 sealant. Acrylic, solvent base; FS TT-S-00230

2.05 Deck Replacement Panels (for Wood Substrate)

A. Exterior Grade Plywood

1. Exterior grade Alkaline Copper Quaternary (ACQ) pressure treated plywood. CDX for exterior, meeting requirements of PS 1-95/ANSI A199.1, PS 2-92.
2. Product must be acceptable to the manufacturer of the overall roofing system. Use either G185 (min.) zinc coated hot-dipped galvanized steel, type 304/316 stainless steel, or copper for fasteners/metal flashing in contact with ACQ wood. Do not combine stainless & galvanized steel.

B. Exterior Grade Tongue and Groove Board

1. Exterior grade tongue and groove boards pressure treated with waterborne preservatives
2. Product must be acceptable to the manufacturer of the overall roofing system. Use either G185 (min.) zinc coated hot-dipped galvanized steel, type 304/316 stainless steel, or copper for fasteners/metal flashing in contact with ACQ wood. Do not combine stainless & galvanized steel.

PART 3 – EXECUTION

3.01 General

C. Fabrication: Unless otherwise indicated, fabricate the required sheet metal roofing components from the following materials and gages:

1. Standing Seam Roofing: 16 oz. copper.
2. Batten Seam Roofing: 16/20 oz. copper.
3. Flat Seam Roofing: 20 oz. copper.
4. Cleats: 16 oz. copper.
5. Continuous Edge strips: 20 oz. copper.
6. Valley Sheets: 20 oz. copper.

D. Workmanship:

1. Tinning and Soldering:
    a. Tin all surfaces of uncoated metal in contact with solder.
    b. Wire brush all surfaces of coated metals in contact with solder. Produce a clean and bright surface.
    c. Apply flux as required.
    d. Sweat solder thoroughly into seams, completely filling the full width of the seam.
    e. Upon completion of soldering, remove all traces of flux residue. If required, apply a neutralizing wash followed by a clean water wash.
    f. All soldering shall be done with soldering irons (heavy coppers).
2. Cross Folded Seams: Where sheet metal is cross folded at a right angle to the first fold, slit the folded portion of the metal at the cross fold and solder a metal patch over the slit to avoid binding.

3.02 Manufacturer's Instructions and Recommendations

E. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

F. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

PART 3 - Preparation of Substrate

A. Examine substrate surfaces to receive roofing system and associated Work and conditions under which roofing will be installed. Do not proceed with roofing until unsatisfactory conditions have been corrected.

B. Surfaces to receive panels shall be even, smooth, sound, clean, dry, free of ice and snow, and free from defects.

C. Verify that roof openings, curbs, pipes, sleeves, ducts, vents, and other penetrations through roof substrate are complete.

3.04 Installation of Underlayment Materials

D. Install two (2) ply of #30 felt. Lap all edges at least 2” and nail 12” staggered.

E. For all copper roofs, over the felt, install one ply of rosin paper. Secure with a sufficient number of copper nails to prevent displacement before installation of metal roofing.

3.05 Installation of Sheet Metal Roofing

F. Standing Seam Roofing (Use only for slopes 3"/ft and greater):

1. General:
    a. Form pans or rolls from 8' or 10' long sheet not more than 24" wide.
    b. Start alternating pans or rolls at eaves with half-length sheets, staggering transverse seams.
    c. Place cleats one foot apart in each standing seam. Secure each cleat with two nails. Turn end of cleat up and over to cover nails.
    d. Provide loose-lock seams at all connections to valley flashing and edge strips.
2. Standing Seams:
    a. Form 5 ply standing lock seams with finished height of 1" on straight surfaces and 1/2" on curved surfaces.
    b. Bend one side edge up 1-1/2" and the other 1-3/4". Make first fold 1/4" wide and second fold 1/2" wide to obtain a locked portion of 5 ply thickness.
    c. At eaves, fold lower end of seam over at a 45 degrees angle.
    d. At hips and ridges, flatten seam for a distance of 6" and fold into ridge or hip seam.
3. Pan Method: Fold lower end of each pan 3/4" under. Slit fold 1" away from corner to form tab where pan turns up into standing seam.
    a. Roof Slopes 3" to 6" per foot: Fold upper end of each pan 1/2" over. Solder a 1-1/2" wide locking strip continuously across the pan 4" below the top folded edge. Hook the 3/4" fold of the lower end of each pan into the locking strip of the pan below.
    b. Roof slopes more than 6" per foot: Fold upper end of each pan 2" over. Hook the 3/4" fold at the lower end of the upper pan into the 2"fold of the underlying pan.
    c. Roll Method: Join sheets together with 1/2" wide double lock seams to form continuous strips equal to the length of the slope. Form the standing seams at the site as specified in this Section.
    d. Ridges and Hips: Provide standing seams as specified for the main roofing sheets.

G. Flat Seam Roofing

1. Roofing Sheets:
    a. Form pieces from sheets not larger than 18" x 24". Notch corners and fold edges 3/4". Lay sheets in courses parallel with eaves and with shorter dimension of sheets at right angles to course. Stagger cross joints.
    b. Secure sheets to deck with cleats, fastened with 2 nails each. Place one cleat at each intersection of longitudinal and transverse seam. Place one cleat in the center of each transverse seam. Fold cleats into seams.

c. Solder all seams thoroughly to produce watertight joints; pre-tin and solder with soldering irons (heavy coppers).

d. Where sheets are turned up on vertical surfaces (such as base flashings), seal seams with Type 2 sealant.

3.06 Cleanup

H. Clean exposed panel surfaces promptly after installation in accordance with recommendations of panel and coating manufacturers.

I. Remove protective film immediately after installation.

END OF SECTION 076100

SECTION 076200 – FLASHING (SHEET METAL AND FLEXIBLE)

PART 1 - GENERAL

1.01 Summary

A. This Section includes flashing (e.g. in-wall flashing, counter flashing), and related accessories.

B. Excludes roof membrane flashing which is integrally installed with roofing membrane systems. Roof membrane flashing is specified in the roofing Sections.

C. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Samples:

1. Sheet Metal: For each type to be incorporated in the Work. Samples shall be 12" square.
2. Pre-formed Sheet Metal Flashing: For each type to be incorporated in the Work. Samples shall be 12" long.
3. Sheet Metal Counterflashing: For each type to be incorporated in the Work. Samples shall be 12" long.
4. Composite Fabric Flashing: For each type to be incorporated in the Work. Samples shall be 12" square.
5. Accessories: For each type of termination bar, metal clip, strap, anchor, and hammer drive anchor to be incorporated in the Work.

C. Shop Drawings: Showing each type of counterflashing and pre-formed sheet metal components including cleats, springs, splice plates; fastener type, size, spacing; and related accessories.

D. Fabricator Qualifications: For sheet metal fabrications. Obtain written acceptance from Architect, prior to commencement with fabrication Work.

E. Fabricator Certification / System Letter: Prepared and signed by sheet metal fabricator, listing all components of each type of assembly. The fabricator must certify that each system complies with wind pressure resistance as specified in the “Performance

Requirements" article in this Section, and will achieve the specified warranty for each application.

1.03 Performance Requirements

A. Wind Pressure Resistance: Pre-formed sheet metal pertaining to coping and/or roof edge metal systems, including blocking shall resist wind pressures in accordance with ANSI/SPRI ES-1 and applicable building codes.

PART 2 - PRODUCTS

2.01 General

A. General Metal Fabrication: Shop fabricate sheet metal units to greatest extent possible. Comply with details shown, and with applicable requirements of SMACNA "Architectural Sheet Metal Manual" and other recognized industry practices. Fabricate for waterproof and weather resistant performance; with expansion provisions for running Work, sufficient to permanently prevent leakage, damage or deterioration of the Work. Form units to fit substrates. Form exposed sheet metal Work without excessive oil canning, buckling and tool marks, true at line and levels indicated, with exposed edges folded back to form hems.

B. Seams: Fabricate non-moving seams in sheet metal with flat lock seams. For metal, tin edges to be seamed, form seams, and solder.

C. Expansion Provisions: Where lapped or bayonet type expansion provisions in Work cannot be used, or would not be sufficiently water/weatherproof, form expansion joints of intermeshing hooked flanges, not less than 1" deep, filled with sealant (concealed within joints).

D. Sealant Joints: Where movable, non-expansion type joints are indicated or required for proper performance of Work, form metal to provide for proper installation of sealant, in compliance with SMACNA standards.

2.02 Pre-Formed Sheet Metal Flashing

A. **Pre-Formed Sheet Metal Flashing (Stainless Steel)**

1. Comply with ASTM A 480, brake formed AISI Type 304, 28 gauge (0.015") stainless steel, unless otherwise indicated. 2D annealed finish, hard.

B. **Pre-Formed Sheet Metal Flashing (Copper)**

1. Comply with ASTM B 370, brake formed 16 oz. hard temper (Type H00) cold rolled copper.

2.03 Flexible Flashing

A. **Composite Flexible Flashing**

1. Multi-Flash SS — York
   Type 304 Stainless Steel / Bonded Polymeric Fabric
2. Or approved equal

B. **Self-Adhering Flexible Flashing**

1. York 304 — York
   Type 304 Stainless Steel / Butyl Adhesive
2. Or approved equal

C. **High Temperature Flexible Flashing**

1. Grace Ultra — W.R. Grace & Co.
   Self-Adhering Butyl Underlayment / Rated up to 300°F.
2. Grace Ice & Water Shield HT — W.R. Grace & Co.
   Self-Adhering Polymeric Film Underlayment / Rated up to 260°F
3. Or approved equal

2.04 Sheet Metal Counterflashing

A. **2-Piece Counterflashing (Stainless Steel)**

1. Comply with ASTM A 480, AISI Type 304, 28 gauge (0.015") stainless steel, unless otherwise indicated. 2D annealed finish, hard.

B. **2-Piece Counterflashing (Copper)**

1. Comply with ASTM B 370, 16 oz. hard temper (Type H00) cold rolled copper.

2.05 Accessories

A. **Solder (for copper)**

1. 50 - 50 tin / lead solder (ASTM B 32), with rosin flux.

B. **Butyl Caulk**

1. SikaLastomer 511 — Sika
2. Butyl Sealant — Tremco
3. Or approved equal

C. **Polyether Sealant**

1. UniverSeal Sealant — York
2. Or approved equal

D. **Flashing Cement**

1. MBR Flashing Cement (2-part) — Johns Manville
2. Or approved equal

E. **Hammer Drive Anchor**

1. HMH SS 304 Metal Anchor — Hilti
2. Zamac Hammer Screw — Powers
3. Zinc Nailon Pin Drive Anchor — Simpson Strong-Tie
4. Or approved equal

F. **Blind Rivet**

1. POP Rivet — Stanley
   Match material being secured.
2. Grip Range Rivet — Fastenal
   Match material being secured.
3. Or approved equal

G. **Termination Bar**

1. York 26 Gauge Stainless Steel Termination Bar w/ Sealant Lip — York
   Stainless Steel
2. T-2 Termination Bar — Hohmann-Barnard
   Stainless Steel
3. Or approved equal

H. **Neoprene Gasket**

1. NS-Closed Cell Neoprene Sponge — Hohmann & Barnard
2. Or approved equal

PART 3 - EXECUTION

3.01 Installation Requirements

A. General:

1. Except as otherwise indicated, comply with manufacturer's installation instructions and recommendations, and with SMACNA "Architectural Sheet Metal Manual".
2. Anchor units of work securely in place by methods indicated, providing for thermal expansion of metal units. Conceal fasteners where possible.
3. Completely isolate dissimilar metals or corrosive substrates to achieve permanent separation to prevent electrolytic corrosion.
4. Set units true to line, levels, and slopes.
5. Install work with laps, joints, and seams that are permanently watertight and weather resistant. Laps shall be 4” minimum, unless otherwise indicated on drawings.

B. Roof Edge Flashing and Copings: Anchor to resist uplift and outward forces to meet performance requirements.

C. Counterflashing:

1. Coordinate installation of counterflashing with installation of base flashing and fit counterflashing tightly to base flashing.
2. Where reglets are indicated on drawings, secure counterflashing in waterproof manner by means of lead wedges and seal as indicated on drawings.
3. Where the roof slope requires a vertical step in the counterflashing, the counterflashing shall be fabricated and installed (including miters) to provide continuous counterflashing along horizontal lines and vertical steps. Coordinate installations of wall flashing with installation of wall-opening components such as windows, doors, and louvers.

3.02 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.03 Cleanup and Protection

A. Clean exposed metal surfaces, removing substances which might cause corrosion of metal or deterioration of finish.

B. Ensure that work will be without damage or deterioration, other than natural weathering, at time of substantial completion.

END OF SECTION 076200

SECTION 077113 – MANUFACTURED COPINGS AND FASCIAS

PART 1 - GENERAL

1.01 Summary

A. This Section includes manufactured sheet metal fascias, roof edge, and related accessories, collectively referred to as fascia systems.

B. Related Sections:

1. 014000 (Quality Requirements).

2. 014339 (Mockups, and Physical Quality Assurance Aids).

3. 016100 (Product Requirements).

4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Samples:

1. Manufactured Fascia Systems: For each complete assembly type and color to be incorporated in the Work including fasteners as provided by manufacturer. Samples shall be 12" long.

C. Shop Drawings: Showing fascia systems including layout, cleats, springs, splice plates; fastener type, size, spacing; and related accessories.

D. Manufacturer Certification / System Letter: Prepared and signed by fascia system manufacturer, listing all components of each type of assembly. The manufacturer must certify that each system complies with wind pressure resistance as specified in the "Performance Requirements" article in this Section, and will achieve the specified warranty for each application.

1.03 Performance Requirements

A. Wind Pressure Resistance: Fascia systems including blocking shall resist wind pressures in accordance with ANSI/SPRI ES-1 and applicable building codes.

1.04 Warranty

A. Fascia System Manufacturer's Warranty: Written form in which manufacturer agrees to furnish products and labor to repair or replace those portions of each system that do not

comply with performance and other requirements specified in the Contract Documents during the warranty period.

1. Warranty Period: Twenty (20) Years, No Dollar Limit (NDL), Total System Warranty.

B. Manufacturer's Inspection and Certification:

1. Coordinate inspections required by manufacturer. Provide three (3) business days' notice to manufacturer's authorized representative to inspect Work at the required milestones or intervals. No Work is to proceed until after each inspection is completed with written acceptance by manufacturer's authorized representative.

2. Upon acceptance of completed Work by manufacturer, obtain manufacturer's certification stating that the Work complies with the requirements for Warranty.

PART 2 - PRODUCTS

2.01 General

A. Components of fascia system shall be aluminum. Comply with the following:

1. Extrusions: Strength and durability properties specified in ASTM B 221 for 6063 T5; 0.50" thick.

2. Sheet: Strength and durability of 5005 H15, ASTM B 209; 0.50" thick.

3. Aluminum Finishes:

a. Comply with NAAMM "Metal Finishes Manual" to produce uniformly finished products. For colored finishes, if any, provide colors or color matches indicated below. If not indicated, as selected by Architect through the submittal process.

b. Finish: High Performance Coating

c. Standard: AA C12C42R1x (cleaned with inhibited chemicals, conversion coated and painted with specified organic coating). Apply fluorocarbon coating system consisting of thermo-cured primer, 0.2 mil min. dry film thickness, and thermo-cured fluorocarbon coating containing "Kynar 500" resin, 1.0 mil min. dry film thickness.

B. Fabrication: Fabricate fascia covers in sizes and profiles required to fit applications indicated and to remain watertight. Include provisions for controlled expansion of fascia components relative to themselves and to adjoining dissimilar materials.

C. Color: Color of fascia covers shall be as shown on Drawings or as selected in writing by Architect from manufacturer's standard colors.

D. Miscellaneous Materials: Include exposed and concealed fasteners, continuous cleats and splice plates; flashing materials, seals, sealants, and adhesive; and other accessories as required for complete assembly of systems indicated.

E. Where products in this Section are to be used in conjunction with a warranted roofing system, the products must be acceptable to the manufacturer of the roofing system.

F. In some cases, a listed product has a companion product (i.e. a product which is a slightly modified version of a listed product) associated with it, designated by enclosing brackets ("[ ]"). Where applicable, companion products are recommended by the manufacturer for better adapting to certain conditions (e.g. greater wind uplift resistance, etc.).

2.02 Fascia Systems

A. Multi-Part Fascia System

1. Presto-Tite Fascia System [Presto-Tite Edge One Fascia System]	Johns Manville
2. Paraguard Raised Edge	Siplast
3. SopraEdge Fascia	Soprema
4. Anchor-Tite HG Fascia	Metal-Era
5. TerminEdge	OMG Roofing Products
6. Or approved equal	

2.03 Fasteners

A. Fasteners

1. As recommended by gutter / fascia system manufacturer. Fasteners to be compatible with gutter / fascia materials.

PART 3 - EXECUTION

3.01 Installation

A. Coordinate installation with roofing systems, and other construction and substrates to produce a watertight assembly capable of withstanding inward and outward loading pressures, and thermal and lateral loads.

B. Completely isolate dissimilar metals or corrosive substrates to achieve permanent separation to prevent electrolytic corrosion.

3.02 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.03 Cleaning

A. Clean exposed metal surfaces in accordance with manufacturer's instruction.

3.04 Touch-up

A. Touch-up damaged metal coatings.

END OF SECTION 077113

SECTION 077123 – MANUFACTURED GUTTERS, DOWNSPOUTS AND SCUPPERS

PART 1 - GENERAL

1.01 Summary

A. This Section includes manufactured sheet metal gutters, downspouts (leaders), conductor heads, scuppers, and related accessories, collectively referred to as gutter and downspout systems.

B. Related Sections:

1. 014000 (Quality Requirements).

2. 014339 (Mockups, and Physical Quality Assurance Aids).

3. 016100 (Product Requirements).

4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Samples:

1. Gutter: For each type to be incorporated in the Work, including miscellaneous accessories and fasteners. Sample shall be 12" long.

2. Downspouts: For each type to be incorporated in the Work, including miscellaneous accessories and fasteners. Sample shall be 12" long.

3. Conductor heads: For each type to be incorporated in the Work, including miscellaneous accessories and fasteners.

4. Color Samples: Manufacturer's standard colors for gutter and downspout systems.

C. Shop Drawings: Showing gutter and downspout systems including layout, and size of components; details of attachment; and adjacent materials, and Work.

D. Manufacturer Certification / System Letter: Prepared and signed by gutter and downspout system manufacturer, listing all components of each type of assembly. The manufacturer must certify that each system complies with wind pressure resistance as specified in the "Performance Requirements" article in this Section, and will achieve the specified warranty for each application.

1.03 Performance Requirements

A. Wind Design Considerations: Gutter and downspout systems shall comply with wind design standards specified in ANSI/SPRI GD-1 and applicable building codes.

1.04 Project Conditions

A. Do not proceed with installation of sealants under the following conditions:

1. When conditions are outside the limitations permitted by the product manufacturer.

2. When ambient and substrate temperature is below 40° F.

3. When substrates are damp or wet. Comply with ASTM C 1193 Paragraph 5.8.3 (Moisture) and Paragraph 16.2 (Environmental Conditions).

PART 2 - PRODUCTS

2.01 General

A. Components of gutter and downspout systems shall be aluminum. Comply with the following:

1. Extrusions: Strength and durability properties specified in ASTM B 221 for 6063 T5.

2. Sheet: Strength and durability of 5005 H15, ASTM B 209. Downspouts shall be minimum 0.050” thick, unless otherwise indicated on Drawings. Gutters, scuppers and conductor heads shall be minimum 0.060” thick, unless otherwise indicated on Drawings.

3. Aluminum Finishes:

a. Comply with NAAMM "Metal Finishes Manual" to produce uniformly finished products. For colored finishes, if any, provide colors or color matches indicated below. If not indicated, as selected by Architect through the submittal process.

b. Coating: High Performance Coating

c. Cleaning Standard: AA C12C42R1x (cleaned with inhibited chemicals, conversion coated and painted with specified organic coating). Apply fluorocarbon coating system consisting of thermo-cured primer, 0.2 mil min. dry film thickness, and thermo-cured fluorocarbon coating containing "Kynar 500" resin, 1.0 mil min. dry film thickness.

B. Fabrication: Fabricate gutter and downspout systems in sizes and profiles to fit application as indicated on drawings and to remain water tight, durable and uniform in appearance.

C. Color: Color of gutter and downspout systems shall be as shown on Drawings or as selected in writing by Architect from manufacturer’s standard colors.

D. Miscellaneous Accessories: Include exposed and concealed fasteners, straps, hangers, and continuous clips; seals, and sealants; and other accessories; as recommended by manufacturer and required for complete assembly of systems indicated.

2.02 Gutters, Downspouts and Scuppers

A. Gutter

1.	Wind-Resistant Gutter	OMG Roofing Products
2.	Seal-Tite Industrial Gutter	Metal-Era
3.	Or Approved Equal	

B. Downspout

1.	Downspout	OMG Roofing Products
2.	Seal-Tite Industrial Downspout	Metal-Era
3.	Or Approved Equal	

C. Conductor Head

1.	Conductor Head	OMG Roofing Products
2.	Collector Box	Metal-Era
3.	Or Approved Equal	

D. Scupper

1.	Through-Wall Scupper	OMG Roofing Products
2.	Thru-Wall Scupper	Metal-Era
3.	Or Approved Equal	

2.03 Accessories

A. Gutter Hanger

1. As recommended by manufacturer.

B. Downspout Straps

1. As recommended by manufacturer.

C. Gutter Bracket

1. As recommended by manufacturer.

D. Fasteners

1. As recommended by manufacturer.

E. Strainer

6. Stainless steel: Use non-magnetic stainless steel of types and sizes standard with manufacture of products indicated to be used with aluminum materials.

F. Splash Block

1. SplashGuard SG24 — Suncast Corporation
2. Or Approved Equal

G. Sealant

1. 756 SMS Building Sealant — Dow Corning Corporation
2. SilPruf NB SCS9000 — Momentive Performance Materials
3. Or Approved Equal

PART 3 - EXECUTION

3.01 General

A. Coordinate installation with roofing, flashing, masonry and substrate Work to ensure that each element of this Work performs properly and that combined elements are sound, waterproofed and properly secured. Anchor and secure to substrate to withstand lateral and thermal stresses.

B. Completely isolate dissimilar metals or corrosive substrates to achieve permanent separation top prevent electrolytic corrosion.

3.02 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.03 Cleaning

A. Clean exposed metal surfaces in accordance with manufacturer's instruction.

3.04 Touch-up

A. Touch-up damaged metal coatings.

END OF SECTION 077123

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SECTION 078400 – FIRESTOPPING

PART 1 – GENERAL

1.01 Summary

A. This Section includes firestopping at penetrations and juncture joints of fire-rated roofs, floors and walls.

B. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).

1.02 Definitions

A. Penetration: Any opening or foreign material passing through or into a fire-rated barrier.

B. Fire-rated: Have the ability to withstand the effects of a standard fire exposure for a specified time period, as determined by qualified testing agency.

C. Fire-rated Barrier: A floor, wall, partition or floor-ceiling assembly able to withstand a standard fire and hose stream test without failure.

D. Fire Resistance Rating: The ability of a structure to act as a barrier to the spread of fire and to confine it to the area of origin. Ratings are expressed in hours and apply to beams, columns, floors, ceilings, roofs, walls and partitions.

E. Firestopping: A means of sealing openings in fire-rated barriers to preserve or restore the fire resistance rating.

F. Firestop System: A material, or combination of materials, installed to retain the integrity of fire-rated construction by maintaining an effective barrier against the spread of flame, smoke or gases through penetrations in fire-rated barriers. It shall be used in specific locations as follows:

1. Penetrations for the passage of duct, cable, cable tray, conduit, piping and electrical busways and raceways through fire-rated vertical barriers (walls and partitions), horizontal barriers (floor slabs and floor/ceiling assemblies), and vertical service shafts.
2. Openings between floor slabs and curtain walls.
3. Openings between structurally separate sections of walls or floors.
4. Construction joints between the top of walls and floor or roof slab and steel deck assemblies, or, concrete floor or roof slab.
5. Vertical service shafts at each floor level.

6. Expansion joints in walls and floors.
7. Openings and penetrations in fire-rated partitions or walls containing fire doors.
8. Other locations indicated in the Contract Documents.

1.03 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Manufacturer Approved Installer Credentials (On-demand).

C. Product Test Reports:

1. Firestopping Test Reports.

D. Manufacturer's Certifications (On-demand).

E. Sample Warranty: Prior to commencing firestopping Work, submit sample warranty and warranted application procedures from manufacturer.

1.04 Performance Requirements

A. Technical Requirements:

1. Firestopping materials shall be UL Classified as "fill, void or cavity material" for use in through-penetration firestop systems.
2. Firestop systems shall provide a fire resistance rating at least equal to the hourly resistance rating of the fire-rated barrier.
3. Firestop systems shall have been tested in accordance with ASTM E 814 or UL 1479 under a minimum positive pressure of 0.01 in. of water.

B. General Considerations:

1. Firestop systems do not re-establish the structural integrity of load bearing partitions. Contractor to consult the Architect prior to penetrating any load bearing assembly.
2. Firestop systems are not intended to support live loads or traffic. Contractor shall consult the Architect if there is reason to believe these limitations may be violated.
3. When more than one firestop system design is applicable, individual characteristics should be evaluated for secondary benefits in performance, e.g. water/air sealing, ease of installation/¬modification, or building movement.

1.05 Quality Assurance

A. Comply with the following:

1. ASTM E 84.
2. ASTM E 814.
3. UL 1479.

4. UL Fire Resistance Directory; Through-Penetration Firestop Systems (XHEZ), and Fill, Void or Cavity Materials (XHHW).
5. UL 723 "Standard Test Method for Surface Burning Characteristics of Building Materials."

B. Manufacturer's Certifications: Obtain the manufacturer's certification of the following:

1. Materials and systems meet or exceed the specified requirements.
2. Firestopping has been completed in full accordance with requirements of the Contract Documents.

1.06 Tests and Inspections

A. Product Testing:

1. Firestopping Testing:

a. Testing: Test firestopping system application to substrate materials similar to Project conditions for compliance with requirements.

b. Test Reports: Reports shall include date of test, location, products used, test method, and test results stating whether firestopping system complies, or does not comply with requirements.

c. Acceptance: Obtain Architect's written acceptance of test results before proceeding with fireproofing Work.

1.07 Warranty

A. Manufacturer shall provide a written warranty stipulating that its products and systems incorporated in the Work, if installed for the respective product or system in accordance with the manufacturer's recommendations, shall provide the firestopping specified in the Contract Documents, and as indicated by its UL rating for that specific installation.

B. The warranty shall not include either or both of the following statements, or variations thereof:

"Owner or User shall determine suitability of the product or system for its intended use and assume all risks and liabilities connected therewith".

And/or

"Owner or User shall test application of product or system for its specific use".

PART 2 - PRODUCTS

2.01 Firestop Systems

A. Firestop Sealant

1. FlameSafe FS 900+ Sealant	RectorSeal
2. Or approved equal	Hilti, Inc.
3. Or approved equal	3M Fire Protection Products
4. Or approved equal	Tremco Sealant Division
5. Or approved equal	

2.02 Materials

A. Grout and sealant systems shall meet or exceed requirements as specified in this Section and shall be acceptable to the Architect.

B. Firestopping systems shall meet the requirements of ASTM E 814, which include, but are not limited to, the following:

1. Prevent flame pass-through.
2. Restrict temperature to not exceed 325 degrees F over ambient on side of assembly opposite flames.
3. Provide a positive smoke seal.
4. Withstand hose stream test.

C. Firestopping materials shall be asbestos-free, emit no toxic or combustible fumes and be capable of maintaining an effective barrier against flame, smoke, gas, and water in compliance with requirements of this Section.

D. Firestopping materials/systems shall be flexible to allow for normal movement of building structure and penetrating items(s) without affecting the adhesion or integrity of the system.

E. Firestopping materials shall not require hazardous waste disposal of used containers/packages.

F. On insulated pipe, the fire-rating classification must not require the removal of the insulation.

G. Firestopping materials shall be free of solvents and shall not experience shrinkage while curing.

PART 3 - EXECUTION

3.01 Examination

A. Verify that penetration elements are properly located and securely fixed, with the proper space between the penetration element and surfaces of the opening.

3.02 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.03 Preparation

A. Clean surfaces of opening

3.04 Installation

A. Install firestopping system in strict accordance with the manufacturer's instructions to obtain the fire-rating required at the specific location.

B. Provide escutcheons for piping at each side of penetration.

3.05 Field Quality Control

A. Inspect all installations to ensure that all Work meets the requirements specified.

END OF SECTION 078400

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SECTION 079200 – JOINT SEALANTS

PART 1 - GENERAL

1.01 Summary

A. This Section includes joint sealants, and related cleaners, primers and accessories (e.g., backer rod, etc.).

B. Related Sections:

1. 014000 (Quality Requirements).

2. 014339 (Mockups, and Physical Quality Assurance Aids).

3. 016100 (Product Requirements).

4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Samples:

1. Sealant: For each type and color of sealant to be incorporated in the Work. Samples shall be fully cured.

2. Lead Weather Cap.

C. Pre-construction Test Reports:

1. Compatibility and Adhesion Test Reports.

2. Field Adhesion Test Reports.

D. Joint Sealant Installation Log (On-demand).

E. Warranty Prerequisites:

1. Sample Warranty: Prior to installation, submit sample warranty and warranted application procedures from manufacturer.

2. Manufacturer Inspection Reports/Certifications (On-demand).

1.03 Performance Requirements

A. Provide joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.

1.04 Tests and Inspections

A. Pre-construction Testing:

1. Compatibility and Adhesion Testing:

a. Test Specimens: Provide to joint sealant manufacturer four (4) test specimens of each Project joint substrate and other materials that will contact or affect joint sealants (e.g., shims, backings, secondary seals, etc.).

b. Testing: Manufacturer shall perform required tests to determine compatibility of materials with one another, and whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.

c. Test Reports: Obtain from manufacturer test reports and written recommendations for primers and substrate preparation needed for adhesion. Where joint sealants are specified to be non-bleeding (or non-staining) to porous substrates, manufacturer shall certify that the sealant products have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.

d. Acceptance: Obtain Architect's written acceptance of test reports and recommendations before proceeding with joint sealant Work.

2. Field Adhesion Testing:

a. Performance Models: Construct performance models following joint sealant manufacturer's recommendations for removal of sealant and backings (at existing joints), joint preparation, and installation of sealant. Individual models shall be constructed for each combination of joint substrate and sealant represented on the Project, at locations determined by Architect, and each shall be a minimum of three (3) feet in length.

b. Testing: Follow joint sealant manufacturer's test recommendations. Where manufacturer does not specify test recommendations, follow Method A (Field-Applied Sealant Joint Hand Pull Tab) in Appendix X1.1 in ASTM C 1193 appropriate for the types of Project joints. For joints with dissimilar substrates, verify adhesion to each substrate separately.

1) Arrange for Architect and manufacturer's authorized representative to be present at testing, provide five (5) business days’ notice.

2) Retest as necessary until satisfactory adhesion is obtained.

c. Test Reports: Reports shall include date of test, location, date joint sealant was installed, Project joint substrates involved, joint preparation method, sealant and other products used, test method, and test results.

d. Acceptance: Obtain Architect's written acceptance of test results before proceeding with joint sealant Work.

1.05 Joint Sealant Installation Log

A. Maintain a tabular log of all joint sealant installations including columns for date, temperature, weather conditions, and location(s).

1.06 Project Conditions

A. Do not proceed with installation of joint sealants (and primers) under the following conditions:

1. When conditions are outside the limitations permitted by the product manufacturer.

2. When ambient and joint substrate temperature is below 40° F.

3. When joint substrates are damp or wet. Comply with ASTM C 1193 Paragraph 5.8.3 (Moisture) and Paragraph 16.2 (Environmental Conditions).

4. When joints do not comply with requirements for joint configurations, and sealant installation tolerances.

1.07 Warranty

A. Joint Sealant Manufacturer's Warranty: Written form in which manufacturer agrees to furnish joint sealants to repair or replace those that do not comply with performance and other requirements specified in the Contract Documents during the warranty period.

1. Warranty Period for Silicone Sealants: Twenty (20) Years, No Dollar Limit (NDL).

B. Manufacturer's Inspection and Certification:

1. Coordinate inspections required by manufacturer. Provide three (3) business days' notice to manufacturer's authorized representative to inspect Work at the required milestones or intervals. No Work is to proceed until after each inspection is completed with written acceptance by manufacturer's authorized representative.

2. Upon acceptance of completed Work by manufacturer, obtain manufacturer's certification stating that the Work complies with the requirements for Warranty.

PART 2 - PRODUCTS

2.01 General

A. Product Callout Abbreviations Key: Sealant product callouts include the following abbreviations:

1. NT .....Non-traffic
2. T .....Traffic
3. NS .....Nonsag
4. P .....Pourable

B. Colors of Exposed Sealant Joints: Where not specifically indicated, Architect will select colors through the sample submittal process.

2.02 Sealants – For General Weathersealing (Non-traffic / Non-sag)

A. Sealant: NT(NS)

1. 795 Silicone Building Sealant	Dow Corning Corporation
2. Silpruf SCS2000	Momentive Performance Materials
3. Or approved equal	

B. Pre-Compressed Joint Sealant

1. Colorseal	Emseal
2. VF Joint Sealant	Construction Specialist, Inc.
3. Or approved equal	

2.03 Cleaners and Primers

A. Cleaner

1. Non-staining cleaner as recommended by sealant manufacturer for each substrate.

B. Primer

1. Non-staining primer as recommended by sealant manufacturer.

2.04 Accessories

A. Compressible Filler (Neoprene)

1. #NS Closed Cell Neoprene Sponge	Hohmann & Barnard
2. DA 2010 Rapid Soft Joint	Dur-O-Wal
3. Or approved equal	

B. Backer Rod

1. As recommended by sealant manufacturer.

C. Bond Breaker Tape

1. As recommended by sealant manufacturer to prevent bond between sealant and joint filler or other materials at back surface of joint.

D. Masking

1. Pressure sensitive tape that will not leave residue upon removal from substrate (as manufactured by 3M Or approved equal).

PART 3 - EXECUTION

3.01 Removal of Existing Joint Sealant

A. Where existing sealant is indicated to be replaced, perform selective demolition as follows:

1. Remove sealant (and backings as applicable), sealant and primer residue, and other contaminants capable of interfering with adhesion of new sealant to joint substrates.

2. Remove only that portion of existing sealant (and backing, as applicable) that can be installed the same working day.

3.02 Preparation

A. Surface Cleaning of Joints: Clean out joints immediately before installation as follows:

1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant.

a. Clean porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants.

b. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air.

2. Remove laitance and form-release agents from concrete joint substrates.

a. Clean nonporous surfaces with cleaner as recommended by manufacturer. Ensure that cleaner does not stain, harm, or leave residues capable of interfering with adhesion of joint sealants on joint substrates.

B. Joint Priming: Prime joint substrates as recommended by joint sealant manufacturer. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.03 Installation

A. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

B. Install sealant backings of type indicated to support sealants during application and at position required to produce uniform cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.

1. Do not leave gaps between ends of sealant backings.

2. Do not stretch, twist, puncture, or tear sealant backings.

3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.

C. Install sealants at the same time backings are installed and using proven techniques that comply with the following:

1. Place sealants so they directly contact and fully wet joint substrates with sealant.

2. Completely fill recesses in each joint configuration.

3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

D. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.

1. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.

2. Provide concave joint configuration per Figure 8A in ASTM C 1193, unless otherwise indicated.

3.04 Cleanup

A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants, and manufacturers of joint substrate materials.

END OF SECTION 079200

SECTION 083463 – DETENTION DOORS AND FRAMES

PART 1 - GENERAL

SCHEDULE 2 - RELATED DOCUMENTS

PRODUCT DATA SHEET 0 - Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

SCHEDULE 3 - SUMMARY

PRODUCT DATA SHEET 0 - Section Includes:

1. Swinging detention doors.
2. Detention frames.

PRODUCT DATA SHEET 1 - Related Requirements:

1. Section 087163 "Detention Door Hardware" for door hardware for detention doors.

SCHEDULE 4 - DEFINITIONS

PRODUCT DATA SHEET 0 - Minimum-Thickness Steel: Indicated as the specified minimum thicknesses for base metal without coatings, according to NAAMM-HMMA 803.

PRODUCT DATA SHEET 1 - Nominal-Thickness Stainless Steel: Indicated as the specified thicknesses for which over- and under-thickness tolerances apply, according to ASTM A 480/A 480M.

SCHEDULE 5 - COORDINATION

PRODUCT DATA SHEET 0 - Coordinate anchorage installation for detention frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors that are to be embedded in adjacent construction. Deliver such items to Project site in time for installation.

SCHEDULE 6 - PREINSTALLATION MEETINGS

PRODUCT DATA SHEET 0 - Preinstallation Conference: Conduct conference at NIC or DOC Construction Management Unit (CMU).

SCHEDULE 7 - ACTION SUBMITTALS

PRODUCT DATA SHEET 0 - Product Data: For each type of product.

1. Include construction details, material descriptions, core descriptions, label compliance, fire-resistance rating, and finishes for each detention door and frame type specified.

PRODUCT DATA SHEET 1 - Shop Drawings: In addition to requirements below, provide a schedule using same reference numbers for details and openings as those on Drawings:

1. Elevations of each door type.
2. Direction of swing.
3. Inmate and non-inmate sides.
4. Details of doors, including vertical and horizontal edge details, and metal thicknesses.
5. Details of frames, including dimensioned profiles, and metal thicknesses.
6. Locations of reinforcement and preparations for hardware.
7. Details of each different wall opening condition.
8. Details of anchorages, joints, field splices, and connections.
9. Details of moldings, removable stops, and glazing.

PRODUCT DATA SHEET 2 - Samples for Verification:

1. For each type of exposed finish required, prepare Samples not less than 3 by 5 inches (76 by 127 mm).
2. For "Detention Doors" and "Detention Frames" subparagraphs below, prepare Samples approximately 12 by 12 inches (305 by 305 mm) to demonstrate compliance with requirements for quality of materials and construction:

    a. Detention Doors: Show vertical-edge, top, and bottom construction; insulation; face stiffeners; and hinge and other applied hardware reinforcement. Include separate section showing glazing if applicable.
    b. Detention Frames: Show profile, welded corner joint, welded hinge reinforcement, grout-cover boxes, floor and wall anchors, and silencers. Include separate section showing fixed steel panels and glazing if applicable.

3. Glazing Samples: For each type of glazing; 12 inches (300 mm) square.

SCHEDULE 8 - INFORMATIONAL SUBMITTALS

PRODUCT DATA SHEET 0 - Qualification Data: For Installer.

PRODUCT DATA SHEET 1 - Welding certificates.

PRODUCT DATA SHEET 2 - Product Test Reports: For each type of detention hollow-metal door and frame assembly including vision and side lights, for tests performed by manufacturer and witnessed by a qualified testing agency.

PRODUCT DATA SHEET 3 - Examination reports documenting inspection of substrates, areas, and conditions.

PRODUCT DATA SHEET 4 - Anchor inspection reports documenting inspections of built-in and cast-in anchors.

PRODUCT DATA SHEET 5 - Field quality-control reports documenting inspections of installed products.

1. Field quality-control certification signed by Contractor and Detention Specialist.

SCHEDULE 9 - MAINTENANCE MATERIAL SUBMITTALS

PRODUCT DATA SHEET 0 - Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Security Fasteners: Furnish not less than one box for every 50 boxes or fraction thereof, of each type and size of security fastener installed.
2. Tools: Provide two (2) sets of tools for installing and removing security fasteners.

SCHEDULE 10 - QUALITY ASSURANCE

PRODUCT DATA SHEET 0 - Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

PRODUCT DATA SHEET 1 - Welding Qualifications: Qualify procedures and personnel according to the following:

1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
2. AWS D1.3, "Structural Welding Code - Sheet Steel."
3. AWS D1.6, "Structural Welding Code - Stainless Steel."

SCHEDULE 11 - DELIVERY, STORAGE, AND HANDLING

PRODUCT DATA SHEET 0 - Deliver detention hollow-metal work palletized, packaged, or crated to provide protection during transit and Project-site storage. Do not use nonvented plastic.

PRODUCT DATA SHEET 1 - Deliver welded detention frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.

PRODUCT DATA SHEET 2 - Store detention hollow-metal work vertically under cover at Project site with head up. Place on minimum 4-inch- (102-mm-) high wood blocking. Provide minimum 1/4-inch (6.3-mm) space between each stacked door to permit air circulation.

PART 2 - PRODUCTS

SCHEDULE 0 - MANUFACTURERS

PRODUCT DATA SHEET 0 - Source Limitations: Obtain detention doors and frames from single source from single manufacturer. The following is a list of manufacturers that are acceptable for detention doors and frames:

1. Maximum Security Products Corp.
2. Habersham Metal Products
3. Slate Security
4. Chief Industries
5. Or approved equal

SCHEDULE 1 - REGULATORY REQUIREMENTS

PRODUCT DATA SHEET 0 - Fire-Rated Assemblies: Complying with NFPA 80 and listed and labeled by a qualified testing agency acceptable to authorities having jurisdiction for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.

1. Smoke- and Draft-Control Assemblies: Provide an assembly with gaskets listed and labeled for smoke and draft control by a qualified testing agency acceptable to authorities having jurisdiction, based on testing according to UL 1784 and installed in compliance with NFPA 105.

PRODUCT DATA SHEET 1 - Fire-Rated, Borrowed-Light Assemblies: Complying with NFPA 80 and listed and labeled by a qualified testing and inspecting agency acceptable to authorities having jurisdiction for fire-protection ratings indicated, based on testing according to NFPA 257 or UL 9.

SCHEDULE 2 - DETENTION DOOR AND FRAME ASSEMBLIES

PRODUCT DATA SHEET 0 - Detention Door and Frame Assemblies: Provide detention door and frame assemblies that comply with the following, based on testing manufacturer's standard units in assemblies similar to those indicated for this Project:

1. Security Grade: Assemblies pass testing requirements in ASTM F 1450 for security grades specified.
2. Bullet Resistance: Level 3 rated when tested according to UL 752.

3. Tool-Attack Resistance: Small-tool-attack-resistance rated when tested according to UL 437 and UL 1034.

PRODUCT DATA SHEET 1 - Detention Frames: Provide sidelight and borrowed-light detention frames that comply with ASTM F 1592 and removable stop test according to NAAMM-HMMA 863, based on testing manufacturer's standard units in assemblies similar to those indicated for this Project.

SCHEDULE 3 - DETENTION DOORS

PRODUCT DATA SHEET 0 - General: Provide flush-design detention doors of seamless hollow construction, 2 inches (51 mm) thick unless otherwise indicated. Construct detention doors with smooth, flush surfaces without visible joints or seams on exposed faces or stile edges.

1. For single-acting swinging detention doors, bevel both vertical edges 1/8 inch in 2 inches (3 mm in 51 mm).

PRODUCT DATA SHEET 1 - Core Construction: Provide the following core construction of same material as detention door face sheets, welded to both detention door faces:

1. Steel-Stiffened Core: 0.042-inch- (1.0-mm-) thick, steel vertical stiffeners extending full-door height, with vertical webs spaced not more than 4 inches (102 mm) apart, spot welded to face sheets a maximum of 3 inches (76 mm) o.c. Fill spaces between stiffeners with insulation.
2. Truss-Stiffened Core: 0.013-inch- (0.3-mm-) thick, steel, truncated triangular stiffeners extending between face sheets and for full height and width of door; with stiffeners welded to face sheets not more than 3 inches (76 mm) o.c. vertically and 2-3/4 inches (70 mm) horizontally. Fill spaces between stiffeners with insulation.

PRODUCT DATA SHEET 2 - Vertical Edge Channels: 0.123-inch- (3.1-mm-) thick, continuous channel of same material as detention door face sheets, extending full-door height at each vertical edge; welded to top and bottom channels to create a fully welded perimeter channel. Noncontiguous channel is permitted to accommodate lock-edge hardware only if lock reinforcement is welded to and made integral with channel.

PRODUCT DATA SHEET 3 - Top and Bottom Channels: 0.123-inch- (3.1-mm-) thick metal channel of same material as detention door face sheets, spot welded, not more than 4 inches (102 mm) o.c., to face sheets.

1. Reinforce top edge of detention door with 0.053-inch- (1.3-mm-) thick closing channel, welded so channel web is flush with top door edges.

PRODUCT DATA SHEET 4 - Hardware Reinforcement: Fabricate reinforcing plates from same material as detention door face sheets to comply with the following minimum thicknesses:

1. Full-Mortise Hinges and Pivots: 0.187 inch (4.7 mm) thick.
2. Maximum-Security Surface Hinges: 0.250 inch (6.3 mm) thick.

3. Strike Reinforcements: 0.187 inch (4.7 mm) thick.
4. Slide-Device Hanger Attachments: As recommended by device manufacturer.
5. Lock Fronts, Concealed Holders, and Surface-Mounted Closers: 0.093 inch (2.3 mm) thick.
6. All Other Surface-Mounted Hardware: 0.093 inch (2.3 mm) thick.
7. Lock Pockets: 0.123 inch (3.1 mm) thick at non-inmate side, welded to face sheet.

PRODUCT DATA SHEET 5 - Hardware Enclosures: Provide enclosures and junction boxes for electrically operated detention door hardware of same material as detention door face sheets, interconnected with UL-approved, 1/2-inch- (12.7-mm-) diameter conduit and connectors.

1. Access Plates: Where indicated for wiring installation, provide access plates to junction boxes, fabricated from same material and thickness as face sheet and fastened with at least four security fasteners spaced not more than 6 inches (152 mm) o.c.

PRODUCT DATA SHEET 6 - Exterior Detention Doors: Construct exterior doors to comply with materials, fabrication, hardware locations, hardware reinforcement, tolerances, and clearances indicated in NAAMM-HMMA 863 and as specified.

1. Security Grade 1: Provide doors with face sheets of 0.093-inch- (2.3-mm-) minimum-thickness, metallic-coated, cold-rolled steel.

SCHEDULE 4 - DETENTION FRAMES

PRODUCT DATA SHEET 0 - General: Provide fully welded detention frames with integral stops, of seamless construction without visible joints or seams. Fabricate detention frames with contact edges closed tight and corners mitered, reinforced, and continuously welded full depth and width of detention frame.

PRODUCT DATA SHEET 1 - Stop Height: Provide minimum stop height of 0.625 inch (16 mm) for detention door openings and minimum stop height of 1-1/4 inches (32 mm) in security glazing or detention panel openings unless otherwise indicated.

PRODUCT DATA SHEET 2 - Exterior Detention Frames: Construct exterior frames to comply with materials, fabrication, hardware locations, hardware reinforcement, tolerances, and clearances indicated in NAAMM-HMMA 863 and as specified.

1. Security Grade 1: Provide frames fabricated from 0.093-inch- (2.3-mm-) minimum-thickness, metallic-coated, cold-rolled steel.

PRODUCT DATA SHEET 3 - Hardware Reinforcement: Fabricate reinforcing plates from same material as detention frame to comply with the following minimum thicknesses:

1. Hinges and Pivots: 0.187 inch (4.7 mm) thick by 1-1/2 inches (38 mm) wide by 10 inches (254 mm) long.
2. Strikes, Flush Bolts, and Closers: 0.187 inch (4.7 mm) thick.

3. Surface-Mounted Hardware: 0.093 inch (2.3 mm) thick.
4. Lock Pockets: 0.123 inch (3.1 mm) thick at non-inmate side, welded to face sheet. Provide 0.123-inch- (3.1-mm-) thick, lock protection plate for attachment to lock pocket with security fasteners.

PRODUCT DATA SHEET 4 - Hardware Enclosures: Provide enclosures and junction boxes for electrically operated detention door hardware, interconnected with UL-approved, 1/2-inch- (12.7-mm-) diameter conduit and connectors.

1. Access Plates: Where indicated for wiring installation, provide access plates to junction boxes, fabricated from same material and thickness as face sheet and fastened with at least four security fasteners spaced not more than 6 inches (152 mm) o.c.

PRODUCT DATA SHEET 5 - Mullions and Transom Bars: Provide closed or tubular mullions and transom bars where indicated. Fasten mullions and transom bars at crossings and to jambs by butt welding. Reinforce joints between detention frame members with concealed clip angles or sleeves of same metal and thickness as detention frame.

PRODUCT DATA SHEET 6 - Jamb Anchors: Weld jamb anchors to detention frames near hinges and directly opposite on strike jamb or as required to secure detention frames to adjacent construction.

1. Number of Anchors: Provide two anchors per jamb plus the following:

    a. Detention Door Frames: One additional anchor for each 18 inches (457 mm), or fraction thereof, above 54 inches (1372 mm) in height.
    b. Detention Frames with Security Glazing or Detention Panels: One additional anchor for each 18 inches (457 mm), or fraction thereof, above 36 inches (914 mm) in height.

2. Masonry Anchors: Adjustable, corrugated or perforated, strap-and-stirrup anchors to suit detention frame size; formed of same material and thickness as detention frame; with strap not less than 2 inches (51 mm) wide by 10 inches (254 mm) long.
3. Embedded Anchors: Provide detention frames with removable faces at jambs where embedded anchors are indicated. Anchors consist of the following three parts:

    a. Embedded Plates: Steel plates, 0.188 inch thick by 4 inches wide by 6 inches long (4.7 mm thick by 102 mm wide by 152 mm long). Continuously weld two steel bars, 1/2 inch (12.7 mm) in diameter and 10 inches (254 mm) long with 2-inch (51-mm) 90-degree turndown on ends, to the embedded end of each plate. Weld steel angles, 0.188 inch thick by 2 by 2 by 4 inches long (4.7 mm thick by 51 by 51 by 102 mm long), to the exposed end of each plate. Embed at locations to match frame angles.
    b. Frame Angles: Steel angles, 0.188 inch thick by 2 by 2 by 4 inches long (4.7 mm thick by 51 by 51 by 102 mm long), welded to detention frames with 1-inch- (25-mm-) long welds at each end of angle.

c. Connector Angles: Steel angles, of size required, to connect frame angles and embedded plates.

4. Postinstalled Anchors: Minimum 1/2-inch- (12.7-mm-) diameter concealed bolts with expansion shields or inserts. Provide conduit spacer from detention frame to wall, welded to detention frame. Reinforce detention frames at anchor locations.

PRODUCT DATA SHEET 7 - Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, formed of same material and thickness as detention frame, and as follows:

1. Monolithic Concrete Slabs: Clip anchors, with two holes to receive fasteners, welded to bottom of jambs and mullions with at least four spot welds per anchor.
2. Separate Topping Concrete Slabs: Adjustable anchors with extension clips, allowing not less than 2-inch (51-mm) height adjustment, welded to jambs and mullions with at least four spot welds per anchor. Terminate bottom of detention frames at finish floor surface.

PRODUCT DATA SHEET 8 - Rubber Door Silencers: Except on weather-stripped detention doors, drill stops in strike jambs to receive three silencers on single-detention-door frames and drill head jamb stop to receive two silencers on double-detention-door frames. Keep holes clear during construction.

PRODUCT DATA SHEET 9 - Grout Guards: Provide factory-installed grout guards of same material as detention frame, welded to detention frame at back of hardware cutouts, silencers, and glazing-stop screw preparations to close off interior of openings and prevent mortar or other materials from obstructing hardware operation or installation.

SCHEDULE 5 - DETENTION PANELS

PRODUCT DATA SHEET 0 - Provide fixed detention panels of same materials, construction, and finish as specified for adjoining detention door.

SCHEDULE 6 - MOLDINGS AND STOPS

PRODUCT DATA SHEET 0 - Provide fixed moldings on inmate side of glazed openings and removable stops on non-inmate side.

1. Height: As required to provide minimum 1-inch (25-mm) glass engagement, but not less than 1-1/4 inches (32 mm).
2. Fixed Moldings: Formed from same material as detention door and frame face sheets, but not less than 0.093 inch (2.3 mm) thick, and spot welded to face sheets a maximum of 5 inches (127 mm) o.c.
3. Removable Stops: Formed from 0.123-inch- (3.1-mm-) thick angle, of same material as detention door face sheets. Secure with button head security fasteners spaced uniformly not more than [6 inches (152 mm)] o.c. and not more than 2

inches (51 mm) from each corner, and as necessary to satisfy performance requirements. Form corners with notched or mitered hairline joints.

PRODUCT DATA SHEET 1 - Coordinate rabbet width between fixed and removable stops with glass or panel type and installation type indicated.

SCHEDULE 7 - MATERIALS

PRODUCT DATA SHEET 0 - Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, CS (Commercial Steel), Type B; free of scale, pitting, or surface defects; pickled and oiled.

PRODUCT DATA SHEET 1 - Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, CS (Commercial Steel), Type B.

PRODUCT DATA SHEET 2 - Metallic-Coated Steel Sheet: ASTM A 653/A 653M, CS (Commercial Steel), Type B; with G60 (Z180) zinc (galvanized) or A60 (ZF180) zinc-iron-alloy (galvannealed) coating designation.

PRODUCT DATA SHEET 3 - Stainless-Steel Sheet: ASTM A 240/A 240M, austenitic stainless steel, Type 304.

PRODUCT DATA SHEET 4 - Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.

PRODUCT DATA SHEET 5 - Concealed Bolts: ASTM A 307, Grade A unless otherwise indicated.

PRODUCT DATA SHEET 6 - Masonry Anchors: Fabricated from same steel sheet as door face.

PRODUCT DATA SHEET 7 - Embedded Anchors: Fabricated from mild steel shapes and plates, hot-dip galvanized according to ASTM A 153/A 153M.

PRODUCT DATA SHEET 8 - Post-Installed Anchors: Torque-controlled expansion anchors.

1. Material for Interior Locations: Carbon-steel components zinc plated to comply with ASTM B 633 or ASTM F 1941 (ASTM F 1941M), Class Fe/Zn 5, unless otherwise indicated.
2. Material for Exterior Locations and Where Stainless Steel Is Indicated: Alloy [Group 1 (A1)] stainless-steel bolts, ASTM F 593 (ASTM F 738M), and nuts, ASTM F 594 (ASTM F 836M).

PRODUCT DATA SHEET 9 - Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.

PRODUCT DATA SHEET 10 - Glazing: Glazing for detention door vision panels shall be fire and impact/safety rated, minimum ¼" thick. Provide glazing that complies with 16 CFR 1201, Category II. Acceptable products include, but are not limited to, the following: SafeWire from Anemostat Door Products; FireLite Plus from Technical Glass Products; SuperLite I-W by

SaftiFirst; or PYRAN Platinum L from Schott North America.

PRODUCT DATA SHEET 11 - Grout: Comply with ASTM C 476, with a slump of not more than 4 inches (102 mm) as measured according to ASTM C 143/C 143M.

PRODUCT DATA SHEET 12 - Insulation: Slag-wool-fiber/rock-wool-fiber or glass-fiber blanket insulation. ASTM C 665, Type I (unfaced); with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively; passing ASTM E 136 for combustion characteristics. Minimum 1.5-lb/cu. ft. (24-kg/cu. m) density.

PRODUCT DATA SHEET 13 - Bituminous Coating: Cold-applied asphalt mastic, compounded for 15-mil (0.4-mm) dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.

SCHEDULE 8 - FABRICATION

PRODUCT DATA SHEET 0 - Fabricate detention doors and frames rigid, neat in appearance, and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for metal thickness. Weld exposed joints continuously; grind, fill, dress, and make smooth, flush, and invisible. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.

PRODUCT DATA SHEET 1 - Tolerances: Fabricate detention doors and frames to comply with manufacturing tolerances indicated in NAAMM-HMMA 863.

PRODUCT DATA SHEET 2 - Removable Jamb Faces: Provide removable jamb faces where required for access to embedded anchors. Fabricate to allow secure reattachment of removable face with security fasteners.

PRODUCT DATA SHEET 3 - Fabricate multiple-opening detention frames with mullions that have closed tubular shapes and with no visible seams or joints.

PRODUCT DATA SHEET 4 - Exterior Detention Doors: Provide weep-hole openings in bottoms of detention doors to permit entrapped moisture to escape. Seal joints in top edges of detention doors against water penetration.

PRODUCT DATA SHEET 5 - Hardware Preparation: Factory prepare detention doors and frames to receive mortised hardware, including cutouts, reinforcement, mortising, drilling, and tapping, according to final Door Hardware Schedule and templates provided by detention door hardware supplier.

1. Reinforce detention doors and frames to receive surface-mounted door hardware. Drilling and tapping may be done at Project site.
2. Locate door hardware according to NAAMM-HMMA 863.

PRODUCT DATA SHEET 6 - Factory cut openings in detention doors.

PRODUCT DATA SHEET 7 - Weld components to comply with referenced AWS standard. Weld before finishing components to greatest extent possible. Remove weld spatter and welding oxides from exposed surfaces by descaling or grinding.

SCHEDULE 9 - GENERAL FINISH REQUIREMENTS

PRODUCT DATA SHEET 0 - Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

PRODUCT DATA SHEET 1 - Finish detention doors and frames after assembly.

SCHEDULE 10 - METALLIC-COATED STEEL SHEET FINISHES

PRODUCT DATA SHEET 0 - Surface Preparation: Clean surfaces with nonpetroleum solvent so surfaces are free of oil and other contaminants. After cleaning, apply a conversion coating suited to the organic coating to be applied over it. Clean welds, mechanical connections, and abraded areas and apply galvanizing repair paint, complying with SSPC-Paint 20, to comply with ASTM A 780.

PRODUCT DATA SHEET 1 - Factory Priming for Field-Painted Finish: Apply shop primer specified in "Shop Primer" Subparagraph below immediately after surface preparation and pretreatment. Apply a smooth coat of even consistency to provide a uniform dry film thickness of not less than 0.7 mil (0.02 mm).

1. Shop Primer: Manufacturer's or fabricator's standard, fast-curing, lead- and chromate-free primer complying with SDI A250.10 acceptance criteria; recommended by primer manufacturer for zinc-coated steel; compatible with substrate and field-applied finish paint system indicated; and providing a sound foundation for field-applied topcoats despite prolonged exposure.

SCHEDULE 11 - STAINLESS-STEEL FINISHES

PRODUCT DATA SHEET 0 - Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.

PRODUCT DATA SHEET 1 - Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.

1. Run grain of directional finishes with long dimension of each piece.
2. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.
3. Directional Satin Finish: No. 4.

SCHEDULE 12 - SECURITY FASTENERS

PRODUCT DATA SHEET 0 - Operable only by tools produced by fastener manufacturer or other licensed fabricator for use on specific fastener type. Provide drive-system type, head style, material, and protective coating as required for assembly, installation, and strength, and as follows:

1. Drive-System Type: Pinned Torx-Plus.
2. Fastener Strength: 120,000 psi (827 MPa).
3. Socket Button Head Fasteners:

    a. Heat-treated alloy steel, ASTM F 835 (ASTM F 835M).
    b. Stainless steel, ASTM F 879 (ASTM F 879M), Group 1 CW.

4. Socket Flat Countersunk Head Fasteners:

    a. Heat-treated alloy steel, ASTM F 835 (ASTM F 835M).
    b. Stainless steel, ASTM F 879 (ASTM F 879M), Group 1 CW.

5. Socket Head Cap Fasteners:

    a. Heat-treated alloy steel, ASTM A 574 (ASTM A 574M).
    b. Stainless steel, ASTM F 837 (ASTM F 837M), Group 1 CW.

6. Protective Coatings for Heat-Treated Alloy Steel:

    a. Zinc and clear trivalent chromium where indicated.
    b. Zinc phosphate with oil, ASTM F 1137, Grade I, or black oxide unless otherwise indicated.

SCHEDULE 13 - SEALANTS

PRODUCT DATA SHEET 0 - Polyurethane Security Sealants: Manufacturer's standard, nonsag, tamper-resistant sealant for joints with low movement.

PRODUCT DATA SHEET 1 - Epoxy Security Sealants: Manufacturer's standard, nonsag, tamper-resistant sealant for joints with no movement.

SCHEDULE 14 - ACCESSORIES

PRODUCT DATA SHEET 0 - Concealed Bolts: ASTM A 307, Grade A unless otherwise indicated.

PRODUCT DATA SHEET 1 - Embedded Plate Anchors: Fabricated from mild steel shapes and plates, minimum 3/16 inch (4.8 mm) thick; with minimum 1/2-inch- (12.7-mm-) diameter, headed studs welded to back of plate.

PRODUCT DATA SHEET 2 - Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.

PART 3 - EXECUTION

SCHEDULE 0 - EXAMINATION

PRODUCT DATA SHEET 0 - Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

PRODUCT DATA SHEET 1 - Examine roughing-in for embedded and built-in anchors to verify actual locations of detention frame connections before detention frame installation.

PRODUCT DATA SHEET 2 - Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.

PRODUCT DATA SHEET 3 - Inspect embedded plate installations before installing detention frames to verify that plate installations comply with requirements. Prepare inspection reports.

1. Remove and replace plates where inspections indicate that they do not comply with specified requirements. Reinspect after repairs or replacements are made.
2. Perform additional inspections to determine compliance of replaced or additional work.

PRODUCT DATA SHEET 4 - Proceed with installation only after unsatisfactory conditions have been corrected.

SCHEDULE 1 - PREPARATION

PRODUCT DATA SHEET 0 - Remove welded-in shipping spreaders installed at factory.

PRODUCT DATA SHEET 1 - Before installation and with shipping spreaders removed, adjust detention frames for squareness, alignment, twist, and plumbness to the following tolerances:

1. Squareness: Plus or minus 1/16 inch (1.6 mm), measured at door rabbet on a line 90 degrees from jamb and perpendicular to frame head.
2. Alignment: Plus or minus 1/16 inch (1.6 mm), measured at jambs on a horizontal line parallel to plane of face.
3. Twist: Plus or minus 1/16 inch (1.6 mm), measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of door rabbet.
4. Plumbness: Plus or minus 1/16 inch (1.6 mm), measured at jambs on a perpendicular line from head to floor.

SCHEDULE 2 - INSTALLATION

PRODUCT DATA SHEET 0 - General: Install detention doors and frames plumb, rigid, properly aligned, and securely fastened in place, complying with Drawings, schedules, and manufacturer'swritten recommendations.

PRODUCT DATA SHEET 1 - Anchorage: Set detention frame anchorage devices according to details on Shop Drawings and according to anchorage device manufacturer's written instructions.

1. Masonry Anchors: Coordinate frame installation to allow for solidly filling space between frames and masonry with grout.
2. Embedded Anchors: Install embedded plates in wall surrounding frame openings to match frame angle locations.
3. Postinstalled Anchors: Drill holes in existing construction at locations to match bolt locations, and install bolt expansion shields or inserts.

PRODUCT DATA SHEET 2 - Where detention frames are fabricated in sections due to shipping limitations, assemble frames and install angle splices at each corner, of same material and thickness as detention frame, and extend at least 4 inches (102 mm) on both sides of joint.

1. Field splice only at approved locations. Weld, grind, and finish as required to conceal evidence of splicing on exposed faces.
2. Continuously weld and finish smooth joints between faces of abutted, multiple-opening, detention frame members.
3. Field Welding: Comply with the following requirements:

    a. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
    b. Obtain fusion without undercut or overlap.
    c. Remove welding flux immediately.
    d. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.

PRODUCT DATA SHEET 3 - Apply bituminous coating to backs of frames before filling with grout.

PRODUCT DATA SHEET 4 - Placing Detention Frames: Install detention frames of sizes and profiles indicated. Set detention frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.

1. Embedded Anchors: Remove jamb faces from detention frames and set detention frames into opening. Weld steel connector angle to frame angle and to embedded plate with 1-inch- (25-mm-) long welds at each end of connector angle to form a rigid frame assembly that is solidly anchored. Reinstall jamb faces using security fasteners.
2. Postinstalled Anchors: Install bolt. After bolt is tightened, weld bolt head to provide nonremovable condition. Grind, dress, and finish smooth welded bolt head.
3. At fire-rated openings, install detention frames according to NFPA 80.
4. Install detention frames with removable stops located on non-inmate side of opening.

PRODUCT DATA SHEET 5 - Grout: Fully grout detention frame jambs and heads. Completely fill space between frames and adjacent substrates. Hand trowel grout and take other precautions, including bracing detention frames, to ensure that frames are not deformed or damaged by grout forces.

PRODUCT DATA SHEET 6 - Security Sealant: Apply polyurethane security sealant at all exposed gaps between detention frames and adjacent substrates.

PRODUCT DATA SHEET 7 - Swinging Detention Doors: Fit non-fire-rated detention doors accurately in their frames, with the following clearances:

1. Between Doors and Frames at Jambs and Head: 1/8 inch (3.2 mm).
2. Between Edges of Pairs of Doors: 1/8 inch (3.2 mm).
3. At Door Sills with Threshold: 3/8 inch (9.5 mm).
4. At Door Sills without Threshold: 3/4 inch (19 mm).
5. Between Door Bottom and Nominal Surface of Floor Covering: 1/2 inch (12.7 mm).

PRODUCT DATA SHEET 8 - Fire-Rated Detention Doors: Install with clearances as specified in NFPA 80.

PRODUCT DATA SHEET 9 - Installation Tolerances: Comply with installation tolerances indicated in NAAMM-HMMA 863.

PRODUCT DATA SHEET 10 - Glazing: Comply with combined written instructions of manufacturers of glazing, sealants, gaskets, and other glazing materials unless more stringent requirements are indicated, including those in referenced glazing publications.

SCHEDULE 3 - FIELD QUALITY CONTROL

PRODUCT DATA SHEET 0 - Inspect installed products to verify compliance with requirements. Prepare inspection reports and indicate compliance with and deviations from the Contract Documents.

PRODUCT DATA SHEET 1 - Detention work will be considered defective if it does not pass tests and inspections.

PRODUCT DATA SHEET 2 - Perform additional inspections to determine compliance of replaced or additional work.

PRODUCT DATA SHEET 3 - Prepare field quality-control certification endorsed by Detention Specialist that states installed products comply with requirements in the Contract Documents.

PRODUCT DATA SHEET 4 - For verification that construction complies with requirements, select one detention door at random from detention doors delivered to Project and have it cut in half or otherwise taken apart.

1. Test Method: Verify weld strength by prying or chiseling door apart at edge seams, end channels, or stiffeners. Not more than 5 percent of welds may fail test.

    a. If tested door fails, replace or rework all detention doors to bring them into compliance at Contractor's expense.
    b. If tested door passes, replace tested door at Owner's expense.

PRODUCT DATA SHEET 5 - Prepare test and inspection reports.

SCHEDULE 4 - ADJUSTING AND CLEANING

PRODUCT DATA SHEET 0 - Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including detention doors and frames that are warped, bowed, or otherwise unacceptable.

PRODUCT DATA SHEET 1 - Clean grout and other bonding material off detention doors, frames, and glazing immediately after installation.

PRODUCT DATA SHEET 2 - Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas, and repair galvanizing to comply with ASTM A 780.

PRODUCT DATA SHEET 3 - Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying primer.

1. After finishing smooth field welds, apply air-drying primer.

PRODUCT DATA SHEET 4 - Stainless-Steel Surfaces: Clean surfaces according to manufacturer's written instructions.

END OF SECTION 083463

SECTION 087163 - DETENTION DOOR HARDWARE

PART 1 - GENERAL

RELATED DOCUMENTS

PRODUCT DATA SHEET 5 - Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

SCHEDULE 2 - SUMMARY

PRODUCT DATA SHEET 0 - Section includes detention door hardware for the following:

1. Swinging detention doors.

SCHEDULE 3 - COORDINATION

PRODUCT DATA SHEET 0 - Templates: Obtain and distribute, to the parties involved, templates for detention doors, frames, and other work specified to be factory prepared for installing detention door hardware.

SCHEDULE 4 - PREINSTALLATION MEETINGS

PRODUCT DATA SHEET 0 - Preinstallation Conference: Conduct conference at NIC or DOC Construction Management Unit (CMU).

1. Review sequence of operation for each type of detention door hardware.
2. Review and finalize a construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
3. Certifying procedures.

SCHEDULE 5 - ACTION SUBMITTALS

PRODUCT DATA SHEET 0 - Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of detention door hardware.

PRODUCT DATA SHEET 1 - Shop Drawings: For each type of detention door hardware.

1. Include plans, elevations, sections, and attachment details.

PRODUCT DATA SHEET 2 - Detention Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware as well as installation procedures and wiring diagrams. Coordinate the Detention Door Hardware Schedule with detention doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of detention door hardware.

1. Integrate detention door hardware indicated in "Detention Door Hardware Schedule" Article into Project's final Detention Door Hardware Schedule, and indicate complete designations of every item required for each detention door and opening.
2. Keying Schedule: Coordinate detention keying with other door hardware in Project's final Keying Schedule.
3. Indicate each detention lock and type of key cylinder using the following prefixes: "P" for paracentric, "M" for mogul, "HS" for high security, and "C" for commercial.
4. Indicate security level of each item.

SCHEDULE 6 - INFORMATIONAL SUBMITTALS

PRODUCT DATA SHEET 0 - Qualification Data: For qualified Installer and Supplier.

PRODUCT DATA SHEET 1 - Product Certificates: For each type of detention door hardware.

1. Certify that detention door hardware complies with listed fire door assemblies.

PRODUCT DATA SHEET 2 - Product Test Reports: For each type of detention lock and latch, security door closer, for tests performed by manufacturer and witnessed by a qualified testing agency.

PRODUCT DATA SHEET 3 - Examination reports documenting inspections of substrates, areas, and conditions.

PRODUCT DATA SHEET 4 - Field quality-control reports documenting inspections of installed products.

1. Field quality-control certification signed by Contractor and qualified Installer.

PRODUCT DATA SHEET 5 - Sample Warranties: For special warranties.

SCHEDULE 7 - CLOSEOUT SUBMITTALS

PRODUCT DATA SHEET 0 - Operation and Maintenance Data: For detention door hardware to include in emergency, operation, and maintenance manuals.

SCHEDULE 8 - MAINTENANCE MATERIAL SUBMITTALS

PRODUCT DATA SHEET 0 - Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of detention door hardware.

PRODUCT DATA SHEET 1 - Initial Maintenance Service: Beginning at Substantial Completion, provide three months' full maintenance by skilled employees of detention door hardware Installer. Include monthly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper detention door hardware operation. Provide parts and supplies the same as those used in the manufacture and installation of original equipment.

PRODUCT DATA SHEET 2 - Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Detention Door Hardware: One (1) full set of hardware components for a single swinging detention door.
2. Security Fasteners: Furnish not less than one box for every 50 boxes or fraction thereof, of each type and size of security fastener installed.
3. Tools: Provide two sets of tools for installing and removing security fasteners.

SCHEDULE 9 - QUALITY ASSURANCE

PRODUCT DATA SHEET 0 - Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer and an authorized representative of detention door hardware manufacturer for installation and maintenance of units required for this Project.

PRODUCT DATA SHEET 1 - Supplier Qualifications: Detention door hardware supplier with warehousing facilities in Project's vicinity who is, or employs, a qualified Architectural Hardware Consultant, available during the course of the Work to consult with Contractor, Architect, and Owner about detention door hardware and keying.

1. Detention Door Hardware Supplier Qualifications: An experienced detention door hardware supplier who has completed projects with detention door hardware similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance, and who is acceptable to manufacturer of primary materials.

    a. Engineering Responsibility: Prepare data for detention door hardware, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.
    b. Scheduling Responsibility: Preparation of Detention Door Hardware and Keying schedules.

PRODUCT DATA SHEET 2 - Architectural Hardware Consultant Qualifications: A person who is currently certified by DHI as an Architectural Hardware Consultant and who is experienced in providing consulting services for detention door hardware installations that are comparable in material, design, and extent to that indicated for this Project.

SCHEDULE 10 - DELIVERY, STORAGE, AND HANDLING

PRODUCT DATA SHEET 0 - Inventory detention door hardware on receipt and provide secure lockup for detention door hardware delivered to Project site.

PRODUCT DATA SHEET 1 - Tag each item or package separately with identification related to the Detention Door Hardware Schedule, and include basic installation instructions with each item or package.

PRODUCT DATA SHEET 2 - Deliver detention door keys to Owner by registered mail or overnight package service**.**

1. Contact information for delivery of keys shall be provided by DOC Construction Management Unit (CMU).

SCHEDULE 11 - WARRANTY

PRODUCT DATA SHEET 0 - Special Warranty: Manufacturer agrees to repair or replace components of detention door hardware that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

    a. Structural failures including excessive deflection, cracking, or breakage.
    b. Faulty operation of detention door hardware.
    c. Deterioration of metals, metal finishes, and other materials beyond normal weathering or detention use.

2. Warranty Period: Three (3) years from date of Substantial Completion.
3. Warranty Period for Continuous-Pin Detention Hinges: Ten (10) years from date of Substantial Completion.
4. Warranty Period for Security Door Closers: Ten (10) years from date of Substantial Completion.

PART 2 - PRODUCTS

SCHEDULE 2 - PERFORMANCE REQUIREMENTS

PRODUCT DATA SHEET 0 - Swinging Detention Door Assemblies: Provide detention door hardware as part of a detention door assembly that complies with security grade indicated, when

tested according to ASTM F 1450, based on testing manufacturer's standard units in assemblies similar to those indicated for this Project.

1. Bullet Resistance: Comply with Level 3 rating when tested according to UL 752; where indicated.

    a. Listed and labeled as bullet resistant by a testing agency acceptable to authorities having jurisdiction.

2. Tool-Attack Resistance: Comply with small-tool-attack-resistance rating when tested according to UL 1034 and UL 437; where indicated.

SCHEDULE 3 - DETENTION DOOR HARDWARE, GENERAL

PRODUCT DATA SHEET 0 - Provide detention door hardware for each door as scheduled in "Detention Door Hardware Schedule" Article to comply with requirements in this Section.

1. Detention Door Hardware Sets: Provide quantity, item, size, finish, or color indicated.

PRODUCT DATA SHEET 1 - Regulatory Requirements:

1. Fire-Rated Detention Door Assemblies: Provide detention door hardware for assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.
2. Where indicated to comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines.

SCHEDULE 4 - ADJUSTABLE THRESHOLD PLATE

B. Multi-Part Adjustable Saddle

1. Series 77	Zero International
2. Or approved equal	

C. General:

1. Fabricate saddle assemblies to meet AAMA 603 Specification.
2. Metal door saddles shall be 6063 Aluminum Alloy with clear finish.
3. Fastening:
    a. Include exposed and concealed fasteners, sealants, flashing materials, seals and adhesive required for complete assembly of systems indicated.

b. All fastening screws, matching items in color and finish specified, shall be supplied with saddle assemblies. Phillips, slotted, flat, truss, and pan wood screw heads are supplied in either stainless steel, zinc or brass plated steel at no extra cost.

c. Lead shields, machine screws and anchors are supplied by request at Contractor's cost.

SCHEDULE 5 - DETENTION HINGES

PRODUCT DATA SHEET 0 - Full-Surface Detention Hinges: Extra heavy weight; two heavy-duty thrust bearings with hardened-steel ball bearings; fabricated from steel plate; 3/4-inch- (19-mm-) diameter, case-hardened, fully welded, steel hinge pin.

1. See hardware schedule at the end of this section.
2. Leaves: Drilled for countersunk security fasteners.
3. Size: Minimum 5 by 5-1/4 by 1/2 inch (127 by 133 by 13 mm).
4. Security Grade: 1 according to ASTM F 1758.
5. Finish: BHMA 600.

SCHEDULE 6 - MECHANICAL DETENTION LOCKS AND LATCHES

PRODUCT DATA SHEET 0 - Lock Mountings:

1. Hollow-Metal Detention Doors: Mount detention lock to back of 0.183-inch (4.65-mm) nominal-thickness, galvanized-steel cover plate for installation in lock pocket fabricated into detention door. Attach cover plate to hollow-metal detention door with security fasteners.

PRODUCT DATA SHEET 1 - Mechanical Deadlocks, Paracentric Cylinder:

1. See hardware schedule at the end of this section.
2. Function: Deadlocked in both locked and unlocked position; latchbolt retracted and extended by five-tumbler paracentric cylinder; keyed two sides.
3. Latchbolt: 2-inch-high by 3/4-inch- (51-mm-high by 19-mm-) thick steel, with two case-hardened-steel insert pins; 3/4-inch (19-mm) throw; 1-1/4-inch (32-mm) bolt projection when retracted.
4. Security Grade: 1 according to ASTM F 1577.

SCHEDULE 7 - DETENTION LOCK TRIM

PRODUCT DATA SHEET 0 - Levers: Solid stainless steel.

PRODUCT DATA SHEET 1 - Knobs: Stainless steel.

PRODUCT DATA SHEET 2 - Escutcheons for Paracentric Locks: 0.125-inch- (3.18-mm-) thick, 3-inch- (75-mm-) diameter stainless steel with BHMA 630 finish. Attach with security fasteners.

1. Style: Single or double wing as required by lock function.

PRODUCT DATA SHEET 3 - Cylinder Shields for Paracentric Locks: 0.125-inch- (3.18-mm-) thick, 3-inch- (75-mm-) diameter stainless steel with BHMA 630 finish and swinging cover to protect keyhole. Attach with security fasteners.

1. Style: Single or double wing as required by lock function.

SCHEDULE 8 - DETENTION CYLINDERS AND KEYING

PRODUCT DATA SHEET 0 - Source Limitations: Subject to compliance with requirements, provide cylinders and keying for paracentric and mogul cylinders by same manufacturer as for detention locks and latches.

PRODUCT DATA SHEET 1 - Paracentric Cylinders: Manufacturer's standard lever-tumbler type, constructed from one-piece spring-tempered brass; with tumblers activated by phosphor bronze springs; five tumblers per lock.

PRODUCT DATA SHEET 2 - Keying System: Provide a factory-registered keying system complying with the following requirements:

1. Paracentric cylinders operated by change keys only.

PRODUCT DATA SHEET 3 - Keys: Provide cast silicon-bronze copper alloy keys complying with the following:

1. Stamping: Permanently inscribe each key with a visual key-control number and include the following notation:

    a. "DO NOT DUPLICATE."

2. Quantity: Provide one (1) cut key and seven (7) blank keys for each key change.

SCHEDULE 9 - DETENTION OPERATING TRIM

PRODUCT DATA SHEET 0 - Standard: BHMA A156.6, Grade 1.

PRODUCT DATA SHEET 1 - Surface-Mounted Door Pulls: 8-3/4-inch (222-mm) overall length and 2-1/4-inch (57-mm) projection; attach to door with two security fasteners.

1. See hardware schedule at the end of this section.
2. Material: Cast stainless steel with BHMA 630 finish.

PRODUCT DATA SHEET 2 - Knob Pulls: 2-inch (51-mm) diameter; fabricated from solid brass with BHMA 606 finish. Attach with security fasteners.

1. See hardware schedule at the end of this section.

SCHEDULE 10 - SECURITY DOOR CLOSERS

PRODUCT DATA SHEET 0 - Standard: BHMA A156.4, Grade 1.

1. Certified Products: Provide security door closers listed in BHMA's "Directory of Certified Door Products."

PRODUCT DATA SHEET 1 - Surface-Mounted Security Door Closers:

1. See hardware schedule at the end of this section.
2. Arms: Minimum 3/8-inch- (9.5-mm-) thick by 1-1/8-inch- (29-mm-) wide, rectangular steel main arm; 5/16-inch- (8-mm-) thick by 1-inch- (25-mm-) wide, rectangular steel secondary arm; full rack-and-pinion type; fabricated with orbital-riveted, pinned, or welded elbow and arm shoe/soffit plate joints designed to prevent disassembly with ordinary hand tools.
3. Cover: Heavy-duty metal, attached with four security fasteners.
4. Mounting: Attach security door closer with security fasteners.

PRODUCT DATA SHEET 2 - Unit Size: Comply with manufacturer's written recommendations for size of security door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to comply with field conditions and requirements for opening force.

SCHEDULE 11 - DETENTION DOOR STOPS

PRODUCT DATA SHEET 0 - Detention Floor Stops: 1-1/2-inch-high by 2-inch- (38-mm-high by 51-mm-) diameter, rubber bumper mounted on steel lag bolt; BHMA A156.16; install in floor with nonshrink grout; for detention doors unless wall or other type stops are indicated. Do not mount floor stops where they can impede traffic.

PRODUCT DATA SHEET 1 - Silencers for Detention Door Frames: BHMA A156.16, Grade 1; neoprene or rubber, minimum 1/2-inch (13-mm) diameter; fabricated for drilled-in application to detention door frame. Attach with security fasteners.

SCHEDULE 12 - FABRICATION

PRODUCT DATA SHEET 0 - Manufacturer's Nameplate: Do not provide products that have manufacturer's name or trade name displayed in a visible location (omit removable nameplates) except in conjunction with required fire-rated labels and as otherwise approved by Architect.

PRODUCT DATA SHEET 1 - Base Metals: Produce detention door hardware units of base metal, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified detention door hardware units and BHMA A156.18 finishes.

PRODUCT DATA SHEET 2 - Fasteners: Provide flat-head security fasteners with finished heads to match surface of detention door hardware.

1. Security Fasteners: Fabricate detention door hardware using security fasteners with head style appropriate for fabrication requirements, strength, and finish of adjacent materials. Provide stainless-steel security fasteners in stainless-steel materials.
2. Concealed Fasteners: For detention door hardware units that are exposed when detention door is closed, except for units already specified with concealed fasteners. Do not use through bolts for installation where bolt head or nut on opposite face is exposed unless it is the only means of securely attaching detention door hardware. Where using through bolts on hollow-metal detention door and frame construction, provide sleeves for each through bolt.
3. Steel Machine Screws: For the following fire-rated applications:

    a. Mortise detention hinges to detention doors.
    b. Strike plates to detention frames.
    c. Security door closers to detention doors and frames.

4. Steel Through Bolts: For the following fire-rated applications unless door blocking is provided:

    a. Surface detention hinges to detention doors.
    b. Security door closers to detention doors and frames.

5. Spacers Bolts: For through bolting of hollow-metal detention doors.

PRODUCT DATA SHEET 3 - Detention Lock Construction: Fabricate detention lock case and cover plate from steel plate. Fabricate bolts from solid sections; laminated construction is unacceptable.

SCHEDULE 13 - HARDWARE FINISHES

PRODUCT DATA SHEET 0 - Standard: Comply with BHMA A156.18.

PRODUCT DATA SHEET 1 - Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PRODUCT DATA SHEET 2 - BHMA Designations: Comply with base material and finish requirements indicated by the following:

1. BHMA 600: Primed for painting, over steel base metal.
2. BHMA 606: Satin brass, clear coated, over brass base metal.

3. BHMA 626: Satin chromium plated over nickel, over brass or bronze base metal.
4. BHMA 630: Stainless steel, satin, over stainless-steel base metal.
5. BHMA 633: Satin brass plated, clear coated, over steel base metal.
6. BHMA 652: Satin chromium plated over nickel, over steel base metal.

SCHEDULE 14 - SECURITY FASTENERS

PRODUCT DATA SHEET 0 - Operable only by tools produced by fastener manufacturer or other licensed fabricator for use on specific fastener type. Provide drive-system type, head style, material, and protective coating as required for assembly, installation, and strength, and as follows:

1. Drive-System Type: Pinned Torx-Plus.
2. Fastener Strength: 120,000 psi (827 MPa).
3. Socket Button Head Fasteners:

    a. Heat-treated alloy steel, ASTM F 835 (ASTM F 835M).
    b. Stainless steel, ASTM F 879 (ASTM F 879M), Group 1 CW.

4. Socket Flat Countersunk Head Fasteners:

    a. Heat-treated alloy steel, ASTM F 835 (ASTM F 835M).
    b. Stainless steel, ASTM F 879 (ASTM F 879M), Group 1 CW.

5. Socket Head Cap Fasteners:

    a. Heat-treated alloy steel, ASTM A 574 (ASTM A 574M).
    b. Stainless steel, ASTM F 837 (ASTM F 837M), Group 1 CW.

6. Protective Coatings for Heat-Treated Alloy Steel:

    a. Zinc and clear trivalent chromium where indicated.
    b. Zinc phosphate with oil, ASTM F 1137, Grade I, or black oxide unless otherwise indicated.

PART 3 - EXECUTION

SCHEDULE 2 - EXAMINATION

PRODUCT DATA SHEET 0 - Examine detention doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance of the Work.

PRODUCT DATA SHEET 1 - Verify locations of detention door hardware with those indicated on Shop Drawings.

PRODUCT DATA SHEET 2 - Proceed with installation only after unsatisfactory conditions have been corrected.

SCHEDULE 3 - PREPARATION

PRODUCT DATA SHEET 0 - Steel Detention Doors and Frames: Comply with BHMA A156.115 Series.

1. Surface-Applied Detention Door Hardware: Drill and tap detention doors and frames according to SDI A250.6.

SCHEDULE 4 - INSTALLATION

PRODUCT DATA SHEET 0 - Mounting Heights: Mount detention door hardware units at heights indicated in DHI's "Recommended Locations for Builders' Hardware for Custom Steel Doors and Frames."

PRODUCT DATA SHEET 1 - Install each detention door hardware item to comply with Shop Drawings and manufacturer's written instructions. Where cutting and fitting are required to install detention door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work. Do not install surface-mounted items until finishes have been completed on substrates involved.

1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.

PRODUCT DATA SHEET 2 - Hinge Installation:

1. Welding: Where indicated, weld hinges to detention doors and frames with continuous fillet weld around three sides of hinge perimeter.
2. Security Fasteners: Provide socket flat countersunk head machine screws; finish screw heads to match surface of detention hinges. Install into drilled and tapped holes.

PRODUCT DATA SHEET 3 - Security Fasteners: Install detention door hardware using security fasteners with head style appropriate for installation requirements, strength, and finish of adjacent materials.

SCHEDULE 5 - FIELD QUALITY CONTROL

PRODUCT DATA SHEET 0 - Inspect installed products to verify compliance with requirements. Prepare inspection reports and indicate compliance with and deviations from the Contract Documents.

PRODUCT DATA SHEET 1 - Perform the following tests and inspections:

1. Verify that lock bolts engage strikes with required bolt projection.
2. Verify that detention door hardware is installed and adjusted according to the Contract Documents.

PRODUCT DATA SHEET 2 - Detention work will be considered defective if it does not pass tests and inspections.

PRODUCT DATA SHEET 3 - Perform additional inspections to determine compliance of replaced or additional work.

PRODUCT DATA SHEET 4 - Prepare field quality-control certification endorsed by Detention Specialist that states installed products comply with requirements in the Contract Documents.

PRODUCT DATA SHEET 5 - Prepare test and inspection reports.

SCHEDULE 6 - ADJUSTING

PRODUCT DATA SHEET 0 - Adjust and check each operating item of detention door hardware and each detention door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust detention door-control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

1. Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.

SCHEDULE 7 - CLEANING AND PROTECTION

PRODUCT DATA SHEET 0 - Clean adjacent surfaces soiled by detention door hardware installation.

PRODUCT DATA SHEET 1 - Clean operating items as necessary to restore proper function and finish.

PRODUCT DATA SHEET 2 - Provide final protection and maintain conditions that ensure that detention door hardware is without damage or deterioration at time of Substantial Completion.

SCHEDULE 8 - DEMONSTRATION

PRODUCT DATA SHEET 0 - Train Owner's maintenance personnel to adjust, operate, and maintain detention door hardware and detention door hardware finishes.

SCHEDULE 9 - DETENTION DOOR HARDWARE SCHEDULE

PRODUCT DATA SHEET 0 - General: Subject to compliance with requirements, provide detention door hardware products indicated in hardware schedule below, or comparable products.

Hardware Set 1

Item	**Product**	**Manufacturer**	**Quantity (each door)**	**Quantity (per Set)**
Hinges	4 1/2 FM-ICS	Folger Adam	3 ea.	60
	Or approved equal			
Deadlock	Series 86 Deadlock (five tumbler, keyed both sides) w/ 80 4DB keeper	Folger Adam	1	20
	Or approved equal			
Escutcheon	No. 2CS Cylinder Shield (exterior side) and No. 1 Escutcheon (interior side)	Folger Adam	1	20
	Or approved equal			
Lock: Non-keyed Knob latch (no cylinder)	Series D9301 (F01) Maxi-Mortise Non-keyed knob latch (passage latch)	Folger Adam	1	20
	Or approved equal			
Trim: Surface-mounted Door pull	No. 2 Pull	Folger Adam	2	40

	Or approved equal			
Surface-mounted Door Closer	4210 Series	LCN	1	20
	Or approved equal			

END OF SECTION 087163

SECTION 089100 – STATIONARY METAL WALL LOUVERS

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. Provide stationary metal wall louvers as indicated on Drawings and as specified herein.

1.02 REFERENCES

A. References and industry standards listed in this Section are applicable to the Work. Unless more restrictive criteria or differing requirements are explicitly stated in the Specifications, or mandated by governing codes or regulations, the recommendations, suggestions, and requirements described in the referenced standards shall be deemed mandatory and applicable to the Work.

1. Air Movement and Control Association (AMCA)

2. American Architectural Manufacturers Association (AAMA)

3. Aluminum Association (AA)

4. American Society for Testing and Materials (ASTM)

5. American Society of Civil Engineers (ASCE)

1.03 SUBMITTALS

A. Shop Drawings

1. Include plans, elevations, sections, details, and attachments to other Work. Show blade profiles, angles, spacing and mullions.

B. Product Data

1. Catalog cuts, specifications, and installation instructions for louvers indicated, showing conformance with specified properties and performance criteria, and with appropriate AMCA Certified Rating Seals.

C. Samples

1. Samples for Initial Selection: For units with factory-applied color finishes.

2. Samples for Verification: For each type of metal finish required.

D. Warranties in accordance with Article 1.06.

1.04 QUALITY ASSURANCE

A. Louvers shall be rated by AMCA (Air Movement and Control Assoc.). Units shall be marked with the required AMCA Certified Ratings Seal.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products of this Section as recommended by manufacturer to protect from damage.

1.06 WARRANTY

A. Finish shall be fully warranted against chipping, peeling, cracking, crazing, blistering, chalking and fading for a period of 10 years.

PART 2 - PRODUCTS

2.01 ALUMINUM LOUVERS

A. Type

Stationary extruded louvers, minimum 4" deep unless indicated otherwise.

B. Properties

1. Material: 6063T5 aluminum alloy

2. Frame extrusions: not less than 0.081” thick

3. Blades: not less than 0.061” thick

4. Blade profile: Drainable

5. Free area: not less than 40%.

C. Performance criteria

1. Wind loads: Louvers shall be designed to withstand the effects of wind loads without permanent deformation of louver components, noise or metal fatigue caused by louver-blade rattle or flutter, or permanent damage to fasteners and anchors. Determine wind loads based on a uniform pressure of 40 lbf/sq.ft. acting inward or outward.

2. High velocity wind-driven rain: Mechanical louvers, i.e. louvers associated with mechanical equipment shall meet

an A rating per AMCA standard 550 for wind driven rain penetration for a 50 MPH wind velocity with a rainfall of eight inches per hour as required by section MC 501.2.2.1 of the 2014 NYC Mechanical Code.

D. Fabrication

1. Form frames with mitered or coped members, welded or riveted and soldered joints. Form ends of blades flat against frame jamb and weld, or rivet and solder blades to frame at each end to ensure watertight joints. Reinforce units with concealed plates, angles, tees or other shapes to form rigid unit. Allow for expansion and contraction.

2. Assemble louvers in factory to minimize field splicing and assembly.

3. Maintain equal louver blade spacing to produce uniform appearance.

4. Fabricate frames, including integral sills, to fit in openings of sizes indicated, with allowances made for fabrication and installation tolerances, adjoining material tolerances, and perimeter sealant joints.

5. Provide mullions of type and at spacings indicated, but not more than recommended by manufacturer, or 60" o.c., whichever is less.

E. Finishes

The finishes shall be certified as complying fully with requirements of AAMA Specification 2605-11.

1. Finish as indicated on Drawings as follows:

a. Color as selected by Project Architect from manufacturer's standard colors.

b. Protect exposed factory finished surfaces prior to shipping.

c. 10 year warranty for finish

F. Sills

Same material and finish as louvers.

2.02 LOUVER SCREENS

A. General

Fabricate removable screen frames of same metal and finish as louvers. Locate screens on inside face of louvers, unless otherwise indicated. Secure screens to louver frames with machine screws at each corner and spaced 12" o.c along frame perimeter.

B. Bird Screens

Anodized 0.051 minimum thickness aluminum wire; 1/2" mesh maximum, 1/4" mesh minimum.

2.03 BLOCK AND BRICK VENTS

NOT USED

2.04 FASTENERS AND ANCHORS

A. Bolts, Nuts, Lags, Washers, Screws and Anchors

Same material as items being installed unless otherwise indicated. Types, gages and lengths to suit unit installation conditions. Aluminum or stainless steel for exterior locations or for items anchored to exterior walls.

2.05 MISCELLANEOUS

A. Provide protection for aluminum against galvanic action wherever dissimilar materials are in contact, by painting the complete contact surfaces of the dissimilar material with 7 to 9 mils of epoxy paint similar to Tnemec Chembuild Series 135 or Series 27 Typoxy. Do not coat paint beyond surface in contact.

B. Isolate the aluminum from concrete and masonry by coating aluminum with 7 to 9 mils of epoxy paint similar to Tnemec Chembuild Series 135 or Series 27 Typoxy. Do not coat paint beyond surface in contact.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates and openings, with installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.

1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Coordinate setting drawings, diagrams, templates, instructions, and directions for installation of anchorages that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to Project site.

3.03 INSTALLATION

A. Install Work of this Section in accordance with manufacturer's printed instructions, except as shown otherwise on Drawings.

B. Install units plumb, level and in proper alignment with adjacent construction.

C. Form tight joints with exposed connections accurately fit together.

D. Provide concealed anchorages wherever possible. Provide brass or lead washers fitted to screws where required to protect metal surfaces and to form weathertight connection.

E. Where louvers are in contact with concrete, masonry or dissimilar metal, coat contacting surface with heavy coat of bituminous paint.

3.04 ADJUSTING AND CLEANING

A. Clean exposed surfaces of louvers and vents that are not protected by temporary covering, to remove fingerprints and soil during construction period. Do not let soil accumulate until final cleaning.

B. Before final inspection, clean exposed surfaces with water and a mild soap or detergent not harmful to finishes. Thoroughly rinse surfaces and dry.

C. Restore louvers and vents damaged during installation and construction so no evidence remains of corrective work. If results of restoration are unsuccessful, as determined by Architect, remove damaged units and replace with new units.

1. Touch up minor abrasions in finishes with air-dried coating that matches color and gloss of, and is compatible with, factory-applied finish coating.

END OF SECTION

SECTION 099000 – CONSTRUCTION PAINTING

PART 1 GENERAL

1.01 DEFINITIONS

A. The word "primer" in this Section refers to substrate cleaners, fillers, sealers, undercoats, and other first or intermediate coats beneath the last or finish coating.
B. The words "finish paint" in this Section refers to the last or final coat and previous coats of the same material or product directly beneath the last or final coat.

1.02 SUBMITTALS

A. Quality Control Submittals:
   1. Test Reports:, Furnish certified test results from an independent testing laboratory showing that products submitted comply with the specifications, if requested by the NYC DOC Representative.
   2. Certificates: Furnish certificates of compliance required under QUALITY ASSURANCE Article.

1.03 QUALITY ASSURANCE

A. Container Labels: Label each product container with paint manufacturer's name, product name and number, color name and number, thinning and application instructions, date of manufacture and shelf-life expiration, required surface preparation, recommended coverage per gallon, wet and dry film thickness, drying time, and clean up procedures.
B. Compatibility of Paint Materials: Primers and intermediate paints shall be products manufactured or recommended by the finish paint manufacturer.
C. Performance Criteria:
   1. The following criteria are REQUIRED for products included in this section:
      a. Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates must not exceed the VOC content limit established in Green Seal Standard GC-03, AntiCorrosive Paints.
   2. Volatile Organic Compounds: The VOC concentrations (in grams per liter) of the product shall not exceed those listed below as determined by U. S. Environmental Protection Agency (EPA) Reference Test Method 24 and the standards referenced in 1.04.E.1.
      a. Anti-Corrosive Paints (if used in interior applications) – 250

1.04 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials to the Site in original, unopened containers and cartons bearing manufacturer's printed labels. Do not deliver products which

have exceeded their shelf life, are in open or damaged containers or cartons, or are not properly labeled as specified.

B. Storage and Handling: Store products in a dry, well ventilated area in accordance with manufacturer's published product data sheets. Storage location shall have an ambient air temperature between 45 degrees F and 90 degrees F.

1.05 PROJECT CONDITIONS

A. Environmental Requirements:
   1. Ambient Air Temperature, Relative Humidity, Ventilation, and Surface Temperature: Comply with paint manufacturer's published product data sheet or other printed product instructions.
   2. If paint manufacturer does not provide environmental requirements, use the following:
      a. Ambient Air Temperature: Between 45 degrees F and 75 degrees F.
      b. Relative Humidity: Below 75 percent.
      c. Ventilation: Maintain the painting environment free from fumes and odors throughout the Work of this Section.
      d. Surface Temperature: At least 5 degrees F above the surface dewpoint temperature.
   3. Maintain environmental requirements throughout the drying period.

PART 2 PRODUCTS

2.01 PAINT MANUFACTURERS

A. Where noted, the following finish paint manufacturers produce the paint types specified.
   1. Rust-Oleum Corporation, 11 Hawthorn Pky., Vernon Hills, IL 60061, (800) 553-8444.
   2. Sherwin-Williams Co., Cleveland, OH 44101, (800) 321-8194.
   3. Valspar Corp., 1401 Severn St., Baltimore, MD 21230, (800) 638-7756.
   4. Wm. Zinsser & Co., 39 Belmont Drive, Somerset, NJ 08875-1285, (908) 469-8100.
   5. Or approved Equal

2.02 FINISH PAINT TYPES

A. Physical Properties:
   1. Specified percent solids by weight and volume, pigment by weight, wet and dry film thickness per coat, and weight per gallon are minimum physical properties of acceptable materials.
      a. Specified minimum wet and dry film thickness per coat are for determining acceptable finish paint products. Minimum

wet and dry film thickness per coat to be applied shall comply with approved finish paint manufacturer's product data sheets.

B. Exterior Steel Finish Paint Type:
   1. Paint Type ESP: Exterior Steel Zinc-Rich Primer, Flat.
      a. Solids by Weight: 79.0 percent.
      b. Solids by Volume: 68.0 percent.
      c. Pigment by Weight: 90.0 percent zinc.
      d. Solvent: Water.
      e. Weight per Gallon: 24.6 lbs.
      f. Dry Film Thickness: 3.0 mils if finish coated, 4.0 mils if not finish coated.
      g. Manufacturers: Ameron Protective Coatings, Inorganic Coatings, Valspar, Or approved equal

D. Interior Steel Finish Paint Types:
   1. Paint Type ISP: Interior Steel Primer, Flat.
      a. Solids by Weight: 72.0 percent.
      b. Solids by Volume: 52.0 percent.
      c. Vehicle: Alkyd resin.
      d. Weight Per Gallon: 11.4 lbs.
      e. Wet Film Thickness: 3.0 mils.
      f. Dry Film Thickness: 1.5 mils.
      g. Manufacturers: PPG, Sherwin-Williams, Valspar, Or approved equal

E. High Performance Paint Types:
   1. Paint Type AU: Aliphatic Urethane, Gloss Finish.
      a. Solids by Volume, Mixed: 48.0 percent.
      b. Weight Per Gallon: 8.0 lbs.
      c. Wet Film Thickness: 3.6 mils.
      d. Dry Film Thickness: 1.3 mils.
      e. Manufacturers: Benjamin Moore, ICI Dulux Paints, Sherwin-Williams, Or approved equal

D. Colors: Provide paint colors either to match existing or to be selected by the NYC DOC Representative from finish paint manufacturers available color selections.
   1. Approved finish paint manufacturers to match designated colors of other manufacturers where colors have been shown on the contract documents.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine surfaces to be prepared, primed, or painted for compliance with contract documents, required environmental conditions, manufacturer's product data sheets, product label instructions and other written requirements.

1. Do not begin any phase of the work without first checking and verifying that surfaces and environmental conditions are acceptable for such work and that any earlier phase deficiencies and discrepancies have been properly corrected.
    a. The commencement of new work shall be interpreted to mean acceptance of surfaces to be affected.

3.02 PREPARATION

A. Protection: Cover and protect both surfaces to be painted and adjacent surfaces not to be painted from existing paint removals, airborne sanding particles, cleaning fluids and paint spills using suitable drop cloths, barriers and other protective devices.

1. Adjacent exterior surface protections include roofs, walls, landscaping, driveways and walkways. Interior protections include floors, walls, furniture, furnishings and electronic equipment.
2. Remove and replace removable hardware, lighting fixtures, telephone equipment, other devices and cover plates over concealed openings in substrates to be painted.
    a. Cover and neatly mask permanently installed hardware, lighting fixtures, cover plates and other devices which cannot be removed and are not scheduled for painting.
3. Schedule and coordinate surface preparations so as not to interfere with work of other trades or allow airborne sanding dust particle to fall on freshly painted surfaces.
4. Provide adequate natural or mechanical ventilation to allow surfaces to be prepared and painted in accordance with product manufacturer's instructions and applicable regulations.
5. Provide and maintain "Wet Paint" signs, temporary barriers and other protective devices necessary to protect prepared and freshly painted surfaces from damages until Work has been accepted.

B. Clean and prepare surfaces to be painted in accordance with specifications, paint manufacturer's approved product data sheets and printed label instructions. In the event of conflicting instructions or directions, the more stringent requirements shall apply.

1. Cleaners: Use only approved products manufactured or recommended by finish paint manufacturer. Unless otherwise recommended by cleaner manufacturer, thoroughly rinse

with clean water to remove surface contaminants and cleaner residue

C. Surfaces:
1. Existing Interior Structural Steel and Metal Decks:
a. Prepare existing steel to be painted by cleaning in accordance with Structural Steel Painting Council (SSPC) standards:
1) SSPC-SP1: Remove oil, grease, dirt, soil, salts, and other surface contaminants using appropriate cleaning solvents and clean rags, vapor, alkali, emulsion, or steam and adequate ventilation.
2) SSPC-SP2: Remove loose rust, mill scale, and paint to the degree specified by hand chipping, scraping, sanding, and wire-brushing.
2. Existing Exterior Structural Steel and Metal Decks:
a. Prepare existing steel to be painted by cleaning in accordance with Structural Steel Painting Council (SSPC) standards:
1) SSPC-SP1: Remove oil, grease, dirt, soil, salts, and other surface contaminants using appropriate cleaning solvents and clean rags, vapor, alkali, emulsion, or steam and adequate ventilation.
2) SSPC-SP5: Remove all visible rust, mill scale, paint, and foreign matter by white-metal blast cleaning with wheel or nozzle (dry or wet) using sand, grit, or shot.

D. Painting Material Preparations:
1. Prepare painting materials in accordance with manufacturer's approved product data sheets and printed label instructions.
a. Stir materials before and during application for a consistent mixture of density. Remove container surface paint films before stirring and mixing.
b. Slightly tint first opaque finish coat where primer and finish coats are the same color.
c. Do not thin paints unless allowed and directed to do so in writing within limits stated on approved product data sheets.

3.03 APPLICATION

A. Environmental Conditions:
1. Other Paints: Apply when surface temperatures will be 45 degrees Fahrenheit to 95 degrees Fahrenheit throughout the drying period.
2. Apply exterior paints during daylight hours free from rain, snow, fog and mist when ambient air conditions are more than 5

degrees above the surface dewpoint temperature and relative humidity less than 85 percent.

3. Exterior Cold Weather Protection: Provide heated enclosures necessary to maintain specified temperature and relative humidity conditions during paint application and drying periods.

B. Install approved paints where specified, or shown on the drawings, and to match approved field examples.

1. Paint Applicators: Brushes, rollers or spray equipment recommended by the paint manufacturer and appropriate for the location and surface area to be painted.

a. Approved minimum wet and dry film thicknesses shall be the same for different application methods and substrates.

C. Paint Type Coats To Be Applied: Unless specified otherwise by finish paint manufacturer's product data sheet, the number of coats to be applied for each paint type are as follows:

1. Paint Types ESP and ISP: Apply 1 coat.

a. Allow primer to dry one week and test adhesion. Remove and replace defective primer where adhesion failures occur.

2. Paint Type AU: Apply in accordance with paint manufacturer's product data sheet and printed label instructions.

D. Surfaces: Unless otherwise specified or shown on the drawings, paint surfaces as follows:

1. Exterior Surfaces:

a. Factory Finished Metal Substrates: Field painting not required.

b. Factory Primed and Unprimed Ferrous Substrates:

1) Existing Unprimed Structural Steel: Paint Type AU over primer Paint Type ESP.

2) New Primed Structural Steel: PaintTypeAU.

3) Decks: Paint Type AU.

2. Interior Surfaces:

a. Factory Finished Metal Substrates: Field painting not required.

b. Factory Primed and Unprimed Ferrous Substrates:

1) Existing Unprimed Structural Steel: Paint Type AU over primer Paint Type ISP.

2) New Primed Structural Steel: PaintTypeAU.

3) Decks: Paint Type AU.

3.04 FIELD QUALITY CONTROL

A. Paint Samples: Assist the NYC DOC Representative in obtaining random one quart paint samples for testing at any time during the Work.

1. Notify the NYC DOC Representative upon delivery of paints to the Site.

2. Furnish new one quart metal paint containers with tight fitting lids and suitable labels for marking.
    a. Furnish labor to thoroughly mix paint before sampling and provide assistance with sampling when required.

3.05 ADJUSTING AND CLEANING

A. Reinstall removed items after painting has been completed.
    1. Restore damaged items to a condition equal to or better than when removed. Replace damaged items that cannot be restored.

B. Touch up and restore damaged finish paints. Touch up and restoration paint coats are in addition to the number of specified finish paint coats.

C. Remove spilled, splashed, or spattered paint without marring, staining or damaging the surface. Restore damaged surfaces to the satisfaction of the NYC DOC representative.

D. Remove temporary barriers, masking tape, and other protective coverings upon completion of painting, cleaning and restoration work.

END OF SECTION

SECTION 099102 – ELECTRICAL PAINTING

PART 1 GENERAL

1.01 DEFINITIONS

A. The word “paint” in this Section refers to substrate cleaners, fillers, sealers, primers, undercoats, enamels and other first, intermediate, last or finish coatings.

B. The word “primer” in this Section refers to substrate cleaners, fillers, sealers, undercoats, and other first or intermediate coats beneath the last or finish coating.

C. The words “finish paint” in this Section refers to the last or final coat and previous coats of the same material or product directly beneath the last or final coat.

D. Finish Paint Systems: Finish paint and primers applied over the same substrate shall be considered a paint system of products manufactured or recommended by the finish coat manufacturer.

1. Finish paint products shall meet or exceed specified minimum physical properties.

1.02 SUBMITTALS

A. Painting Schedule: Cross-referenced Painting Schedule listing all exterior and interior substrates to be painted and specified finish paint type designation; product name and manufacturer, recommended primers and product numbers, and finish paint color designation for each substrate to be painted.

1. Designate exterior substrates by building name and number, substrate to be painted and surface location.
2. Designate interior substrates by building name and number, floor, room name and number, and surface to be painted.

B. Product Data Sheets: Manufacturer’s published product data sheets describing the following for each finish paint product to be applied:

1. Percent solids by weight and volume, solvent, vehicle, weight per gallon, ASTM D 523 gloss/reflectance angle, recommended wet and dry film thickness, volatile organic compound (VOC) content in lbs/gallon, product use limitations and environmental restrictions, substrate surface preparation methods, directions and precautions for mixing and thinning, recommended application methods, square foot area coverage per gallon, storage instructions, and shelf-life expiration date.
2. Manufacturer’s recommended primer for each finish paint product and substrate to be painted.

3. Manufacturer's complete range of available colors for each finish paint product to be applied.

C. Finish Paint Type Samples: Two finish paint samples applied over recommended primers for each substrate to be painted.

1. Samples shall be in the designated color and specified ASTM D 523 reflectance.

2. Label each sample with the following information:

a. Project number and Painting Schedule designation describing substrates and locations represented by the sample.

b. Finish paint and primer manufacturer, product names and numbers, finish paint color and reflectance.

3. Leave a 1 inch wide exposed strip of unpainted substrate and each coat of primer and finish paint.

4. Sample Sizes:

a. Sheet Metals: 4 inch by 8 inch flat sheets.

b. Bar and Tubular Metals: 8 inch long bars or tubular stock.

D. Quality Control Submittals:

1. Test Reports: Furnish certified test results from an independent testing laboratory, showing that products submitted comply with the specifications, when requested by the Director's Representative

2. Certificates: Furnish certificates of compliance required under QUALITY ASSURANCE Article.

1.03 QUALITY ASSURANCE

A. Volatile Organic Compounds (VOCs) Regulatory Requirements: Chapter III of Title 6 of the official compilation of Codes, Rules and Regulations of the State of New York (Title 6 NYCRR), Part 205 Architectural Surface Coatings.

1. Certificate of Compliance: List of each paint product to be delivered and installed. List shall include written certification stating that each paint product listed complies with the VOC regulatory requirements in effect at the time of job site delivery and installation.

B. Container Labels: Label each product container with paint manufacturer's name, product name and number, color name and number, thinning and application instructions, date of manufacture, shelf-life expiration date, required surface preparations, recommended coverage per gallon, wet and dry film thickness, drying time, and clean up procedures.

C. Field Examples:

1. Prior to on-site painting, at locations designated by the Director's Representative, apply field examples of each paint type to be applied.

2. Field examples to be applied on actual substrates to be painted and shall duplicate earlier approved paint samples.

a. Field Example Minimum Wet and Dry Film Thickness: As indicated on approved product data sheet.

b. Application: Apply each coat in a smooth uniform wet mil thickness without brush marks, laps, holidays, runs, stains, cloudiness, discolorations and other surface imperfections.

1) Leave a specified exposed width of each previous coat beneath each subsequent coat of finish paint and primer.

c. Use of Field Examples: Field examples shall serve as a quality control standard for acceptance or rejection of painting Work to be done under this Section.

3. Field Example Sizes:

a. Electrical Equipment: As directed by Director's Representative. Leave 1 inch minimum width exposed strips of each applied primer and finish coat.

b. Linear Substrate Examples: 20 lineal feet with 12 inch long strips.

4. Do not begin applying paints represented by field examples until examples have been reviewed and approved by the Director's Representative.

a. Protect and maintain approved field examples until all painting work represented by the example has been completed and approved.

D. Compatibility of Paint Materials: Primers and intermediate paints shall be products manufactured or recommended by the finish paint manufacturer.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials to the Site in original, unopened containers and cartons bearing manufacturer's printed labels. Do not deliver products which have exceeded their shelf life, are in open or damaged containers or cartons, or are not properly labeled as specified.

B. Storage and Handling: Store products in a dry, well ventilated area in accordance with manufacturer's published product data sheets. Storage location shall have an ambient air temperature between 45 degrees F and 90 degrees F.

1.05 PROJECT CONDITIONS

A. Environmental Requirements:

1. Ambient Air Temperature, Relative Humidity, Ventilation, and Surface Temperature: Comply with paint manufacturer's published product data sheet or other printed product instructions.

2. If paint manufacturer does not provide environmental requirements, use the following:

a. Ambient Air Temperature: Between 45 degrees F and 75 degrees F.

b. Relative Humidity: Below 75 percent.

c. Ventilation: Maintain the painting environment free from fumes and odors throughout the Work of this Section.

d. Surface Temperature: At least 5 degrees F above the surface dewpoint temperature.

3. Maintain environmental requirements throughout the drying period.

B. The following items are not to be field painted unless otherwise specified, noted or directed:

1. Stainless steel, chrome plated or monel surfaces.
2. Piping or ductwork to be insulated.
3. Insulation on concealed piping and concealed ductwork.
4. Insulated items covered with aluminum, stainless steel, or PVC jacketing.
5. Insulation on piping in walk-in and non walk-in tunnels.
6. Uninsulated mechanical equipment with factory applied baked on enamel finish.
7. Mechanical equipment with enameled steel insulated jacket.
8. Prefabricated multi-wall chimneys.

1.06 EXTRA MATERIALS

A. Provide extra finish paint materials, from the same production run as paints to be applied, in the following quantities for each color installed:

1. Paint Type IAL: One gallon.
2. Color Coded Paints: One gallon.
3. Other Paint Types: One gallon.

PART 2 PRODUCTS

2.01 PAINT MANUFACTURERS

A. Where noted, the following finish paint manufacturers produce the paint types specified.

1. Ameron Protective Coatings, 201 Berry St., Brea, CA 92621, (800) 926-3766.
2. Armstrong World Industries, Inc., P.O. Box 3001, Lancaster, PA 17604, (800) 866-5639.

3. Benjamin Moore and Co., 51 Chestnut Ridge Rd., Montvale, NJ 07645, (201) 573-9600.
4. ICI Dulux Paints, 4000 Dupont Cr., Louisville, KY 40207, (800) 984-5444.
5. Inorganic Coatings, Inc., 500 Lapp Rd., Malvern, PA 19355, (800) 345-0531.
6. PPG Architectural Finishes, One PPG Plaza, Pittsburgh, PA 15272, (800) 441-9695.
7. Rust-oleum Corporation, 11 Hawthorn Pky., Vernon Hills, IL 60061, (800) 553-8444.
8. Sherwin-Williams Co., Cleveland, OH 44101, (800) 321-8194.
9. Valspar Corp., 1401 Severn St., Baltimore, MD 21230, (800) 638-7756.
10. Wm. Zinsser & Co., 39 Belmont Dr., Somerset, NJ 08875-1285, (908) 469-8100.
11. Or approved equal

2.02 MISCELLANEOUS PRODUCTS

A. Cleaning Solvents: Low toxicity with flash point in excess of 100 degrees F.

B. Color Pigments: Pure, nonfading, finely ground pigments with at least 99 percent passing a 325 mesh sieve.

1. Use lime-proof color pigments on masonry, concrete and plaster.
2. Use exterior pigments in exterior paints.

C. Galvanizing Compound, Cold: Single component compound with 93 percent pure zinc in the dried film and meeting the requirements of DOD-P-21035A (NAVY).

D. Masking Tape: Removable paper or fiber tape, self-adhesive and nonstaining.

E. Metal Filler: Polyester resin base autobody filler.

F. Mineral Spirits: Low odor type recommended by finish paint manufacturer.

G. Paint Stripper: As recommended by finish paint manufacturer.

H. Stain Blocker, Primer-Sealer: As recommended by finish paint manufacturer.

I. Turpentine: ASTM D 13.

2.03 FINISH PAINT TYPES

A. Physical Properties:

1. Specified percent solids by weight and volume, pigment by weight, wet and dry film thickness per coat, and weight per gallon are minimum physical properties of acceptable materials.

a. Opaque Pigmented Paints: Physical properties specified are for white titanium dioxide base before color pigments are added.

b. Specified minimum wet and dry film thickness per coat are for determining acceptable finish paint products. Minimum wet and dry film thickness per coat to be applied shall comply with approved finish paint manufacturer's product data sheets.

2. Gloss or Reflectance: The following ASTM D 523 specified light levels and angles of reflectance:

a. Flat: Below 15 at 85 degrees.
b. Eggshell: Between 5 and 20 at 60 degrees.
c. Satin: Between 15 and 35 at 60 degrees.
d. Semigloss: Between 30 and 65 at 60 degrees.
e. Gloss: Over 65 at 60 degrees.

B. Interior Finish Paint Types:

1. Paint Type IAL-3: Interior Acrylic Latex, Semigloss Enamel.

a. Solids by Weight: 49.0 percent.
b. Solids by Volume: 35.0 percent.
c. Solvent: Water.
d. Vehicle: Vinyl acrylic resin.
e. Weight Per Gallon: 10.0 lbs.
f. Wet Film Thickness: 3.8 mils.
g. Dry Film Thickness: 1.2 mils.
h. Manufacturers: Benjamin Moore, ICI Dulux, Sherwin-Williams, Or approved equal

C. Colors: Provide paint colors selected by the Director from finish paint manufacturers available color selections.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine surfaces to be prepared, primed, or painted for compliance with contract documents, required environmental conditions,

manufacturer's product data sheets, product label instructions and other written requirements.

1. Do not begin any phase of the work without first checking and verifying that surfaces and environmental conditions are acceptable for such work and that any earlier phase deficiencies and discrepancies have been properly corrected.

a. The commencement of new work shall be interpreted to mean acceptance of surfaces to be affected.

3.02 PREPARATION

A. Protection: Cover and protect surfaces to be painted, adjacent surfaces not to be painted, and removed furnishings and equipment from existing paint removals, airborne sanding particles, cleaning fluids and paint spills using suitable drop cloths, barriers and other protective devices.

1. Adjacent exterior surface protections include roofs, walls, landscaping, driveways and walkways. Interior protections include floors, walls, furniture, furnishings and electronic equipment.

2. Remove and replace removable hardware, lighting fixtures, telephone equipment, other devices and cover plates over concealed openings in substrates to be painted.

a. Cover and neatly mask permanently installed hardware, lighting fixtures, cover plates and other devices which cannot be removed and are not scheduled for painting.

3. Schedule and coordinate surface preparations so as not to interfere with work of other trades or allow airborne sanding dust particle to fall on freshly painted surfaces.

4. Provide adequate natural or mechanical ventilation to allow surfaces to be prepared and painted in accordance with product manufacturer's instructions and applicable regulations.

5. Provide and maintain "Wet Paint" signs, temporary barriers and other protective devices necessary to protect prepared and freshly painted surfaces from damages until Work has been accepted.

B. General: Clean and prepare surfaces to be painted in accordance with specifications, paint manufacturer's approved product data sheets and printed label instructions. In the event of conflicting instructions or directions, the more stringent requirements shall apply.

1. Cleaners: Use only approved products manufactured or recommended by finish paint manufacturer. Unless otherwise recommended by cleaner manufacturer, thoroughly rinse with clean water to remove surface contaminants and cleaner residue.

C. Surfaces:

1. Existing Painted Substrates: Thoroughly clean to remove dirt, soot, grease, mildew, chalkiness and stains using finish paint manufacturer's recommended cleaners.

2. Steel Substrates:

a. Prepare steel in accordance with Structural Steel Painting Council (SSPC) standards:

1) SSPC-SP1: Remove oil, grease, dirt, soil, salts, and other surface contaminants using appropriate cleaning solvents and clean rags, vapor, alkali, emulsion, or steam and adequate ventilation.

2) SSPC-SP2: Remove loose rust, mill scale, and paint to the degree specified by hand chipping, scraping, sanding, and wire-brushing.

3. Galvanized Metal:

a. Allow new galvanized surfaces to weather as long as possible before cleaning. Remove surface contaminants using clean rags and petroleum spirits.

b. Remove "white rust" using appropriate solvent and, if necessary, wire brushing or sanding.

c. Use appropriate Structural Steel Painting Council Standard SSPC-SP1 to SSPC-SP6 to prepare steel substrates where galvanized protection has been removed.

4. Aluminum:

a. Non-corroded Surfaces: Rub with fine steel wool and wipe clean with mineral spirits.

b. Corroded Surfaces: Sand smooth, rub with fine steel wool and wipe clean with mineral spirits.

D. Painting Material Preparations:

1. Prepare painting materials in accordance with manufacturer's approved product data sheets and printed label instructions.

a. Stir materials before and during application for a consistent mixture of density. Remove container surface paint films before stirring and mixing.

b. Slightly tint first opaque finish coat where primer and finish coats are the same color.

c. Do not thin paints unless allowed and directed to do so in writing within limits stated on approved product data sheets.

3.03 PAINTING SCHEDULE

A. Interior Exposed Items: Unless otherwise specified, apply the following paint types with manufacturer's recommended primers on the following interior substrates.

1. Paint Type IAL-3: Exposed raceways, fittings, pull boxes, junction boxes, etc.

3.04 APPLICATION

A. Environmental Conditions:

1. Water-based Paints: Apply when surface temperatures will be 50 degrees Fahrenheit to 90 degrees Fahrenheit throughout the drying period.

2. Other Paints: Apply when surface temperatures will be 45 degrees Fahrenheit to 95 degrees Fahrenheit throughout the drying period.

3. Apply exterior paints during daylight hours free from rain, snow, fog and mist when ambient air conditions are more than 5 degrees above the surface dewpoint temperature and relative humidity less than 85 percent.

a. When exterior painting is allowed or required during nondaylight hours, provide portable outdoor weather recording station with constant printout showing hourly to diurnal air temperature, humidity, and dewpoint temperature.

4. Exterior Cold Weather Protection: Provide heated enclosures necessary to maintain specified temperature and relative humidity conditions during paint application and drying periods.

B. Application: Apply approved paints where specified, or shown on the drawings, and to match approved field examples.

1. Applicators: Brushes, rollers or spray equipment recommended by the paint manufacturer and appropriate for the location and surface area to be painted.

a. Approved minimum wet and dry film thicknesses for each coat shall be as recommended on approved product data sheets and the same for each application method and substrate.

C. Paint Type Coats To Be Applied: Unless otherwise specified, or recommended by finish paint manufacturer's product data sheet and approved by submittal, the number of coats to be applied for each paint type are as follows:

1. Acrylic Latex Paint Type IAL:

a. New Unpainted Surfaces: Apply 1 coat of primer and 2 coats of finish paint.

b. Existing Painted Surfaces:

1) Apply 2 coats of finish paint when existing paint has a lower gloss.

2) Apply one coat of primer and 2 finish coats when existing paint has a higher gloss.

c. Paint Type IAL: Provide mildewcide additive for bathrooms, kitchens, janitor closets, laundry rooms, restrooms and other wet or damp areas.

2. Paint Type ISP: Apply 1 coat.

a. Allow paint to dry one week and test adhesion. Remove and replace defective primer where adhesion failures occur.

3. Other Paint Types: Apply in accordance with paint manufacturer's product data sheets.

3.05 FIELD QUALITY CONTROL

A. Paint Samples: Assist the Director's Representative in obtaining random one quart paint samples for testing at any time during the Work.

1. Notify the Director's Representative upon delivery of paints to the Site.

2. Furnish new one quart metal paint containers with tight fitting lids and suitable labels for marking.

a. Furnish labor to thoroughly mix paint before sampling and provide assistance with sampling when required.

3.06 ADJUSTING AND CLEANING

A. Reinstall removed items after painting has been completed.

1. Restore damaged items to a condition equal to or better than when removed. Replace damaged items that cannot be restored.

B. Touch up and restore damaged finish paints. Touch up and restoration paint coats are in addition to the number of specified finish paint coats.

C. Remove spilled, splashed, or spattered paint without marring, staining or damaging the surface. Restore damaged surfaces to the satisfaction of the Director's representative.

D. Remove temporary barriers, masking tape, and other protective coverings upon completion of painting, cleaning and restoration work.

END OF SECTION

SECTION 099713 – METAL COATINGS

PART 1 - GENERAL

1.01 Summary

A. This Section includes coatings on steel substrates.

B. This Section excludes coating the following metal surfaces: stainless steel, anodized aluminum, copper, bronze, and brass.

C. Related Sections:

1. 014000 (Quality Requirements).
2. 014339 (Mockups, and Physical Quality Assurance Aids).
3. 016100 (Product Requirements).
4. 017310 (Execution).

1.02 Submittals

A. Product Data: For each product specified in Part 2 - Products.

B. Samples: For each coating type, color and steel substrate combination to be incorporated in the Work. Samples shall be fully cured, 8" square, with stepped coats to show each coat required for system; label each coat.

1.03 Project Conditions

A. Apply coatings only when temperature of surfaces to be coated and surrounding air temperature are within manufacturer recommendations, and will remain so for at least 24 hours. Verify minimum temperatures listed with products in Part 2 of this Section with manufacturer.

B. Do not apply coatings under the following conditions:

1. When conditions are outside the limitations permitted by the product manufacturer.
2. In snow, rain, fog, or mist.
3. When relative humidity exceeds 85 percent.
4. When temperatures are less than 5° F above the dew point.
5. When surfaces are damp or wet, or when ice or frost is present on surfaces.

PART 2 - PRODUCTS

2.01 General

A. Product Callout Abbreviations Key: Steel coating product callouts (e.g. 3E) include the following abbreviations:

2.....2 coats

3.....3 coats

I .....Interior grade

E .....Exterior grade (exposed / concealed)

Z .....Zinc-Rich primer application

B. Coatings by Category:

1. Epoxy:

a. PPG: Amerlock 2 (2 parts).
6 mils (dry film thickness) per coat.
Minimum application air and surface temperature is 20° F.

b. Or approved equal

2. Polyamide Epoxy:

a. Sherwin Williams: Macropoxy 646 Fast Cure Epoxy (2 parts).
6 mils (dry film thickness) per coat.
Minimum application air and surface temperature is 35° F.

b. Tnemec: Tneme-Fascure Series 161 HS (2 parts).
5 mils (dry film thickness) per coat.
Minimum application air and surface temperature is 35° F and rising.

c. Tnemec: High-Build Epoxoline Series 66 HS (2 parts).
5 mils (dry film thickness) per coat.
Minimum application air and surface temperature is 50° F.

d. Or approved equal

C. Colors of Coatings: Where not specifically indicated, Architect will select colors through the sample submittal process.

2.02 Exterior Grade Steel Coatings

A. Steel Coating: 2E

1. Sherwin Williams 2-Coat System:

Prime Coat (Mill White Color):	Macropoxy 646 Fast Cure Epoxy	Sherwin Williams
Top Coat (Gray):	Macropoxy 646 Fast Cure Epoxy	Sherwin Williams

2. PPG 2-Coat System:

Prime Coat (Red Color)	Amerlock 2	PPG
Second Coat (Gray Color)	Amerlock 2	PPG

3. Tnemec 2-Coat System:

Prime Coat (Color: TBD)	Tneme-Fascure 161 HS [Hi-Build Epoxoline 66HS]	Tnemec
Second Coat (Color: TBD)	Tneme-Fascure 161 HS [Hi-Build Epoxoline 66HS]	Tnemec

4. Or approved equal

B. Steel Coating: 3E

1. Sherwin Williams 3-Coat System:

Prime Coat (Mill White Color):	Macropoxy 646 Fast Cure Epoxy	Sherwin Williams
Second Coat (Gray Color):	Macropoxy 646 Fast Cure Epoxy	Sherwin Williams
Top Coat	Acrolon 218 HS	Sherwin Williams

2. PPG 3-Coat System:

Prime Coat (Red Color):	Amerlock 2	PPG
Second Coat (Gray Color)	Amerlock 2	PPG

Top Coat	Amercoat 450H	PPG

3. Tnemec 3-Coat System:

Prime Coat	Tneme-Fascure 161 HS [Hi-Build Epoxoline 66HS]	Tnemec
Second Coat	Tneme-Fascure 161 HS [Hi-Build Epoxoline 66HS]	Tnemec
Top Coat	Endura- Shield 1095	Tnemec

4. Or approved equal

PART 3 - EXECUTION

3.04 Preparation

A. Surface Preparation:

1. Clean substrates of substances that could impair bond of coatings, including dirt, oil, grease, and incompatible paints and encapsulants.

2. Perform surface preparation and cleaning in compliance with coating manufacturer's instructions for the particular substrate conditions.

a. Where the manufacturer indicates more than one preparation standard, the better preparation (as determined in writing by the Architect) shall apply.

b. For existing steel members in exterior restoration work, where the coating manufacturer does not specify preparation, prepare substrate in accordance with the following SSPC standard:

1) SSPC-SP 3 "Power Tool Cleaning" and SSPC-VIS 3 "Guide and Reference Photographs for Steel Surfaces Prepared by Power and Hand Tool Cleaning"

c. For new steel members, where the coating manufacturer does not specify preparation, prepare substrate in accordance with the following SSPC standard:

1) SSPC-SP 6 "Commercial Blast Cleaning" and SSPC-VIS 1 "Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning"

3.04 Manufacturer's Instructions and Recommendations

A. Comply with manufacturer's written installation instructions and recommendations for applications indicated.

B. If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

3.04 Application

A. Apply coating systems as indicated on Drawings, and as follows:

1. New Members (steel and galvanized steel):

a. Perform any indicated shop fabrication prior to application of coatings.

b. Apply complete coating system to all surfaces in shop prior to delivery to Project.

c. Touch up shop applied coating after erection. Clean field welds, bolted connections and abraded areas, and apply primer, intermediate coat (where applicable), and top coat.

2. Existing Members (steel and galvanized steel):

a. Perform any indicated, drilling, structural welding or bolting prior to field application of coatings.

b. Apply coating system to all surfaces in field.

3. Apply coatings to produce uniform surface films without cloudiness, holidays, laps, brush marks, runs, sags, or other surface imperfections.

4. If undercoats or other conditions show through final coat, apply additional coats until cured film has a uniform coating finish, color, and appearance.

3.04 Touch-up

A. At completion of the Work of other trades, touch up and restore damaged or defaced coated surfaces.

END OF SECTION 099713

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PART 2 - SECTION 210000
PART 3 - GENERAL PROVISIONS FOR FIRE PROTECTION SYSTEMS WORK

PART 4 - 1.01 SCOPE AND INTERPRETATION

PART 5 - A. These Specifications and accompanying Drawings provide for the furnishing and the installation of the fire protection systems, including all accessories such as hose stations and cabinets, sprinkler heads, flow switches, etc.

PART 6 - B. The specifications and Drawings require the Master Fire Suppression Piping Contractor, to provide all labor, materials, equipment and appurtenances to perform of all Work pertaining or incidental thereto, which is needed to complete the Work shown on the Drawings and called for in the Specifications.

PART 7 - C. The complete fire protection system and the Work shall be so installed as to give proper and continuous service under all conditions, and shall be in accordance with the requirements of all public authorities having jurisdiction and to the complete satisfaction of the Authority. Any Work shown on the Drawings and not particularly described in the specifications, or vice versa or any Work which may be deemed necessary to complete the Contract shall be provided by the Contractor as part of this Contract.

PART 8 - D. For purposes of clearness and legibility, fire protection Drawings are essentially diagrammatic and size and location of equipment are drawn to scale wherever possible. The Drawings indicate size, connection points and routes of pipe. It is not intended, however, that all offsets, rises and drops are shown. Provide piping as required to fit structure, avoid obstruction, and retain clearances, headroom openings and passageways.

PART 9 - E. Sprinklers shown and described on the Drawings shall be connected to water supply piping in accordance with the requirements of NFPA 13-07, Standard for the Installation of Sprinkler Systems, as amended by Section Q102 of Appendix Q of the 2014 NYC Building Code, despite any possible omission of indication of such piping on the plans. Any question involving the installation of such piping shall be referred to the Authority for resolution.

PART 10 -

PART 11 - F. Fire protection systems shall be tested in accordance with the NYC Building Code and the NYC Fire Code.

PART 12 -

PART 13 - G. Installation of sprinkler and standpipe systems are subject to the special inspection requirements of Chapter 17 of the NYC Building Code.

PART 14 -

PART 15 - The Contractor shall cooperate and provide access to Special Inspectors hired by the Authority for conducting Special Inspections.

PART 16 -

H. Scope of Work: The fire protection work of this contract shall include but shall not be limited to the following systems, equipment and services:

PART 17 -

PART 18 - 1. Provide a complete combined fire protection system consisting of:

PART 19 -

a. Distribution and branch piping, drain lines, hose valves, roof manifolds, Fire Department connections, sprinkler heads, and all associated appurtenances and alarm devices.

PART 20 -

PART 21 - 2. Provide a complete sprinkler system consisting of risers and riser control valves, sprinkler heads, floor control valve assembly, drain lines, Fire Department connections, pumps and pump controllers, and all associated appurtenances and connection to alarm devices.

3. Piping: Installation of complete sprinkler/standpipe systems piping from the point of connection at a flanged fitting at the water source piping installed by the plumbing contractor. Piping includes among other things: Fire Department connections and fittings, O.S & Y valves, control valves, flow switches, floor control valve assembly, drainage piping, sprinkler heads, hose station and cabinets etc.

4. Equipment and devices furnished under other Sections of this Contract that are integrated with the fire protection system, including electrical devices for system monitoring and alarms, shall be piped by this Contractor.

5. All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels, and water-flow switches on all sprinkler systems shall be electrically supervised by the fire alarm system.

6. Valves controlling water supplies to standpipe systems shall be supervised in the open position so that a change in the normal position of the valve will generate a supervisory signal which shall be transmitted to the fire alarm system.

7. Floor Control Valves: For a sprinkler system, an approved, supervised, indicating control valves assembly shall be provided at the point of connection to the riser on each floor in high-rise buildings.

8. The testing of the sprinkler system shall be as per the provisions of Section 213300.

9. Painting requirements for dedicated piping of sprinkler system shall be as per Section 213300.

10. Piping, equipment supports and vibration isolation: To comprise all restraints, hangers, pipe guides, rods, beam clamps,

brackets, pipe anchors, other attachments, floor flanges, masonry anchors, bolts, nuts, washers, and other items as required to fully support all piping and equipments installed under this contract. Provide spring hangers, and vibration mounts where recommended by equipment manufacturers, where required to meet noise abatement regulations and as necessary to prevent piping and equipment vibrations being transmitted to structure.

11. Instrumentation: Provide thermometers, pressure gauges and other items for all piping and equipment installed under this contract, as indicated on contract drawings and as necessary for operation, maintenance and adjustments.

12. Miscellaneous Work: Included shall be all items of materials, piping, controls, wiring and other miscellaneous items not specifically shown on Contract Drawings or called for herein but which are normally furnished and required for a complete installation of this type.

13. Sealing of Openings/penetrations: Openings left in walls, floors, ceilings or partitions shall be sealed. Penetrations into other trades work shall be sealed to an airtight condition. Penetrations through insulated systems, such as refrigerated rooms/equipment, etc, shall be insulated and sealed on both sides of penetration. Sealant on interior side of such insulated spaces/equipment shall be silicone recommended by manufacturer. Finish shall match existing adjoining finish in all respects.

14. Coordination Drawings: The Fire Protection Systems contractor shall cooperate with the HVAC, P&D, and Electrical contractors in the development of the coordination drawings. The drawings, indicating ductwork, steam, hydronic & fuel piping, etc. shall be generated by the HVAC contractor, who in turn is to provide them to the Fire Protection Systems contractor for the inclusion of sprinkler and standpipe piping in this coordination set. This is after the P&D subcontractor has entered its information, and will subsequently be given to the Electrical contractor. The specified order in which the various trade contractors impose their work on the coordination drawings is not intended to grant priority to any one trade contractor in the allocation of space. At the completion of this phase, hold a coordination meeting to eliminate any interference among the trades that the drawings indicate and to avoid any conflicts in installing the Work.

15. Project Record Documents: For the requirements under this provision, refer to Section G01720.

PART 22 - 1.02 <u>CODES AND STANDARDS</u>

PART 23 - A. It shall be unlawful for any person to perform the work referred to under this Fire Protection Specifications and/or shown on the Fire Protection Contract Drawings unless such person is a licensed master fire

suppression piping contractor, as permitted by the NYC Building Code and unless such work is performed under the direct and continuing supervision of a licensed master fire suppression piping contractor.

PART 24 - B. Where requirements for products, materials, systems, equipment, methods and other portion of the work specified herein exceed minimum requirements of regulatory agencies having jurisdiction over the construction work, contractor shall comply with such requirements specified herein, unless specifically approved otherwise by the Authority.

PART 25 - 1.03 TORCH BURNING OPERATION

PART 26 - A. The storing and use of oxygen and combustible gases in conjunction with torch burning apparatus is subject to the Rules and Regulations of the Division of Fire Prevention of the Fire Department of the City of New York, latest Fire Prevention (F.P.) Directive. Fire watches shall be provided during all operations using torches for burning, cutting or welding.

PART 27 - B. Contractor shall apply for and obtain permits for the use and storage of such equipment on premises. The operator of such equipment shall have a certificate of fitness issued by the Fire Department.

PART 28 - C. The cost of permits, certificates, fire watches, apparatus and other items required in the torch burning operation shall be borne by the Contractor at no additional cost to the Authority.

PART 29 - 1.04 PROTECTION OF MATERIALS AND WORK

PART 30 - A. Existing Building

1. Open ends of piping shall be temporarily closed by a proper fitting, until piping is approved and ready for service.

2. Motors and appurtenances shall be covered and protected during the progress of the Work.

PART 31 - 1.05 GUARANTEES AND WARRANTIES

PART 32 - A. The Requirements of Section G01740 and this Article shall apply to Guarantees and Warranties.

PART 33 - B. Contractor's Guarantees: The Contractor guarantees that all Work of this Contract is free from all defects, and is as specified, and that should any defects, which cannot be proven to have been caused by improper use, develop within the space of one year from the date of substantial completion of the Work, such defects shall be made good by the Contractor, free of cost to the NYC DOC.

PART 34 - 1.06 OPENINGS AND CHASES

PART 35 - A. In addition to the requirements in the Article entitled Removals, Cutting, and Patching of Section 017300, the following shall also apply:

Openings through exterior foundation walls shall be made watertight by the Contractor after pipes, conduits and other items passing through the wall have been installed. This building is planned and detailed, and is the intent of these specifications to provide a structure that will prevent the penetration by rodents and vermin of any vacant space where they might find a harborage. The Contractor will be held responsible for securing this condition by the closing of all points of access to such spaces, including the passage of piping and conduits, through all walls, partitions, ceilings and furred out spaces, the closing of access to voids in hollow tile or cinder blocks. There shall be a special inspection of the building with regard to this matter before final acceptance.

PART 36 - 1.07 INSTRUCTION OF CUSTODIAN

PART 37 - A. After the fire protection system has been tested, and all other items adjusted and operating properly to the satisfaction of the NYC DOC, Contractor shall furnish a competent person to instruct the Custodial staff in the operation and maintenance of the systems. Determination of the date and time of such instruction shall be under the direction of the DOC's Representative.

PART 38 -
PART 39 - 1.08 SUBMITTALS

PART 40 - A. Formal submission for approval of manufacturer is not required if the Contractor provides equipment as per manufacturer/model number or series listed in the specification. Formal submissions are also not required for materials and appurtenances (ex. pipes, etc.) if the Contractor provides items as defined in the specification. In this case, Contractor must submit affidavit (for record purposes only) stating that listed equipment and/or items as defined in the specification will be provided. Submittals are mandatory for certain critical items and will be so noted in the respective specifications. Submittals are always required to verify capacity. Schedules, installation instructions, startup manuals, operation and maintenance manuals, and shop drawings are always required to be submitted.

PART 41 -
PART 42 - 1.09 CLEANING AND REPAIR

A. At the completion of the Work and before the final inspection is made the Contractor shall thoroughly flush the system and leave it free from all marks, scratches, stains, and other damage. All pumps, filters, and other equipment shall be cleaned and left in condition to operate, and the work, as a whole, left in perfect working order. Remove all tools, debris and excess materials from the premises.

PART 43 -

PART 44 - B. Contractor shall not leave sharp exposed metal edges (bottom of threaded rods, equipment supports, etc.) that could otherwise present safety hazards to the building's occupants/work staff.

PART 45 -

END OF SECTION

*** * ***

LIST OF SUBMITTALS

SUBMITTAL	DATE SUBMITTED	DATE APPROVED
Coordination Drawings:	_____	_____
Contractor's affidavits For submission of specified Materials/or appurtenances	_____	_____
Painting Schedule:	_____	_____

***

PART 46 - SECTION 213300
PART 47 - SPRINKLER SYSTEM

PART 1 - GENERAL

PART 48 - 1.01 DESCRIPTION OF WORK

PART 49 - A. Provide a wet pipe automatic sprinkler system as specified herein, as shown on the Drawings and as needed for a complete and proper installation. Product specific requirements are contained herein; Section 210000, General Provisions for Fire Protection Systems Work, shall be referred to for general requirements.

PART 50 - 1.02 RELATED SECTIONS

A. 21000 – General FP Work.
B. 213300 – Sprinkler Systems.

PART 51 - 1.03 DESIGN REQUIREMENTS

PART 52 -

A. Based on the fire protection (sprinkler) drawings provided in the Contract Documents, a third party professional engineer licensed in NY State (not a direct employee) having 5 years experience in the design and installation of fire protection systems shall be engaged by the Contractor to provide hydraulic calculations and Drawings meeting the design parameters indicated in paragraph 1.03D below. The Drawings shall comply with applicable codes and incorporate the final pipe sizes, pipe locations, and sprinkler head locations for the fire protection system after coordination with the other trades. The prepared Drawings and calculations will be reviewed by the original Engineer of Record to ensure conformance with the Design parameters.

B. The Contractor's Engineer shall become the Engineer of Record for the fire protection work by filing Form PW-1 with the Building Department, superseding those plans filed by the original Engineer of Record. This PW-1 shall be filed within 90 ccds from the NTP**.** The Contractor's Engineer shall also prepare all necessary documents, including plans, and file such documents under his/her professional seal for approval by the Building Department. The Contractor shall then obtain a construction permit to perform this work based on the approval.

C. The Contractor's engineer is responsible for filing all subsequent revisions/amendments and incorporating as-built conditions into filed plans prior to inspection by the NYC DOC's Construction Inspection Division. These revisions/amendments must be filed in a timely manner to allow for full inspection of the system. Installed conditions that do not match the filed documents will be rejected. The Contractor is also responsible for securing inspection for final acceptance of the installed sprinkler system. Filed and approved Drawings must be available for the field inspection and the filing shall have been completed

in sufficient time to allow for the inspection to take place while all piping is exposed.

D. Design Parameters

1. Sizes of risers, mains, sub-mains, and the originally selected sprinkler booster pump(s) are not to be changed from those shown on the Contract Drawings unless shown to be inadequate. To make changes to these items, the Contractor's engineer must document design flaws in the original system design with hydraulic calculations prepared following the guidelines outlined in Chapter 11 of NFPA 13-07 as amended in Appendix Q102 of the 2014 NYC Building Code. Locations of risers, as well as types of sprinkler heads shown on the Contract Drawings shall not be revised without approval of the original Engineer of Record, as they are typically located where they are needed to meet design intent, freeze protection, etc. Deviations will be allowed for sizing of branch piping and the number of sprinkler heads per branch line contingent upon availability of water supply and compliance with the sizing guidelines outlined in Section 14.5 of NFPA 13-07 for Light Hazard, Ordinary Hazard and Extra Hazard Occupancies. Dry sprinkler heads required to prevent freezing shall be so provided. Use of the "Pipe Schedule Method" in sizing piping of the system design is not permitted.

2. Hydraulic calculations submitted for plan approval and in support of revisions to size of branch piping and relocation and/or revision of number of sprinkler heads shall take into account and maintain a minimum safety factor of 10 psi, which is part of the original design. The 10 psi safety factor is to be applied to the street pressure as indicated by the hydrant flow test, i.e. the available street pressure as indicated by the hydrant flow test is to be reduced by 10 psi and the resulting reduced street pressure together with the pump pressure rise shall be shown to be capable to adequately supply the Contractor's sprinkler system.

3. If extended coverage quick-response sprinklers are employed with the intent of reducing the system area of operation, the density for 1500 sq. ft shall be used. In addition, the number of sprinklers in the design area shall never be less than five (5).

4. The capacity of the originally selected sprinkler booster pump shall be verified to be adequate to supply the water demand for the system as revised by the Contractor's engineer. If inadequate, the Contractor's engineer shall resize the pumps as required and reflect the resizing on the amended Drawings.

~~PART 53 –~~
PART 54 - 1.04 SUPPLEMENTAL SUBMITTALS
PART 55 -

PART 56 - A. Product Data: Certificate for Hose Threads: Verify that the hose threads on Fire Department connections match the threads on equipment used by the New York City Fire Department.

PART 57 -

PART 58 - B. Submit copies of all permits and approved drawings issued by the New York City Building Department.

PART 59 - C. Shop Drawings

PART 60 -

1. Complete sprinkler system layout indicating the locations of sprinkler heads, devices, and accessories. Include separate details of special or not easily visualized piping arrangements and inspector's test valves and connections.

PART 61 -

2. Hydraulic calculations shall be complete and cross referenced to the appropriate drawing sheets.

3. Wiring Diagrams: Power, signal, and control wiring. Differentiate between manufacturer-installed and field-installed wiring.

PART 62 - D. Test Reports as specified in the Field Quality Control Article.

PART 63 - E. Certifications:

PART 64 -

PART 65 - 1. Certification of Installation: Submit certificate upon completion of sprinkler work, which indicates that work has been tested in accordance with NFPA 13-07, as amended by the NY City Building Code, and also that system is operational, complete and has no defects.

PART 66 -

PART 67 - 2. Certificates of Calibration for all test equipment.

PART 68 -

PART 69 - 3. Welders Qualifications/Certifications

PART 70 -

PART 71 - 4. Welding Procedure Compliance with NFPA

PART 72 - F. Maintenance data: Include an instruction manual describing the operation and maintenance of the system in the maintenance manual.

PART 73 - G. Maintenance materials: Sprinkler heads, steel cabinet, wrench, caps and chains

PART 74 - 1.05 <u>SUPPLEMENTAL QUALITY ASSURANCE</u>

PART 75 - A. Codes and Standards

1. NFPA Compliance: Install fire protection systems in accordance with NFPA 13-07: Standard for the Installation of Sprinkler Systems.

2. UL Compliance: Provide sprinkler products in accordance with UL standards; provide UL label on each product.

3. New York City Building Code: Comply with the requirements of the 2014 NYC Building Code and with the Rules and Regulations of the Building Department, The Board of Standards and Appeals, The Division of Fire Prevention of the Fire Department and all other public authorities having jurisdiction.

4. Fire Department/Marshal Compliance: Install sprinkler systems in accordance with local regulations of Fire Department or Fire Marshal.

5. Screw Thread Connections: Comply with local Fire Department/Marshal regulations for sizes, threading and arrangement of connections for fire department equipment to Fire Department connections.

PART 76 - B. All gauges, instruments and test devices shall be provided with a certificate of calibration and calibration curve or letter indicating that a minimum of five (5) test points have been calibrated. The certificate and letter must show the date of last calibration. The calibration date must be within a year of the testing date.

PART 77 - 1.06 EXTRA MATERIALS

PART 78 - A. Heads: For each style and temperature range required, furnish additional sprinkler heads, amounting to six heads when fewer than 300 heads are installed and twelve heads when between 300 and 1200 heads are installed. All the spare heads will be enclosed in a steel cabinet with a special sprinkler wrench to be delivered to the NYC DOC. Obtain a receipt.

PART 79 - B. Deliver also two spare caps and chains for each Fire Department connection. Obtain a receipt.

PART 2 - PRODUCTS

PART 80 - 2.01 MATERIALS AND MANUFACTURERS

PART 81 - A. General

PART 82 -

PART 83 - 1. Provide piping materials and factory fabricated piping products of sizes, types, pressure and temperature ratings, and capacities as indicated on the final approved Drawings and these specifications. Sizes of risers, mains, and sub-mains are not to be changed from those shown on the Contract Drawings, except as indicated in paragraph 1.03D above.

PART 84 -

PART 85 - 2. Provide fittings of materials that match pipe materials used in the sprinkler systems.

PART 86 - B. Identification: Provide identification complying with the following listing:

1. Fire Protection Piping: Plastic pipe markers (color identification: red).

2. Fire Protection Valves: Plastic valve tags: (valves painted green)

3. Fire Protection Signs: Provide the following signs:

a. At each sprinkler valve, sign indicating what portion of system valve controls.

b. At each outside alarm device, sign indicating whom to call if device is activated.

PART 87 - C. Piping: All sprinkler piping shall be UL Listed and FM approved. Provide pipes, fittings, specialties, supports and anchors as shown on the Drawings, and complying with the following listing:

PART 88 -

PART 89 - 1. Aboveground Pipe, Within the Building

PART 90 -

PART 91 - a. In buildings not exceeding 300 ft in height above grade and for pressure up to 300 psi, pipe shall be schedule 10 or 40 standard black steel as per ASTM A53, A135, A795.

PART 92 -

PART 93 - 1) Pipe sizes 2½" and above

PART 94 -

PART 95 - a) Schedule 40 piping with threaded ends, roll-grooving, or welded joints and fittings.

PART 96 -

PART 97 - b) Schedule 10 piping shall only be permitted when joined with either roll-grooved end fittings or welded joints and fittings.

PART 98 -

PART 99 - i) Pipe wall thickness for schedule 10 shall be 0.134 for pipe sizes 5" and 6"; 0.188 for pipe sizes 8" and 10"; 0.330 for 12" pipe

PART 100 -

PART 101 - 2) Pipe sizes 2" and below

PART 102 -

PART 103 - a) Schedule 40 piping with threaded ends, roll-grooving, or welded joints and fittings.

PART 104 -

PART 105 - b)Schedule 10 with welded joints and fittings.

PART 106 -

PART 107 - b. Fittings shall be black, threaded malleable cast iron or flanged cast steel and shall have a pressure rating of 300 psi water working pressure. Pressure ratings shall be cast in or on the fittings.

PART 108 -

PART 109 - c. All welded connections must be performed off site in a shop and be done in accordance with NFPA 51B.

PART 110 -

PART 111 - 2. Mechanical Coupling Type Fittings:

PART 112 -

PART 113 - a. The use of mechanical coupling type fittings on sprinkler system in lieu of threaded fittings or flanged fittings or grooved fittings is acceptable in sizes 2" to 8" inclusive. The mechanical couplings shall be self-centering and shall engage and lock the grooved pipe and/or fittings in a positive couple while allowing for some degree of angular pipe deflection, contraction and expansion. Each coupling shall consist of a malleable iron or ductile iron housing in two or more segments, a single molded composition sealing gasket, and two or more steel oval neck track bolts with hex nuts.

PART 114 -

PART 115 - b. Flexible couplings shall be Style-77 as manufactured by Victaulic Company of America, Gruvlok Fig. 7001 by Anvil, Shurjoint #7707 by Shurjoint Piping Products or approved equal. Entire coupling installation including pipe grooving shall be performed in accordance with the manufacturer's instructions. Only couplings, together with their respective grooved end pipe fittings having fire department approval will be accepted.

PART 116 -

PART 117 - 3. Underground Pipe -Inside and Outside the Building

PART 118 -

PART 119 - a. All pipes shall be ductile iron class 52 for 4" pipe size and class 56 for 6" pipe size mechanical joint pipe. In addition, the name of the manufacturer and the pressure to which the pipe was tested shall be permanently and legibly indicated on all pipes.

PART 120 -

PART 121 - b. Fittings shall be ductile iron mechanical joints with pressure rating of 300 psi. Pressure ratings shall be permanently indicated on the fittings.

PART 122 -

PART 123 - c. Ductile iron pipe shall be lined in accordance with AVWA C104, Cement-Mortar lining for Ductile-Iron Pipe and Fittings for Water.

D. Hangers & Supports: Adjustable steel clevis hangers, adjustable steel band hangers or adjustable band hangers for horizontal-piping hangers and supports.

1. Two-bolt riser clamps for vertical piping supports.

2. Steel turnbuckles and malleable iron sockets for hanger-rod attachments.

3. Concrete inserts, top-beam C-clamps, side beam or channel clamps or center beam clamps for building attachments. C-type clamps used to attach hangers to the building structure in areas subject to earthquakes shall be equipped with a retaining strap or safety hook to prevent movement. See Figure 7-7 of ASHRAE Practical Guide to Seismic Restraint, 1999. C-type clamps, with or without retaining straps, shall not be used to attach braces to the building structure.

4. The seismic bracing of sprinkler piping is governed by Section 9.3 of NFPA 13-07, Installation of Sprinkler Systems as modified by the NY City Building Code. Reference Section 15303, Seismic Controls, Fire Protection Systems

PART 124 - E. Valves: All sprinkler valves shall be UL/FM approved. Provide valves shown on the Drawings, needed for a proper installation, and complying with the following:

PART 125 -

1. Gate Valves: 300 psi WWP: 3/4" to 2", bronze body, OS&Y indicating type; double or wedge disc with threaded ends. 2½" and up: IBBM, OS&Y **or** indicating type; double or wedge disc with end connections as required to suit the piping system.

PART 126 -

2. Butterfly Valves: ductile iron body; double seal or encapsulated ductile iron disc design for bubble tight shut off; stainless steal stems, gear operated; valve operation: integral indicating device.

PART 127 -

3. Valve Locking Devices: chain: 3/16" galvanized steel, welded link; padlock; key tags: 1½" dia. Brass, stamped with valve number and service; "S" hooks: brass, for securing keys to key tags.

PART 128 -

4. Check Valves: IBBM, single clapper swing check with metal to metal or rubber faced checks, suitable for horizontal and vertical installation; end connections as required to suit the piping system; 300 psi.

PART 129 -

PART 130 - F. Control Valves

1. Riser control valves shall be O.S & Y. gate valves with flanged cast iron body, bronze mounted and 300 P.S.I. WWP, Kennedy Valve Fig No. 7168, NIBCO F-697-0, 300 P.S.I. WWP or Stockham G-634. They shall be electrically supervised by tamper switches that send a signal to the fire

alarm system. Control valve location shall be clearly indicated with necessary signs and arrows.

PART 131 - a. Tamper Switches for O.S. & Y gate valve shall be model number OSY2 supervisory switch as manufactured by System Sensor or model #OSYSU-2 by Potter Electric Signal. OSY2 or other approved model number shall be installed on each valve as specified herein. Switches shall be mounted so as not to interfere with the normal operation of the valve and shall be adjusted to operate within two revolutions of the valve control or when the stem has moved no more than one-fifth of the distance from its normal position. The mechanism shall be contained in a weatherproof die cast metal housing that provides a side entrance for 1/2″ conduit and incorporates the necessary facilities for attachment to the valve. A grounding provision shall be provided. The switch assembly shall include two switches each with a rated capacity of 10 Amp @ 125/250VAC and 2.5 Amp @ 24VDC. The cover shall contain tamper-resistant screws for which a security wrench will be provided with each switch. The OSY2 shall be Underwriters Laboratories listed for indoor or outdoor use. The OSY2 shall be Factory Mutual, CSFM, or MEA approved.

PART 132 -

2. Floor control valves shall be installed at the point of connection to the riser on each floor. Valves shall be fitted with a supervising electrical tamper switch. Provide a floor control valve assembly as per Figure A.8.17.4.2(b) of NFPA 13-07 in the sprinkler supply piping on each floor.

a. Floor control valves shall be butterfly valves as specified above the equal of Anvil Star Gruvlok Figure AE-7722-3A, Kennedy Valve Figure G300, NIBCO GD-4765-8N, Tyco Model BFV-N, Globe GL300G or Victaulic FireLock Series 705W. They shall be electrically supervised by tamper switches that send a signal to the fire alarm system. Control valve location shall be clearly indicated with necessary signs and arrows.

1) Tamper Switch for butterfly valve shall be model number PIBV2 Post Indicator Butterfly Valve supervisory switch as manufactured by System Sensor. PIBV2 shall be installed on each valve as specified herein. Switches shall be mounted so as not to interfere with the normal operation of the valve and shall be adjusted to operate within two revolutions of the valve control or when the valve flag has moved no more than one-fifth of the distance from its normal position. The mechanism shall be contained in a weatherproof die cast metal housing, which shall provide a side entrance for 1/2″ conduit and incorporate a 1/2″ NPT nipple for attachment to the valve body. A grounding provision is provided. The

switch assembly shall include two switches each with a rated capacity of 10 Amp @ 125/250V AC and 2.5 Amp @ 24V DC. The cover shall contain tamper-resistant screws for which a security wrench will be provided with each switch. PIBV2 shall be Underwriters Laboratories listed for indoor or outdoor use. The PIBV2 shall be Factory Mutual, CSFM, or MEA approved.

b. The floor control valve assembly shall be installed inside the cabinet specified herein or inside an access panel. Cabinet shall be recessed, 20-gage steel body and white enamel inside. Exposed trim and door shall be type 304 stainless steel with a No. 4 finish. Cabinet door: horizontal duo panel with frame. Provide with clear tempered safety glass, handle and lock keyed alike. Door shall be hinged right or left as required. Cabinet shall be Potter Roemer Model No SS1307-D-M-L Series or Croker Corp. Figure No. 2960-D-BK-LOK. Contractor shall verify size of cabinet, including the appropriate depth for field installation, before ordering same.

PART 133 - c. A floor control valve manifold assembled together by one manufacturer will be permitted. The floor control valve assembly shall include at a minimum: indicating-type control valve with a supervisory switch, pressure gauge, water flow switch, check valve and test and drain connection. Approved control valve manifold shall be as manufactured by GLOBE, model UMC Series or other approved equal.

PART 134 -

3. Sectional and riser control valves 6” and larger shall have a minimum 3/4” valve by-pass.

PART 135 -

PART 136 - G. Special Valves

1. Provide valves, UL listed, in accordance with the following listing. Provide sizes and types that mate and match piping and equipment connections.

a. Alarm Check Valve: Provide alarm check valve, model # Victaulic Series 751 or TYCO Fire Products AV-1 or approved equal, with a water trim by-pass line and a retard chamber that allow for containment of pressure surges and avoidance of false alarms that are caused by intermittent pressure variations. Alarm check valve shall be of ductile construction body and capable of operating in 300 psi working water pressure.

1) The retard chamber shall be constructed of ductile iron body and be coated in the interior as well as in the exterior with a corrosion resistant painting or material. Retard chamber shall be similar to Victaulic Series 752 or other approved equal.

PART 137 -

PART 138 - 2) Other accessories for alarm check valve include Alarm Pressure Switch and a Retard Vent Kit. The Alarm pressure switch actuates an alarm and sends a signal to the fire alarm panel. Approved model#: Victaulic, EPS10-1 or EPS10-2 or other approved equal.

PART 139 -

PART 140 - 3) Retard Vent Kit shall be similar to Victaulic Series 752 V or other approved equal.

b. Water Flow Detector: Provide a paddle or vane-type water flow detector in the sprinkler supply piping in the location indicated on the Drawings. Detector shall be so constructed and installed that any flow of water from the system equal to or greater than that from a single automatic sprinkler of the smallest orifice size installed on the system will result in an audible alarm on the premises within 5 minutes after such flow begins and until such flow stops. The delay mechanism shall be a sealed mechanical pneumatic unit with visual indication of actuation. The actuation mechanism shall include a corrosion paddle or vane inserted through a hole in the pipe and connected by a mechanical linkage to the delay mechanism. Unless noted, enclosures shall be NEMA 4 listed by UL. Listed paddle or vane-type water flow detector does not require approval number from NYC Office of Technical Certification and Research (OTCR). Manufacturer and Model Number: System Sensor WFD Series

PART 141 - c. Pressure Reducing Valves: Provide listed pressure- reducing valves that are intended to keep the maximum outlet pressure to 165 psi at any point in the system. Valves shall be rated for maximum inlet pressure of 250 psi and be suitable for field outlet" set pressure" ranging from 80 to 150 psi. Valves shall be similar to PRV-1 as manufactured by TYCO.

PART 142 -

PART 143 - 1) Pressure gauges shall be provided on the inlet and outlet sides of each pressure-reducing valve.

PART 144 -

PART 145 - 2) A relief valve shall be installed on the discharge side of the pressure-reducing valve

PART 146 -

2. Electrical Subcontractor shall provide the sprinkler electric alarm equipment including the control panel, bells, signs, wiring, etc. All equipment for the Sprinkler Alarm system which is not specifically called for to be provided by any other contractors and/or

subcontractors shall be provided by the Master Fire Suppression Piping Contractor.

3. Approved Manufacturers:

Anvil International/Anvil Star
Firematic Sprinkler Devices
Reliable Automatic Sprinkler Co.
Victaulic Co. of America.
Tyco Fire Suppression & Building Products
Potter Electric Signal Company
Globe Fire Sprinkler Corporation
Shurjoint Piping Products
Or approved equal

PART 147 - H. Gauges: Provide gauges shown on the Drawings and complying with the following:

PART 148 -

PART 149 - 1. Provide pressure gauges of materials, capacities and ranges, designed and constructed for use in service as required:

PART 150 -

PART 151 - a. Type: General use, 1% accuracy, ANSI B40.1

PART 152 -

PART 153 - b. Case: drawn steel or brass, cast aluminum, shatterproof glass lens, 4½" diameter.

PART 154 -

PART 155 - c. Connector: brass with 1/4" male NPT.

PART 156 -

PART 157 - d. Scale: white coated aluminum, with permanently etched markings.

PART 158 -

PART 159 - e. Range: conform to the following:

PART 160 -

PART 161 - 1) Vacuum: 30" Hg - 15 psi

PART 162 -

PART 163 - 2) Water: 0 – 300 psi

PART 164 -

2. Approved Manufacturers:

PART 165 - Ametek/US Gauge
PART 166 - Ernst Flow Industries
PART 167 - Marsh Bellofram
PART 168 - Miljoco Corporatjuion
PART 169 - Trerice (H.O) Co.
PART 170 - Weiss Instruments, Inc.
PART 171 - Wesler Instruments
PART 172 - Or approved equal

PART 173 -

PART 174 - I. Pressure Gauge Cocks:

PART 175 -

PART 176 - 1. Provide pressure gauge cocks between pressure gauges and gauge tees on piping systems. Construct gauge cock of brass with 1/4" female NPT on each end, and "T" handle brass plug.

PART 177 -

PART 178 - a. Syphon: 1/4" straight coil constructed of brass tubing or loop-shaped section of brass, stainless-steel or steel pipe with 1/4" male NPT on each end.

PART 179 - b. Snubber: 1/4" brass bushing with corrosion resistant porous metal disc, through which pressure fluid is filtered. Select disc material for fluid served or pressure rating.

PART 180 -

PART 181 - 2. Manufacturers: same as for pressure gauges

PART 182 -

PART 183 - J. Pressure and/or Temperature Gauge Connector Plugs:

PART 184 -

PART 185 - 1. Provide gauge connector plugs rated for 500 psi at 200°F. Construct of brass and finish in nickel–plate equipped with 1/4" or 1/2" NPS fitting, with self-sealing valve core type neoprene gasketed orifice suitable inserting 1/8" OD probe assembly from dial type insertion pressure and/or temperature gauge. Equip orifice with gasketed screw cap and chain.

PART 186 -

PART 187 - 2. Approved manufacturers:

PART 188 -

PART 189 - Miljoco Corporation
PART 190 - MG Piping Products Co.
PART 191 - Peterson Equipment Co.
PART 192 - Sisco, A Spedco, Inc. Co.
PART 193 - Trerice (H.O) Co.
PART 194 - Watts Regulator Co.
PART 195 - Or approved equal

PART 196 - K. Sprinkler Head

1. Provide sprinkler head of type indicated on Drawings, and in accordance with the following listing. Provide fusible links for 165^{o}F or heat responsive, frangible glass bulb design rated at 155^{o}F unless otherwise indicated on the Drawings. Wet or dry sprinklers that utilize O-rings as seals are not to be used on projects. O-ring sprinklers can degrade over time. These sprinkler heads can corrode, or minerals, salts, and other contaminants in water can affect the polymeric rubber O-ring seals. These factors could cause the sprinkler heads to not activate in a fire. Heads that use Teflon coated Belleville metallic seals rather than a rubber O-ring are to be used.

Upright
Pendent

a. Finishes for Upright, Pendent and Recess Pendent: chrome plate for occupied areas, cast or plain brass for unoccupied areas.

b. Sprinkler Cabinet and Wrench: Provide steel, baked red enameled, sprinkler box with capacity to store sprinkler heads and wrench.

PART 197 -
PART 198 -

c. In light hazard occupancy only, quick-response extended coverage (QREC) sprinklers shall be installed in accordance with their listing. To reduce branch piping as well as the number of heads that are provided, quick-response extended coverage sprinklers shall be installed where indicated in drawings. Typically, gymnasium or other similar fire hazard classifications are ideal for maximizing the protection area by using sidewall horizontal quick-response extended coverage sprinklers.

2. Approved Manufacturers:

Firematic Sprinkler Devices, Inc.
Anvil International/Anvil Star
Viking Corp.
Reliable Automatic Sprinkler Co.
Victaulic Co. of America.
Tyco Fire Suppression & Building Products
Globe Fire Sprinkler Corporation
Or approved equal

PART 199 - L. Fire Department Connections

PART 200 - 1. Flush type shall be of the size indicated on drawings. Fire Department connections shall be polished brass with two individual drop clapper valves and cast iron plugs painted green with brass chain and with polished plate lettered “SPRINKLER" inscribed in letter sizes 1-inch-high and 1/8 inch deep. The letter inscription shall be either an integral part of the plate or on a separate nameplate securely fastened to or above the Fire Department connection. Flush type fire department connections shall be Potter Roemer Fig. 5020G Series (THREADS: N.Y.F.D.), or Croker Corp. Fig. 6030 Series (3” NYCFD inlets). Threads shall be to NYC Fire Department specifications.

PART 201 - 2. Exposed type shall be of the size indicated on the drawings. Fire Department connections shall be polished brass with two individual drop clapper valves, pin lug swivels, plugs and chains painted green and with polished brass wall plate lettered “SPRINKLER" inscribed in letter sizes 1-inch-high and 1/8 inch deep. The letter inscription shall be

either an integral part of the plate or on a separate nameplate securely fastened to or above the Fire Department connection. Expose type shall be Potter- Roemer, Fig. 5750 Series (THREADS: N.Y.F.D.) or Croker Corp. Fig 6430 Series (3" NYCFD inlets). Threads shall be to NYC Fire Department specifications.

PART 202 -

PART 203 - 3. Sidewalk type shall be of the size indicated on drawings. It shall be polished brass, complete with 18" sleeve, cast brass plugs and chains painted green, and floor plate lettered "SPRINKLER" inscribed in letter sizes 1-inch-high and 1/8 inch deep. The letter inscription shall be either an integral part of the plate or on a separate nameplate securely fastened to or above the Fire Department connection. Sidewalk type shall be Potter Roemer 5760 Series (THREADS: N.Y.F.D.) or Croker Corp. Fig. 6513 (3" NYCFD inlets). Sidewalk Fire Department connection risers shall be made of red brass.

a. Where a fence encloses a portion of the building containing a Fire Department connection, Contractor shall provide and secure to the fence directly opposite the Fire Department connection a steel sign containing the following wording: "F.D. Fire Department Connection located...Feet behind Sign." Sign shall be finished in porcelain enamel with one inch red letters on white background.

PART 204 - 4. Approved Manufacturers:

Elkhart Brass Mfg. Co., Inc.
Croker
Potter Roemer
Or approved equal

PART 205 - M. Ladders: Provide permanent heavy steel ladders to provide access to valves in accordance with the code requirements. Ladders shall be of width and height required, shall be made of heavy steel bars and heavy rungs and shall be permanently fastened at location. Where the shut-off valve adjacent to the sprinkler alarm valve is located higher than 7' above the floor, ladder shall be provided where directed.

PART 206 -

PART 207 - N. Pipe Escutcheons

1. Pipe escutcheons shall have inside diameter closely fitting pipe outside diameter or outside of pipe insulation where pipe is insulated. Select outside diameter of escutcheon to completely cover pipe penetration hole in floors, walls, or ceilings; and pipe sleeve extension, if any. Escutcheons shall be cast or sheet brass, solid or split-hinged, with brass set screw. Provide chrome finish for occupied areas exposed to view.

2. Manufacturers:

Zurn Industries, Inc.

PART 208 - McGuire Mfg. Co.

PART 209 - Or approved equal

PART 210 -

PART 211 - O. Pipe Sleeves: Provide pipe sleeves of one of the following. Pipe sleeve must be appropriate type and thickness for the UL firestopping assembly selected:

1. Sheet-Metal: Fabricate from galvanized sheet metal; round tube closed with snaplock joint, welded spiral seams, or welded longitudinal joint. Fabricate from the following gauges: 3" and smaller, 20 gage minimum; 4" to 6", 16 gage; over 6", 14 gage minimum.

2. Steel-Pipe: Fabricate from Schedule 40 galvanized steel pipe; remove burrs.

3. Iron-Pipe: Fabricate from cast-iron or ductile-iron pipe; remove burrs.

PART 212 - 4. Firestop penetration materials for sealing sleeves shall be listed by Underwriters Laboratories and if not listed have MEA or OTCR approval. The materials shall be as specified in Section 07270. For pipes passing through fire-rated floor, cast-in place firestop device with Underwriters Laboratories listing, and if not listed have MEA or OTCR approval, is permitted as an acceptable sleeve alternative to a metallic sleeve with firestopping material. The cast-in place device is a one-step firestopping process that does not require additional firestop penetration materials for sealing the sleeves. The device shall be installed where required for sleeving purposes. The cast-in place firestop device shall not be used for wall applications.

5. Materials for sealing space between each pipe and sleeve through non-rated interior walls shall consist of mineral wool and sealant.

PART 213 -

2.02 PAINTING

PART 214 -

A. Paints used on dedicated sprinkler piping shall not:

PART 215 -

1. Exceed the VOC content limits established in the Green Seal Standard GS-11 Paints, first edition, May 20, 1993.

PART 216 -

2. Exceed the VOC content limit of 250 g/L established in the Green Seal Standard GC-03, Anti-Corrosive paints, second edition, January 7, 1997.

PART 217 -

B. Provide colors indicated in Paragraph 3.03.C

PART 218 -

1. Prime coat – Acrylic primer such as Tnemec 115 Unibond DF or Benjamin Moore D.T.M. Acrylic Low Lustre WP25 – 1.2 Mills DFT or Approved Equal

PART 219 -

2. Two Finish coat**s** – Semi-Gloss Acrylic Latex – 1.3 Mills DFT.

PART 220 -

2.03 SOURCE QUALITY CONTROL

A. Inspection

In addition to other regulatory inspections that the sprinkler system is subject to, welded piping is required to follow the following requirements and be performed by the NYC DOC's Special Inspection Agency.

1. The Contractor shall send a notice of intent to the NYC DOC indicating that they plan to utilize welded piping. The Contractor's notification to the NYC DOC shall be in writing and must be sent 30 days prior to the commencement of the welding at the fabricator's shop.
2. The Contractor shall notify the NYC DOC's representative in writing no less than two (2) business days prior to the commencement of shop welding. The Contractor shall provide access to its shop to the Special Inspector engaged by the NYC DOC.
3. The Special Inspector will conduct periodic visits to the Contractor's shop for a visual review that the Contractor complies with written and procedural quality controls during the welding operation.
4. The special inspector will verify the welder's qualifications as measured by his or her competence to perform welds in accordance with NFPA 51B – Standard for Fire Protection during Welding, Cutting, and Other Hot Work.
5. When welding is performed, the Contractor shall assign to each welder an identification symbol or number to identify the welds performed by that particular welder. The welder shall identify all fabricated welds by imprinting onto the side of the pipe his or her symbol or number.
6. The special inspector will prepare reports of its inspections, and such reports shall indicate that sprinkler pipe inspected was or was not in conformance with approved shop drawings or construction documents.
7. Any pipe with shop welded pipe joints or fittings installed without record of shop inspection or the welder's identification symbol/number shall be removed and replaced, at the Contractor's expense, with pipe that was properly inspected and identified with shop welds.

PART 221 -
PART 3 - EXECUTION

PART 222 - 3.01 INSTALLATION

PART 223 - A. Approval of Sprinkler System: All necessary permits for work in connection with the installation of the sprinkler system shall be obtained by the Contractor before commencing any of the sprinkler work. The NYC DOC will prepare and submit plans to the Building Department and obtain approval of the sprinkler system.

PART 224 - B. Installation of Identification

1. Install fire protection signs on sprinkler system in accordance with NYC Building Code, NFPA 13 requirements.

2. Each valve in the sprinkler system shall be tagged in accordance with the requirements of The New York City Building Code.

PART 225 - C. Piping Installation

1. Pipes and pipe fittings shall be in accordance with Article 2.01.

2. Comply with requirements of NFPA 13 for installation of sprinkler piping materials. Install piping products where indicated, in accordance with manufacturer's written instructions and in accordance with recognized industry practices to ensure that piping systems comply with requirements and serve intended purposes.

3. Coordinate with other work including plumbing piping, as necessary to interface components of sprinkler piping properly with other work.

4. Install drain piping at low points of piping systems and at the alarm valve, a valve drain connection that will be carried down to the floor to discharge into the nearest floor drain, unless otherwise shown on the Drawings. Low points of sprinkler piping that cannot be drained through the alarm valve drain or when there is no alarm valve shall also be provided with drains as may be shown on the Drawings or as required.

5. Install valved hose connections of sizes indicated, or 3/4" size if not otherwise indicated, on sprinkler at ends of branch lines and cross mains at locations where indicated on the Drawings.

6. Install Inspector's test connection where indicated, or at most remote point from riser.

7. All parts of the sprinkler system that may be exposed to frost shall be protected from freezing by any of the following methods:

   a. The piping shall be frost-proofed with insulation having a thermal conductance of 0.1 Btu/hr per square foot of surface per degree F at a mean temperature of 70°F to 75°F (21°C to 24°C). Insulation shall be protected to prevent water infiltration, and when exposed to the weather the insulation shall be covered with a 45 pound (20kg) roofing felt jacket or equivalent.

   PART 226 - b. Electric tracers may be used in conjunction with the insulation.

PART 227 - D. Installation of Valves

1. Install alarm valves and water flow detectors where indicated on the Drawings.

2. Valves shall have built-in tamper switches for use in applications where supervision of the open position of the valve may be desired. The tamper switch is operated by a cam connected to the valve stem. The Contractor should make certain that the valve disc when fully open does not interfere with the operation of other system components immediately adjacent to the valve.

3. Install the floor control valve assembly inside the specified recessed cabinet or an access panel

PART 228 - E. Installation of Sprinkler Pressure Gauges: Install gauges in accordance with Articles 2.01.F, G & H.

PART 229 - F. Installation of Electrical Devices: Provide wiring requirements for electrical wiring of control panel, bells, valves, tamper switch, alarm valves, and water flow detectors.

PART 230 - G. Installation of Sprinkler Head

1. Install sprinkler head at the proper position shown on the Drawings, or as required. Install concealed type sprinkler heads with factory painted white cover plate in areas with suspended ceilings. Install recessed type sprinkler head with manufacturer supply escutcheon.

2. Install sprinkler piping, heads, and all other items and accessories to clear electric lighting fixtures.

PART 231 - H. Installation of Pipe Escutcheons: Install pipe escutcheons on each pipe penetration through floors, walls, partitions, and ceilings. Secure escutcheon to pipe or insulation so escutcheon covers penetration hole, and is flush with adjoining surface.

PART 232 - 3.02 ADJUSTING AND CLEANING

PART 233 - A. Cleaning and Inspecting: Clean and inspect fire protection systems in accordance with Article 3.05.

PART 234 - 3.03 FIELD PAINTING

PART 235 - A. Paints and coatings used in the interior of building to mark piping for identification purposes shall not exceed the VOC content limits established in Section 016100.

PART 236 -

PART 237 - B. Paint exposed sprinkler piping with a prime coat and two finish coats as specified in Section 09900: Painting. Protect sprinkler heads during painting with small paper bags. Painting of sprinkler piping, hangers, and all other items and accessories shall conform to the code requirements.

PART 238 -

PART 239 - C. Painting of Dedicated Piping:

PART 240 -

PART 241 - 1. Cross-over mains, cross-over connections and risers of sprinkler systems that are exposed during alterations shall be painted red and the handles of valves serving the dedicated piping shall be painted green. If under filing done for the alteration work a hydrostatic pressure test is required, painting of pipe shall be done before the test.

PART 242 -

PART 243 -

PART 244 - 3.04 FIELD QUALITY CONTROL/INTERDISCIPLINARY TESTS AND FUNCTIONAL PERFORMANCE TESTS

PART 245 - A. Cooperate with the NYC DOC and provide all required access to facilitate all testing and inspections required by the NYC DOC for quality control and Regulatory Compliance.

PART 246 -

PART 247 - B. Sprinkler Piping Flushing

PART 248 -

PART 249 - Prior to connecting sprinkler risers for flushing, flush water feed mains, lead-in connections and control portions of sprinkler piping. After fire sprinkler piping installation has been completed and before piping is placed in service, flush entire sprinkler system, as required to remove foreign substances, under pressure as specified in NFPA 13. Continue flushing until water is clear, and check to ensure that debris has not clogged sprinkler heads.

PART 250 - C. Test

1. Hydrostatic Testing: After flushing system, test fire sprinkler piping hydrostatically, for one (1) hour period, at not less than 200 psi or 50 psi in excess of the system working pressure, whichever is greater. Check system for leakage of joints. Measure hydrostatic pressure at low point of each system or zone being tested.

2. Repair or replace piping system as required to eliminate leakage and to demonstrate compliance with NFPA standards.

3. Test the entire sprinkler installation, including sprinkler alarm system, in accordance with the requirements of the Building Code and give at least 2 days advance notice in writing of tests and inspections to the Commissioner of Buildings and the NYC DOC. Tests shall be conducted in the presence of the Commissioner or Commissioner's authorized representative and the NYC DOC's Representatives, Fire Department and any other public NYC DOC having jurisdiction. All tests shall be performed as part of this contract.

D. Interdisciplinary Pre-Start-Up and Start-Up Tests/ Inspections

The Contractor shall conduct interdisciplinary pre-start up and start up tests/inspections (e.g. verifying correct installation of sprinkler flow detectors and alarm gong) as per the manufacturer's start up procedures. Contractor shall submit signed start up affidavit signed by the factory authorized service representative certification indicating that all of the manufacturer's pre-start up and start up procedures have been successfully completed.

E. Functional Performance Tests

PART 251 - Contractor shall also submit signed functional performance testing affidavit signed by the factory authorized service representative indicating that all of the manufacturer's functional performance tests (flushing, hydrostatic tests and testing of the sprinkler alarm system activation) have been successfully completed.
PART 252 -

3.06 SPECIAL INSPECTION

PART 253 - A. Installation of sprinkler systems, including all supports and attachments, is subject to the Special Inspection requirements of Section BC 1704.23 of the 2014 NYC Building Code. The NYC DOC will engage a Special Inspector to perform the required inspections.
PART 254 -
PART 255 - B. Cooperate with the NYC DOC and provide all required access to facilitate all testing and inspection related to the Special Inspection.

C. The special inspector shall verify that the material and test certification forms have been transmitted to the Fire Department and the Department of Buildings.

3.07 FLOW TEST

PART 256 -

A. The sprinkler system shall be flow tested as follows:

1. The main drain valve shall be opened and remain open until the system pressure stabilizes

2. The static and residual pressures shall be recorded on the contractor's test certificate

3. Water flow detecting devices including the associated alarm circuits shall be flow tested through the inspector's test connection and shall result in an audible alarm on the premises within 5 minutes after such flow begins and until such flow stops.

4. All components of the sprinkler system and auxiliary must have been pressure tested as a composite system

5. Discharge tests of the sprinkler system shall be conducted using the fire department connections (Fire Department connections)

6. Pressure gauges shall be installed at critical points and readings shall be taken under various modes of auxiliary equipment operation.

7. Water flow alarm signals shall be responsive to discharge of water through the system test pipes (Fire Department connections) while auxiliary equipment is in each of the possible modes of operation

8. Where sprinkler booster pumps are part of the water supply, testing shall be conducted while the pumps are operating.

PART 257 -

END OF SECTION

*** * ***

LIST OF SUBMITTALS

SUBMITTAL	DATE SUBMITTED	DATE APPROVED
Product Data:	_____	_____
1. Manufacturer's Product Data		
2. Installation Instructions		
3. Certificate: Hose Threads		
NYC DOB		
1. Permits:	_____	_____
2. Approved Drawings		
Shop Drawings:	_____	_____
1. Sprinkler Layout		
2. Hydraulic Calculations		
3. Wiring Diagrams		
Test Reports:	_____	_____
Certificates:	_____	_____
1. Certification of Installation:		
2. Certificate of System Painting Completion		
3. Certificate of Calibration For test equipment		
4. Welder's Qualifications		
5. Welding Procedure		
Maintenance Data:	_____	_____
1. Spare Parts Lists		
2. Instruction Manual		
3. Maintenance Manual		
Maintenance Material:	_____	_____
1. Head		
2. Steel Cabinet		
3. Wrench		
4. Caps and Chains		

*** * ***

SECTION 221400
PART 1 FACILITY STORM DRAINAGE

GENERAL

SUMMARY

Section Includes:
- Storm water piping above grade.
- Unions and flanges.
- Pipe hangers and supports.
- Roof drains.
- Cleanouts.

PART 2
REFERENCES
PART 3

American Society of Mechanical Engineers:
- ASME A112.21.2M - Roof Drains.
- ASME B16.29 - Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings - DWV.
- ASME B31.9 - Building Services Piping.

ASTM International:
- ASTM A74 - Standard Specification for Cast Iron Soil Pipe and Fittings.
- ASTM C14M - Standard Specification for Concrete Sewer, Storm Drain, and Culvert Pipe (Metric).
- ASTM C76 - Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe.
- ASTM C76M - Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe (Metric).
- ASTM C443 - Standard Specification for Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets.
- ASTM C443M - Standard Specification for Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets (Metric).
- ASTM C478 - Standard Specification for Precast Reinforced Concrete Manhole Sections.
- ASTM C478M - Standard Specification for Precast Reinforced Concrete Manhole Sections (Metric).
- ASTM C564 - Standard Specification for Rubber Gaskets for Cast Iron Soil Pipe and Fittings.

Cast Iron Soil Pipe Institute:
- CISPI 301 - Standard Specification for Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications.

CISPI 310 - Specification for Coupling for Use in Connection with Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications.

SUBMITTALS
PART 4

Shop Drawings: Indicate dimensions, weights, and placement of openings and holes for roof drains.

Product Data:

Piping: Submit data on pipe materials, fittings, and accessories. Submit manufacturers catalog information.

Hangers and Supports: Submit manufacturers catalog information including load capacity.

Storm Drainage Specialties: Submit manufacturers catalog information, component sizes, rough-in requirements, service sizes, and finishes.

Manufacturer's Installation Instructions: Submit installation instructions for material and equipment.

Manufacturer's Certificate: Certify products meet or exceed specified requirements.

DELIVERY, STORAGE, AND HANDLING

Protect piping systems from entry of foreign materials by temporary covers, completing sections of the Work, and isolating parts of completed system.

PRODUCTS

PIPE HANGERS AND SUPPORTS
PART 5

Manufacturers:

Carpenter & Paterson Inc.
Creative Systems Inc.
Flex-Weld, Inc.
Glope Pipe Hanger Products Inc.
Jay R. Smith Mfg. Co.
Or approved equal

PART 6

Hangers for Pipe Sizes 2 inches (50 mm) and Larger: Carbon steel, adjustable, clevis.

ROOF DRAINS
PART 7

Roof Drain :

Assembly: ASME A112.21.2M.

Body: cast iron with sump.

Strainer: Removable Stainless Steel.
Accessories: Coordinate with roofing type

a. Membrane flange and membrane clamp with integral stop.
b. Adjustable under deck clamp.
c. Roof sump receiver.
d. Waterproofing flange.
e. Leveling frame.
f. Adjustable extension sleeve for roof insulation.
g. Perforated or slotted ballast guard extension for inverted roof.

PART 8
CLEANOUTS

Interior Unfinished Accessible Areas : Caulked or threaded type. Provide bolted stack cleanouts on vertical rainwater leaders.

EXECUTION

PREPARATION

Ream pipe and tube ends. Remove burrs.

Remove scale and dirt, on inside and outside, before assembly.

Prepare piping connections to equipment with flanges or unions.

Keep open ends of pipe free from scale and dirt. Protect open ends with temporary plugs or caps.

INSTALLATION - HANGERS AND SUPPORTS

Inserts:
Provide inserts for placement in concrete forms.
Provide inserts for suspending hangers from reinforced concrete slabs and sides of reinforced concrete beams.
Provide hooked rod to concrete reinforcement section for inserts carrying pipe 4 inches and larger.
Where concrete slabs form finished ceiling, locate inserts flush with slab surface.

Pipe Hangers and Supports:
Install in accordance with ASME B31.9
Support horizontal piping as scheduled.
Install hangers to provide minimum 1/2 inch (15 mm) space between finished covering and adjacent work.
Place hangers within 12 inches (300 mm) of each horizontal elbow.

Use hangers with 1-1/2 inch (40 mm) minimum vertical adjustment. Design hangers for pipe movement without disengagement of supported pipe.

PART 9

INSTALLATION - ABOVE GROUND PIPING

Establish invert elevations, slopes for drainage to 1/8 minimum. Maintain gradients.

Extend cleanouts. Lubricate threaded cleanout plugs with mixture of graphite and linseed oil. Provide clearance at cleanout for snaking drainage system.

Install non-conducting dielectric connections wherever jointing dissimilar metals.

Route piping in orderly manner and maintain gradient. Route parallel and perpendicular to walls.

Install piping to maintain headroom. Group piping to conserve space.

SCHEDULES

PIPE HANGER SPACING		
PIPE MATERIAL	MAXIMUM HANGER SPACING Feet (m)	HANGER ROD DIAMETER Inches (mm)
Cast Iron (All Sizes)	5 (1.5)	5/8 (15)

Note for Cast Iron Pipe: Provide close to joint on barrel. Also provide hanger at each change of direction and each branch connection.

PART 10

PART 11 END OF SECTION

SECTION 221426 – DRAINS

GENERAL

Summary

This Section includes roof and terrace drains, and related accessories.

Related Sections:

014000 (Quality Requirements).

014339 (Mockups, and Physical Quality Assurance Aids).

016100 (Product Requirements).

017310 (Execution).

Submittals

Product Data: For each product specified in Part 2 - Products.

Pre-construction Test Reports:

Existing Drain Flow Test Reports (On-demand). If inadequate drain flow is determined by testing, provide report to Architect immediately.

Field Quality Control Test Reports:

New Drain Test Reports.

Tests and Inspections

Pre-construction Testing

Existing Drain Flow Testing:

Testing: Test drain by inserting a hose and running water a minimum of 15 minutes at a rate of 5 gallons per minute to determine flow adequacy.

Test Reports: Reports shall include date of test, location, test method, and test results stating whether drain flow is adequate, or, if not adequate, state cause and make recommendations for correcting flow.

Field Quality Control Testing:

New Drain Flow Testing:

Testing: Following installation of drains and related piping, inspect drains and drain lines, and test for adequate flow by inserting a hose and running water a minimum of 15 minutes at a rate of 5 gallons per minute. Arrange for Architect to be present at testing, provide five (5) business days' notice.

Test Reports: Reports shall include date of test, location, test method, and test results stating whether drain flow is adequate or not adequate.

PRODUCTS

General

Provide accessories such as under deck and miscellaneous clamps, adapters, sump receivers, extension collars etc. required for proper installation of all roof and terrace drains.

Roof and Terrace Drains

Roof Drain (16 inch diameter)

Bottom outlet:

21500-22	Josam Company
1010	J.R. Smith
ZC-Z100	Zurn Industries

Or approved equal

Side outlet:

7. 21500-66NH-22	Josam Company
1020	J.R. Smith
ZC-Z100-90	Zurn Industries

Or approved equal

Retrofit Drain

Hercules RetroDrain	OMG Roofing Products
RD2150	Zurn Industries

Or approved equal

Note: Dimension of retrofit drain as specified on Drawings.

Accessories

Lead Pan

Comply with ASTM B 749, Sheet lead conforming to ASTM B 29.

Drain Dome

Drain Dome	Josam Company
Drain Dome	J.R. Smith
Drain Dome	Zurn Industries

Or approved equal

Note: Dimension of drain dome as specified on Drawings.

Clamping Ring

Clamping Ring	Josam Company
Clamping Ring	J.R. Smith
Clamping Ring	Zurn Industries

Or approved equal

Note: Dimension of clamping ring as specified on Drawings.

Installation

Field verify type and size of pipe connections required to assure a water-tight connection at roof.

Patch opening surrounding drain body to provide a level surface for setting new drain.

EXECUTION

Manufacturer's Instructions and Recommendations

Comply with manufacturer's written installation instructions and recommendations for applications indicated.

If written instructions are not available or do not apply to Project conditions, consult manufacturer's authorized representative for specific recommendations before proceeding with Work. Document such recommendations in detail and submit to Architect along with Product Data.

END OF SECTION 221426

SECTION 230000 - BASIC HEATING, VENTILATING AND AIR CONDITIONING REQUIREMENTS

PART 1 - GENERAL

PART 258 - 1.01 SCOPE OF WORK

PART 259 - A. Provide labor, materials, tools, machinery, equipment, and services necessary to complete the HVAC Work under this Contract. All systems and equipment shall be complete in every aspect and all items of material, equipment and labor shall be provided for a fully operational system and ready for use. Coordinate the work with the work of the other trades in order to resolve all conflicts without impeding the job progress.

B. Examine the Architectural, Structural, Plumbing and Electrical Drawings and other Divisions, and Sections of the Specifications in order to determine the extent of the Work required to be completed under this Division. Failure to examine all the Contract Documents for this Project will not relieve the Contractor of his/her responsibilities to perform the Work required for a complete fully operational and satisfactory installation.

PART 260 -

PART 261 - C. The Work includes but is not limited to the following systems, equipment and services:

1. HVAC

a. Disconnect, Remove and reinstall existing HVAC equipment.

b. Start up and operational test existing HVAC equipment.

c. Repair HVAC equipment as indicated on drawings.

PART 262 - D. Start-up services shall be included in the bid.

PART 263 - E. All systems, equipment and services specified herein shall be provided complete and ready for use.

PART 264 -

PART 265 -

PART 266 -

1.02 RELATED WORK

PART 267 -

PART 268 - A. Division 1 General Requirements

PART 269 -

B. Division 2, 3, 4, 5, 7 Structural Sections

PART 270 -

C. ..... Division 16 Electrical Sections

PART 271 -

PART 272 - 1.03 SUBMITTALS

PART 273 - A. General**:** Unless indicated otherwise in the specific technical section, if a particular product specified in the technical section is being provided, manufacturer's qualifications and samples (except as listed below), are not required to be submitted. Manufacturer's product data, installation instructions, samples requiring color or texture approval, samples showing thickness and type of material, shop drawings, and calculations are to be submitted. Schedules, startup manuals, operation and maintenance manuals, and shop drawings are always required to be submitted.

PART 274 - B. The following Submittals are required for all Sections of Division 15-Heating, Ventilating, and Air Conditioning. Specific "Supplemental Submittals" or additional information to that listed below that are required to be submitted are defined in each individual technical section.

1. Product Data: Submit manufacturer's product data for equipment including catalog sheets or cuts, specifications, capacity, performance charts, test data, materials, dimensions, weights, furnished specialties and accessories; and installation instructions. Submit start-up instructions where applicable.

2. Shop Drawings: Submit manufacturer's shop drawings detailing equipment assemblies and indicating dimensions, weight, loadings, required clearances, method of field assembly, components, location and size of each field connection.

PART 275 -

PART 276 - C. Where indicated in the Supplemental Submittals of the technical sections, the following submittals are defined as follows:

PART 277 -

1. Maintenance Data: Submit maintenance data and parts list. Include this data and the product data in the maintenance manual in accordance with the requirements of Division 1.

2. Test Report: Submit factory certified test results prior to shipping.

PART 278 -

3. Certificates: Submit written affidavit stating that the Contractor has started up and demonstrated (in the presence of the NYCDOC's Representative and required Department of Corrections personnel, including a Maintenance Representative) that the equipment is operating properly as designed.

PART 279 - D. Piping, Ductwork, and Wiring Diagrams: Submit a complete wiring diagram, ductwork layout, and piping layout of all equipment. All parts of the installation shall be indicated exactly as installed and shall be properly identified. Valve identification numbers shall agree with valve tags. All equipment, valves and piping shall be clearly identified, shown and labeled.

PART 280 - E. Coordination Drawings: Provide complete coordination Drawings showing interface of all mechanical trades with the Architecture of the Building. All copies are to be signed. The Contractor is to keep a copy of the signed coordination drawing on the site.

PART 281 - 1.04 QUALITY ASSURANCE

PART 282 - A. Manufacturer's Qualifications: If a particular product specified in the technical section is not being provided, provide manufacturer's qualifications.

Provide manufacturer's qualifications that indicate that the firms are regularly engaged in manufacture of equipment, of types, materials, and sizes required, whose products have been in satisfactory use in similar service for not less than five years.

B. Codes and Standards: All equipment furnished and installed shall meet or exceed the referenced Standards and Codes in all respects – installation, performance, etc.

References and industry standards listed herein and in other HVAC Sections are applicable to the Work specified in the Section. Unless more restrictive criteria is explicitly called-out for in other HVAC Specifications or mandated by the Building Code, the requirements described in the referenced standards below shall be deemed applicable to the Work. This includes language in the documents in the form of a recommendation or suggestion, which shall be deemed as mandatory.

PART 283 -

1. NFPA
2. NYC BUILDING CODE
3. ASHRAE
4. SMACNA
5. ELECTRICAL IEEE STANDARDS
6. STATE DEC REGULATIONS
7. NYCDEP DEPARTMENT OF AIR RESOURCES CRITERIA
8. ASME
9. ANSI
10. NY INDUSTRIAL CODE RULE 4
11. ABMA
12. UL
13. LOCAL LAWS
14. NCPWB
15. FCI
16. EJMA
17. MSS
18. ABMA
19. IRI
20. MEA
21. AABC
22. NEBB

23. ARI
24. AMCA
25. ADC
26. NEMA
27. NEC
28. ASTM
29. FCI

PART 284 -

PART 285 - 1.05 ACCESSIBILITY

PART 286 - A. Install access for servicing and maintenance. Coordinate the final location of concealed equipment and devices requiring access with final location of access panels and doors. Allow ample space for removal of all parts that require replacement or servicing.

PART 287 - B. For access doors to valves, dampers and all other HVAC type of items, accessories and equipment, concealed in walls, furring's and hung ceilings; Door shall permit full access to the equipment.

PART 288 - 1.06 ROUGHING-IN

PART 289 -

PART 290 - A. Verify final locations for roughing work with field measurements and with the requirements of the actual equipment being connected. Coordinate with General Construction drawings.

PART 291 -

PART 292 - 1.07 MECHANICAL INSTALLATIONS

PART 293 - A. Coordinate HVAC equipment and materials installation with other building components.

PART 294 - B. Verify all dimensions by field measurements.

PART 295 - C. Arrange for chases, slots, and openings in other building components to allow for HVAC installations.

D. Sequence, coordinate, and integrate installations of HVAC materials and equipment for efficient flow of the Work. Give particular attention to large equipment requiring positioning and entrance prior to the close of the building.

PART 296 - E. Coordinate the cutting and patching of building components to accommodate the installation of HVAC equipment and materials.

PART 297 - F. Where mounting heights are not detailed or dimensioned, install HVAC services and overhead equipment to provide the maximum headroom possible.

PART 298 - G. Install HVAC equipment to facilitate maintenance and repair or replacement of equipment components. As much as practical, connect equipment for ease of disconnecting and minimum of interference with other installations.

PART 299 - H. Coordinate the installation of HVAC materials and equipment above ceilings with suspension system, light fixtures, and all other installations and accessories.

PART 300 - I. Provide all rigging, disassembly and reassembly of equipment including the furnishing and installation of dunnage and all other required and necessary accessories.

PART 301 - 1.08 COORDINATION DRAWINGS

PART 302 - A. Provide coordination drawings. Coordination drawings shall be completed so as not to delay the progress of the Project.

B. The coordination drawings shall be prepared in the following manner: HVAC Subcontractor shall prepare a set of mylars drawn to the scale of 3/8"=1'-0", indicating thereon ductwork, steam and return piping, refrigerant piping, and sprinkler work, plus structural and architectural background details. HVAC Subcontractor shall deliver this set of mylars to Plumbing and Drainage, who will draw the P&D work to scale on the mylars. Then the HVAC Subcontractor shall deliver the set of mylars to Electrical, who will superimpose the Electrical work on the drawings. The elevation, location, support points, and size of all lines shall be indicated. All beam and slab penetrations shall be indicated and sizes shall be coordinated. HVAC Contractor shall provide shop drawings for all roof openings required for installation of HVAC systems. Roof opening shop drawings shall be dimensioned from the centerline of the nearest structural column and coordinated with the approved HVAC equipment, sheet metal shop drawings, framing plan, etc. The specified order in which the Subcontractors impose their work on the mylars is not intended to grant priority to any one Subcontractor in the allocation of space. At the completion of this phase, hold a coordination meeting to eliminate any interference among the trades that the drawings indicate and to avoid any conflicts in installing the Work. Should any problems of coordination require architectural or structural change of design, this change shall be submitted to the NYCDOC for approval.

PART 303 - C. If any trade installs any Work before coordinating with the Work of other trades, that Trade shall make necessary changes to correct the condition without extra cost to the NYCDOC. This requirement for "Coordination Drawings" shall not be construed as authorization to make any unauthorized changes to the Drawings. All Design Drawings space allocations shall be maintained, such as ceiling height, chase walls, equipment room size, and all other items and accessories, unless prior written authorization is received from the NYCDOC to change them.

PART 304 - D. After the set of mylars has been coordinated, and all necessary changes have been made, each Subcontractor shall sign the coordination drawings, attesting to the agreement that the work is clear.

PART 305 - E. Furnish (in writing, with copies to the Engineer and the NYCDOC) any information necessary to permit the Work to be installed satisfactorily and with the least possible interference or delay.

1.09 CUTTING AND PATCHING

PART 306 -

PART 307 - A. Do not endanger or damage installed Work through procedures and processes of cutting and patching.

PART 308 - B. Arrange for repairs required to restore the work, because of damage caused as a result of HVAC installations.

PART 309 - C. No additional compensation will be authorized for cutting and patching Work that is necessitated by defective or non-conforming installations.

PART 310 - D. Perform cutting, fitting, and patching of HVAC equipment and materials required to:

1. Remove and replace defective work.

2. Remove and replace work not conforming to requirements of the Contract Documents.

3. Remove samples of installed work as specified for testing.

4. Install equipment and materials in existing structures.

5. Cut, remove and legally dispose of selected HVAC equipment, components, and materials as indicated, including, but not limited to removal of HVAC piping, heating units and trim and other HVAC items made obsolete by the new work.

6. Protect the structure, furnishings, finishes, and adjacent materials not indicated or scheduled to be removed.

PART 311 -

PART 312 - 1.10 EQUIPMENT NOISE AND VIBRATION

PART 313 - A. Provide equipment and systems that, as defined herein, shall be quiet and free of apparent vibration in operation.

PART 314 - B. The vibration shall not be apparent in occupied areas of the building. Both the balancing of rotating machinery and the installation of vibration isolation at various locations are required**.**

PART 315 - C. Obtain equipment that is quiet in operation as compared to other available equipment of its size, capacity, and type; install equipment so that a minimum amount of noise and/or vibration is transmitted to the building; and fabricate the duct system so that air noises generated in the system are held to an absolute minimum.

PART 316 - D. Adjust all the equipment RPM, noise production and vibration in order to avoid any production of resonance in any system.

PART 317 - 1.11 EQUIPMENT GUARDS

PART 318 - A. Provide easily removable expanded metal guards for all belts, couplings, exposed fan inlets and outlets, and other moving parts of machinery. Provide tachometer openings in the guards at least 2" in diameter, for all belt-driven or variable speed machinery. Equipment guards shall comply with OSHA requirements.

PART 319 - 1.12 ELECTRICAL CHANGES TO MECHANICAL EQUIPMENT

PART 320 - A. If any changes made in equipment submitted are approved especially as to the sizes of the motors, notify Electrical.

PART 321 -
PART 322 - 1.13 DELIVERY, STORAGE, AND HANDLING

PART 323 - A. Handle equipment carefully to prevent damage, breaking, denting, and scoring. Do not install damaged units or components; replace with new.

PART 324 - B. Store equipment in clean dry place. Protect from weather, dirt, fumes, water, construction debris, and physical damage.

C. Comply with manufacturer's rigging and installation instructions for unloading equipment, and moving them to final location.

PART 325 - 1.14 GUARANTEES, WARRANTIES, BONDS, AND MAINTENANCE CONTROL

A. Refer to General Sections for procedures and submittal requirements for warranties. Refer to individual equipment specifications for warranty requirements.

1. Compile and assemble the warranties specified for HVAC work into a separated set of documents, tabulated and indexed for easy reference.

2. Provide complete warranty information for each item to include product or equipment including duration of warranty or bond; and names, addresses, and telephone numbers and procedures for filing a claim and obtaining warranty services.

3. Unless otherwise noted in the specific sections, warranties for the equipment, workmanship and materials shall be provided for the period of one year. Exceptions include, but are not limited to, the five-(5) year warranty provided for the refrigeration compressors.

PART 326 -

4. Manufacturers', not Contractors' warranties, shall be provided for all HVAC equipment and accessories.

PART 327 -

5. All warranties are to start from the date of Substantial Completion.

PART 328 -

PART 329 - 1.15 OPERATIONS, TRAINING, AND MANUAL

PART 330 - A. Refer to General Sections for procedures and requirements for preparation and submittal of operation and maintenance manuals of each HVAC equipment. Refer to individual equipment specifications for maintenance manual additional requirements. In addition, include the following information:

1. Description of function, normal operating characteristics and limitations, performance curves, engineering data and tests, and complete nomenclature and commercial numbers of all replaceable parts.

2. Manufacturer's printed operating procedures to include start-up, break-in, routine and normal operating instructions; regulation, control, stopping, shut-down, and emergency instructions; and summer and winter operating instructions.

3. Maintenance procedures for routine preventative maintenance and troubleshooting; disassembly, repair, and reassemble; aligning and adjusting instructions.

4. Servicing instructions and lubrication charts and schedules.

PART 331 - B. Bind all the other Sections maintenance manuals in a single final Operating and Maintenance Manual.

PART 332 - 1.16 PAINTING

PART 333 -

PART 334 - A. Painting Schedule

1. No on-site painting is required on the following items unless specifically indicated otherwise:

a. Concealed metal and piping.

b. Piping or ductwork to be insulated.

c. Insulation on piping or ductwork in unfinished spaces or concealed.

d. Mechanical equipment with a factory applied baked on enamel finish, not specified to be insulated or provided with an enameled steel insulated jacket.

2. Paint the following:

a. Hangers, Supports, Restraints and Accessories:

1) All black steel or iron pipe hangers, rods, inserts, brackets, restraints**,** and accessories for supporting piping systems and duct systems: 1 coat of primer and 2 coats of latex semi-gloss enamel. Paint black steel hanger rods, threaded on the job site, with a primer immediately after installation.

PART 335 -

PART 336 - F. Color Coding:

1. Apply finish paints of colors indicated opposite the various items listed below where such items are installed in Mechanical Equipment Rooms:

Piping, Exposed - Bare and Insulated on Unfinished Spaces and Rooms:

Refrigerants	Green
Sprinkler Systems	Red
Steam Supply (all pressures)	Yellow
Steam Condensate Returns	Yellow

PART 337 - 1.17 ADJUSTING AND CLEANING

PART 338 - A. Refer to Section 017310 for general requirements for final cleaning.

PART 339 - B. Alignment: Check alignment, and where necessary, realign equipment within recommended tolerances by the manufacturer and in presence of manufacturer's service representative and the NYCDOC.

PART 340 -

PART 341 - 1.18 TORCH BURNING OPERATION

PART 342 - A. The storing and use of oxygen and combustible gases in conjunction with torch burning apparatus is subject to the Rules and Regulations of the Division of Fire Prevention of the Fire Department of the City of New York, latest Fire

Prevention (F.P.) Directive. Fire watches shall be provided during all operations using torches for burning, cutting or welding.

PART 343 - B. Contractor shall apply for and obtain permits for the use and storage of such equipment on premises. The operator of such equipment shall have a certificate of fitness issued by the Fire Department.

C. The cost of permits, certificates, fire watches, apparatus and other items required in the torch burning operation shall be borne by the Contractor at no additional cost to the NYCDOC.

PART 344 -

PART 2 - PRODUCTS - NOT APPLICABLE

PART 3 - EXECUTION

PART 345 - 3.01 INSPECTION

PART 346 - A. Examine areas and conditions under which equipment is to be installed. Do not proceed with work until conditions are suitable.

PART 347 -

3.02 INSTALLATION

PART 348 -

PART 349 - A. Install equipment in accordance with manufacturer's installation instructions. Install units plumb and level, firmly anchored in locations indicated, and maintain manufacturer's recommended clearances.

PART 350 - B. Support: Install equipment on 4" high concrete pad when installed on floor, with vibration isolators and restraints as required.

PART 351 - C. Accessories: Install equipment accessories not installed at factory and shown on the Drawings.

D. Connections: Connect all equipment and accessories as recommended by manufacturer for a complete installation.

PART 352 -

PART 353 - E. Contractor shall not leave sharp exposed metal edges (bottom of threaded rods, mechanical equipment supports, etc.) that could otherwise present safety hazards to the building’s occupants/work staff.

3.03 START-UP AND DEMONSTRATION/TRAINING/SERVICE

PART 354 -

A. Start-Up and Demonstration/Training: The Contractor shall start-up and demonstrate, in the presence of the NYCDOC's Representative including Maintenance Representative, the proper operation of all equipment provided in this Contract. The Contractor shall also provide training to the NYCDOC’s designated Representatives.

PART 355 -

PART 356 - B. Service: Provide the services of a competent field service representative to furnish service to the facility during construction and during the warranty period. Service must be performed within 48 hours from the time of notification (24 hours for emergencies).

PART 357 - 3.04 ADJUSTING AND CLEANING

PART 358 - A. Cleaning: Clean factory-finished surfaces. Repair any marred or scratched surfaces with manufacturer's touch-up paint.

PART 359 -

PART 360 - 3.05 SPARE PARTS

PART 361 -

PART 362 - A. Provide a set of spare parts that may be normally required, such as belts, filters, etc. that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

PART 363 -

PART 364 -

PART 365 -

PART 366 -

PART 367 -

3.06 TESTING

PART 368 -

A. The Contractor shall furnish energy, fuel, oil, water, air, light and electrical instruments as required for all testing. Reference Section 235900, Cleaning and Testing.

PART 369 -

PART 370 -

PART 371 -

END OF SECTION

SECTION 230001

HVAC PIPING

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

N/A

1.02 SUBMITTALS

A. Product Data:

1. Catalog sheets and specifications indicating manufacturer name, type, applicable reference standard, schedule, or class for specified pipe and fittings.

2. Material Schedule: Itemize pipe and fitting materials for each specified application in Pipe and Fittings Schedule in Part 3 of this Section. Where optional materials are specified indicate option selected.

B. Quality Control Submittals:

1. Installers Qualification Data:

a. Welder Qualification Data: Copies of certification; include names, home addresses.

b. Welding Procedures:

1) Copy of QW-482 "Suggested Format for Welding Procedure Specification (WPS)" for all welders for all weld types.

2) Copy of QW-483 "Suggested Format for Procedure Qualification Record (PQR)" as specified in Welding Quality Assurance below for all weld types.

c. Welders' Certificates:

1) Copy of QW-484 "Suggested Format for Manufacturer's Record of Welder or Welding Operator Qualification Tests (WPQ)" for all welders for all weld types.

2. Welding Procedure Submittals: Submit the following:

a. Welding Procedure Specifications: Provide for each weld type.

1) Recommended to use ASME Form E00006, QW-482 "Suggested Format for Welding Procedure Specification (WPS)".

b. Procedure Qualification Records: Provide for each weld type.

1) Recommended to use ASME Form E00007, QW-483 "Suggested Format for Procedure Qualification Record (PQR)".

3. Contract Closeout Submittals:
   a. Copy of Final Hydrostatic Testing Record Log.

1.03 QUALITY ASSURANCE

A. Qualifications of Welding Procedures, Welders and Welding Operators: Comply with the following:

B. Welding Procedures:

1. Record in detail, and qualify the Welding Procedure Specifications for every welding procedure that is proposed to be used for the Project.
2. Develop procedures for all metals included in the work.
3. Qualify the procedures for making transition welds between different materials, or between plates or pipes of different wall thickness.
4. Qualification for each welding procedure shall conform to the requirements of ASME B31.1, and as specified herein.
5. Describe the method for each system including the number of beads, the volts, the amperes, and the welding rod for various pipe thicknesses and materials.
6. The welding procedures shall specify end preparation for butt welds including cleaning, alignment, and root openings.
7. Preheat, interpass temperature control, and postheat treatment of welds shall be as required by approved welding procedures, unless otherwise indicated or specified.
8. Approval of any procedure does not relieve the Contractor of the sole responsibility for producing acceptable welds.
9. Welding procedures shall be identified individually and shall be clearly referenced to the type of welding required for this project.
10. These procedures shall be the same as those used for all pipe welder qualification tests, all shop welds, and all field welds.
11. Provide procedure qualification records for all proposed Welding Procedure Specifications (WPS).

C. Welder Qualification:

1. WPQs:
   a. Provide welder qualifications for each welder for each weld type.
   b. Recommended to use ASME Form E00008, QW-484 “Suggested Format for Manufacturer’s Record of Welder or Welding Procedure Qualification Tests (WPQ).”
2. Perform WPQs under the witness of an independent agency.
   a. The witness shall be a representative of an independent testing agency, Authorized Inspector, or consultant,

any of which must be approved by the National Certified Pipe Welding Bureau.

b. The qualifying test segment must be a 2 inch nominal pipe size with wall thickness within range of the WPS.

c. Tests position shall be "6G" per ASME Section IX.

3. Evidence of Continuity: Welder qualifications must be current.

a. If the qualification test is more than 6 months old, provide record of welding continuity for each welder.

b. Record of welding continuity shall show that the welder in question has performed welding to the procedure in question without a 6 month continuous span of inactivity since the date that the welder qualification test was passed for the submitted welding procedure.

c. Record of welding continuity shall include, at a minimum, the welder's employer name and address, the date the welder qualification test was passed, and the dates indicating welding continuity including welding procedure for each date.

D. Weld Records:

1. For all welding within the scope of ASME B31.1, submit for approval an administrative procedure for recording, locating, monitoring, and maintaining the quality of all welds to be performed on the project.

a. The weld record shall include but not be limited to drawings and schedules identifying location of each weld by individual number, identification of welder who performed each weld by individual welder's name, stamp number, date and WPS used.

2. After achieving qualification, but before being assigned work, each qualified person shall be assigned an identifying number by the Contractor to be used to identify all of his welds.

a. A list of qualified persons with their respective numbers shall be submitted and maintained accurately with deletions and additions reported promptly.

3. Upon completing a joint, the welder shall mark the pipe not more than 6 inches from the weld with the identifying number and the last two digits of the year in which the work was performed.

a. Make identification marks with a rubber stamp or felt-tipped marker with permanent, weatherproof ink or other methods approved by the Director's Representative that do not deform the metal.

b. Place identification marks for seam welds adjacent to the welds at 3-foot intervals.

c. Identification by die stamps or electric etchers is not acceptable.

d. Provide required markers. Substitution of a map of welds with welders' names is not acceptable.

4. Maintain a constantly updated log available to the Director's Representative at all times.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Pipe Storage:

1. Upon the receipt of each shipment of pipe on the job, maintain the pipe marking, and store pipe in accordance with ASTM material specifications, and method of manufacture (seamless, etc.) of each length of pipe.

2. Pipe markings shall be clearly readable at the time of pipe installation.

3. If at the time of its installation, any length of pipe not readily identifiable will be subject to rejection, or arbitrary downgrading by the Director's Representative to the lowest grade which has been received on the job to that date.

4. Provide factory-applied plastic end-caps on each length of pipe and tube, except for concrete, corrugated metal, bell and-spigot, and clay pipe.

a. Maintain end-caps through shipping, storage and handling to prevent pipe-end damage and prevent entrance of dirt, debris, and moisture.

PART 2 PRODUCTS

2.01 STEEL PIPE AND FITTINGS

A. Standard Weight Schedule 40 or Extra Heavy Weight Schedule 80, Black .

B. Flanges, Welding Neck Type, Same Pressure Rating as Adjoining Pipe: ASME B16.5.

E. Weld Fittings, Carbon Steel:

1. Butt Welding Type: ASME B16.9.

a. Allied Piping Products Co., Inc.'s Branchlets, Type 1 or 2.

b. Bonney Forge Corp.'s Weldolets.

F. Malleable Iron, Steam Pattern Threaded Fittings:

1. 150 lb Class: ASME B16.3.

G. Unions: Malleable iron, 250 lb class, brass to iron or brass to brass seats.

I. Couplings: Same material and pressure rating as adjoining pipe, conforming to standards for fittings in such pipe. Use taper tapped threaded type in screwed pipe systems operating in excess of 15 psig.

J. Nipples: Same material and strength as adjoining pipe, except nipples having a length of less than one inch between threads shall be extra heavy.

2.02 DIELECTRIC CONNECTORS

A. Dielectric Fitting: Bronze ball valve with end connections and pressure rating to match associated piping.

1. Nipples with inert non-corrosive thermoplastic linings are not acceptable.

PART 3 EXECUTION

3.01 INSTALLATION - GENERAL

A. Install piping at approximate locations indicated, and at maximum height.

B. Install piping clear of door swings, and above sash heads.

C. Make allowances for expansion and contraction.

D. Allow for a minimum of one inch free air space around pipe or pipe covering, unless otherwise specified.

E. Install vertical piping plumb.

F. Use fittings for offsets and direction changes, except for Type K soft annealed copper tube.

G. Cut pipe and tubing ends square; ream before joining.

H. Threading: Use American Standard Taper Pipe Thread Dies.

1. Thread brass pipe with special threading dies.

I. Make final connections to equipment with unions, flanges, or mechanical type joint couplings.

3.02 WATER AND PROPYLENE GLYCOL PIPING SYSTEMS

A. Pitch:

1. Pitch horizontal piping 1/8 inch per 10 feet in direction indicated on drawings. When direction of flow is not indicated, pitch supply piping up in direction of flow and return piping downward in direction of flow.
2. Pitch single pipe systems up in direction of flow 1/8 inch per 10 feet.

B. Air Vents: Install air vents at locations indicated on the drawings, and at each high point in system. Use manually operated air vents, unless otherwise indicated.

C. Drains:

1. Install piping to be completely drainable. Provide drains at low points, consisting of a 1/2 inch valve with a hose bibb connection, and at the following locations and equipment:

a. In each section of piping separated by valves.
b. For each riser, where riser or runout to riser has a valve installed.
c. For each heating cooling unit, having valves in supply and return connections.
d. In low point of piping to each down fed convector or radiator.

D. Runouts: Connect runouts to upfeed risers to top of mains, and runouts to downfeed risers to bottom of mains.

3.03 PIPE AND FITTING SCHEDULE

A. Abbreviations: The following abbreviations are applicable to the Pipe and Fitting Schedule:

BS	Black steel.
ST	Steel.
SW	Standard weight.
WE	Weld end.
XH	Extra heavy weight.

B. Where options are given, choose only one option for each piping service. No deviations from selected option will be allowed.

C. Schedule of Pipe and Fittings for the different piping services is as follows:

1. Chilled Water (CWS & CWR) 125 psig and less:

a. 3 inch and less: SW BS pipe with SW fittings.

b. 4 inch Size: SW BS pipe, with SE SW fittings, or WE SW ST fittings.

c. 5 inch and Up: SW BS pipe, with WE SW ST fittings.

2. Chilled Water (CWS & CWR) 126 psi to 250 psi:

END OF SECTION

SECTION 230700
PIPING INSULATION

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

N/A

1.02 ABBREVIATIONS

A. FS: Federal Specification.

B. K: Thermal Conductivity, i.e., maximum Btu per inch thickness per hour per square foot.

C. pcf: Pounds per cubic foot.

D. PVC: Polyvinylchloride.

1.03 SUBMITTALS

A. Product Data: Manufacturer's catalog sheets, specifications and installation instructions for the following:

1. Insulation Materials.
2. Jacket Materials.

B. Quality Control Submittals:

1. Installers Qualification Data:
    a. Name of each person who will be performing the Work, and their employer's name, business address and telephone number.
    b. Furnish names and addresses of the required number of similar projects that each person has worked on which meet the qualifications.

1.04 QUALITY ASSURANCE

A. Qualifications: The persons installing the Work of this Section and their Supervisor shall be personally experienced in mechanical insulation work and shall have been regularly employed by a company installing mechanical insulation for a minimum of 5 years.

B. Regulatory Requirements:

1. Insulation installed inside buildings, including laminated jackets, mastics, sealants and adhesives shall have a Fire Spread/Smoke Developed Rating of 25/50 or less based on ASTM E 84.

PART 2 PRODUCTS

2.01 PIPING INSULATION

A. Flexible Elastomeric Foam Insulation:
1. FM tested and approved, meeting the following:
a. Maximum Water Vapor Transmission: 0.10 perm - inch based on ASTM E 96, Procedure A.
b. K of 0.27 at 75 degrees F based on ASTM C 518 or C 177.
c. Fire Spread/Smoke Developed Rating: 25/50 or less based on ASTM E 84.
2. Pipe Insulation: ASTM C 534, Type I.
3. Polyethylene and polyolefin insulation is not acceptable.

C. High Density Jacketed Insulation Inserts for Hangers and Supports:
1. For Use with Fibrous Glass Insulation:
a. Cold Service Piping:
1) Polyurethane Foam: Minimum density 4 pcf, K of 0.13 at 75 degrees F, minimum compressive strength of 125 psi.
2. For Use with Flexible Elastomeric Foam Insulation: Hardwood dowels and blocks, length or thickness equal to insulation thickness, other dimensions as specified or required.

D. Cements:
1. Fibrous Glass Thermal Insulating Cement: Asbestos free; ASTM C 195.
2. Fibrous Glass Hydraulic Setting Thermal Insulating and Finishing Cement: ASTM C 449/C 449M.

2.02 INSULATION JACKETS

A. Laminated Vapor Barrier Jackets for Piping: Factory applied by insulation manufacturer, conforming to ASTM C 1136, Type I.
1. Type I: Reinforced white kraft and aluminum foil laminate with kraft facing out.
a. Pipe Jackets: Furnished with integral 1-1/2 inch self sealing longitudinal lap, and separate 3 inch wide adhesive backed butt strips.

2. Laminated vapor barrier jackets are not required for flexible elastomeric foam insulation.

B. Canvas Jackets: Cotton duck, fire retardant, complying with NFPA 701, 4 oz or 6 oz per sq yd as specified.

C. Premolded PVC Fitting Jackets:
1. Constructed of high impact, UV resistant PVC.
a. ASTM D 1784, Class 14253-C.
b. Working Temperature: 0-150 degrees F.

D. Metal Jacketing:
1. Aluminum: ASTM B 209, Alloys 1100, 30003, 3105 or 5005, Temper H14, 0.016 inch thick.
a. Factory Pre-formed Sectional Pipe Jacketing:
1) Smooth outer finish with integral bonded laminated polyethylene film - kraft paper moisture barrier underside.
2) Pittsburgh or modified Pittsburgh longitudinal lock seams.
3) 2 inch overlapping circumferential joints with integral locking clips, or butt joints sealed with 2 inch wide mastic backed aluminum snap bands.
b. Fastening Devices:
1) Strapping: Type 18-8 stainless steel, 0.020 inch thick, 1/2 and 3/4 inch wide as specified.
2) Wing Seals: Type 18-8 stainless steel, 0.032 inch thick.
3) Sheet Metal Screws: Panhead, Type A, hardened aluminum, and stainless steel.

2.03 ADHESIVES, MASTICS, AND SEALERS

A. Lagging Adhesive (Canvas Jackets): Childers' CP-50A, Epolux's Cadalag 336, Foster's 30-36.

B. Vapor Seal Adhesive (Fibrous Glass Insulation): Childers' CP-82, Epolux's Cadoprene 400, Foster's 85-75 or 85-20.

C. Vapor Barrier Mastic/Joint Sealer (Fibrous Glass Insulation): Childers' CP-30, Epolux's Cadalar 670, Foster's 95-44 or 30-35.

D. Adhesive (Flexible Elastomeric Foam): Armstrong's 520, Childers' CP-80, Epolux's Cadoprene 488, Foster's 82-40.

E. Adhesive (Reinforcing Membrane): Childers' Chil-Spray WB CP-56.

F. Mastic (Reinforcing Membrane): Childers' AK-CRYL CP-9.

G. Sealant (Metal Pipe Jacket): One-part silicone sealant for high temperatures; Dow Corning's Silastic 736 RTV or General Electric's RTV 106.

2.04 MISCELLANEOUS MATERIALS

A. Pressure Sensitive Tape for Sealing Laminated Jackets:
   1. Acceptable Manufacturers: Alpha Associates, Childers, Ideal Tape, Morgan Adhesive.
   2. Type: Same construction as jacket.

B. Wire, Bands, and Wire Mesh:
   1. Binding and Lacing Wire: Nickel copper alloy or copper clad steel, gage as specified.
   2. Bands: Galvanized steel, 1/2 inch wide x 0.015 inch thick, with 0.032 inch thick galvanized wing seals.
   3. Wire Mesh: Woven 20 gage steel wire with 1 inch hexagonal openings, galvanized after weaving.

C. Reinforcing Membrane: Glass or Polyester, 10 x 10 mesh. Alpha Associates Style 59, Childer's Chil-Glas, Foster's MAST-A-FAB.

PART 3 EXECUTION

3.01 PREPARATION

A. Perform the following before starting insulation Work:
   1. Install hangers, supports and appurtenances in their permanent locations.
   2. Complete testing of piping.
   3. Clean and dry surfaces to be insulated.

3.02 INSTALLATION, GENERAL

A. Install the Work of this Section in accordance with the manufacturer's printed installation instructions unless otherwise specified.

B. Provide continuous piping insulation and jacketing when passing thru interior wall, floor, and ceiling construction.

1. At Through Penetration Firestops: Coordinate insulation densities with the requirements of approved firestop system being installed. See Section 078400.

a. Insulation densities required by approved firestop system may vary with the densities specified in this Section. When this occurs use the higher density insulation.

C. Do not intermix different insulation materials on individual runs of piping.

3.03 INSTALLATION AT HANGERS AND SUPPORTS

A. Reset and realign hangers and supports if they are displaced while installing insulation.

B. Install high density jacketed insulation inserts at hangers and supports for insulated piping.

C. Insulation Inserts For Use with Flexible Elastomeric Foam Insulation:

1. Where clevis hangers are used, install insulation shields with hardwood filler pieces, same thickness as adjoining insulation, inserted in undersized die cut or slotted holes in insulation at support points.

2. Contour hardwood blocks to match the curvature of pipe, and shield.

3. Coat dowels and blocks with insulation adhesive, and insert while still wet.

4. Vapor seal outer surfaces of dowels and blocks with adhesive after insertion.

5. Install filler pieces as follows:

PIPE/TUBING SIZE	**FILLER PIECES**	**POSITION**
Thru 1-1/2”	2 dowel plugs	6 o’clock; in tandem
2” thru 4”	1 block, 2 dowel plugs	6 o’clock, and 4 & 8 o’clock respectively
6” thru 8”	2 blocks, 4 dowel plugs	6 o’clock; in tandem and 4 & 8 o’clock; in tandem

3.04 INSTALLATION OF FLEXIBLE ELASTOMERIC FOAM INSULATION

A. Where possible, slip insulation over the pipe, and seal butt joints with adhesive.

1. Where the slip-on technique is not possible, slit the insulation and install.

2. Re-seal with adhesive, making sure the mating surfaces are completely joined.

B. Insulate fittings and valves with miter cut sections. Use templates provided by the manufacturer, and assemble the cut sections in accordance with the manufacturer's printed instructions.

1. Insulate threaded fittings and valves with sleeved fitting covers. Over lap and seal the covers to the adjoining pipe insulation with adhesive.

C. Carefully mate and seal with adhesive all contact surfaces to maintain the integrity of the vapor barrier of the system.

D. Piping Exposed Exterior to a Building, Totally Exposed to the Elements:

1. Apply flexible elastomeric foam insulation to piping with adhesive.

2. Apply reinforcing membrane around piping insulation with adhesive or mastic.

3. Adhesive Applied System: Apply 2 coats of finish. See Section 099000.

4. Mastic Applied System: Apply another coat of mastic over reinforcing membrane.

3.05 INSTALLATION OF SHEET METAL JACKETING ON PIPING

A. Secure jacketing to insulated piping with preformed aluminum snap straps and stainless steel strapping installed with special banding wrench.

B. Jacket exposed insulated fittings, valves and flanges with mitered sections of aluminum jacketing.

1. Seal joints with sealant and secure with preformed aluminum bands.

3.06 PIPING INSULATION SCHEDULE

A. Insulate all cold service and hot service piping, and appurtenances except where otherwise specified.

3.07 COLD SERVICE INSULATION MATERIAL SCHEDULE

TYPE	SERVICE AND TEMPERATURES	INSULATION MATERIAL	PIPE SIZES (INCHES)	MINIMUM (NOMINAL) INSULATION THICKNESS (INCHES)

TYPE	SERVICE AND TEMPERATURES	INSULATION MATERIAL	PIPE SIZES (INCHES)	MINIMUM (NOMINAL) INSULATION THICKNESS (INCHES)
C	Hot and Chilled Water and other.	Flex. Elastomeric Foam	1-1/2 & less Over 6”	1 ½” 2”

END OF SECTION

PART 373 - SECTION 233113
PART 374 - METAL DUCTWORK

PART 1 - GENERAL

PART 375 - 1.01 DESCRIPTION OF WORK

A. Provide all the metal ductwork used for the supply, exhaust/fresh air system, as specified herein, as shown on the Drawings and as needed for a complete and proper installation. The inserted section of ducts shall match the existing duct material and schedule.

PART 376 -

PART 377 - 1.02 RELATED SECTIONS

PART 378 -

A. Division 23 Sections

PART 379 - 1.03 SUPPLEMENTAL SUBMITTALS

PART 380 - A. Product Data

1. Submit Shop Standards for metal ductwork including gages, materials, type of joints, sealing requirements, method of fabrication and reinforcing. Shop standards shall be in accordance with the SMACNA HVAC Duct Construction Standards, latest edition.

PART 381 -

2. Submit manufacturer's product data for factory-fabricated single wall round ductwork, duct sealant and cement, gasket materials, duct liner and sound traps; and installation instructions.

PART 382 - 1.04 SUPPLEMENTAL QUALITY ASSURANCE

PART 383 - A. Codes and Standards

1. SMACNA Standards: Comply with SMACNA's HVAC Duct Construction Standards Metal and Flexible Third Edition-2005 for fabrication and installation of metal ductwork.

2. NFPA Compliance: Comply with the NFPA 96-1984 as amended by MC 506.

3. Comply with the New York City Mechanical Code.

PART 2 - PRODUCTS

PART 384 - 2.01 MATERIALS

PART 385 - A. Sheet Metal:

1. Galvanized Steel: Lock-forming quality; ASTM A 653 G60 coating designation; mill-phosphatized finish for surfaces of ducts exposed to view.

2. Reinforcement Shapes and Plates: Galvanized steel reinforcement where installed on galvanized, sheet metal ducts; compatible materials for aluminum and stainless-steel ducts.

3. Tie Rods: Galvanized steel, 1/4" minimum diameter for 36" length or less; 3/8" minimum diameter for lengths longer than 36".

B. Gages of Metal for galvanized rectangular duct: Gages of metal shall be in accordance with Tables 2.1 through 2.28 of SMACNA HVAC Duct Construction Standards Third Edition - 2005**.** Duct shall be constructed to the pressure shown on the Drawings. The duct pressure classification shall default to the equipment external static pressure if the pressure levels are not shown on the Drawings.

PART 386 - C. Hangers and Supports

PART 387 -

1. Rod Type Hangers and Angles: Hot dip galvanized steel with 2 locking nuts in place.

2. Strap Hangers: Same material as ducts except that galvanized-steel straps attached to aluminum ducts shall have contact surfaces painted with zinc-chromate primer.

3. Trapeze and Riser Supports: Steel shapes complying with ASTM A36. Same material as ducts.

4. Strap and Rod Sizes: Comply with SMACNA for sheet width and thickness and for rod diameters.

PART 388 -

5. For ducts with a cross sectional area of 2 square feet or less, hangers shall be constructed of at least 1 inch by 1/16 inch steel strap. For ducts with a cross sectional area of over 2 square feet, hangers shall be constructed of at least 1 inch by 1/8 inch steel strap.

PART 389 - D. Miscellaneous Ductwork Materials:

1. Sheet Metal Screws, Machine Bolts, Rivets and Nuts: Tinned, cadmium plated or rust resistant materials. Bolts shall be button-head stove bolts, 1/4" x 3/4" unless otherwise specified.

2. Beam Clamps: For ducts with a cross sectional area of 2 square feet or less, clamp shall be Caddy Catalog Number 4H-Series Fig 2. For ducts with a cross sectional area of over 2 square feet, clamp shall be Fee & Mason 255L with locking nut and 255S retaining strap.

3. Welding Studs: Erico Fastening Systems, capacitor discharge, low carbon steel, copper flashed.

4. Structural (carbon) Steel Shapes and Steel Plates: ASTM A36, shop primed.

5. Stainless Steel Shapes and Plates: ASTM A276 and ASTM A666.

PART 390 -

6. Machine Bolt Expansion Anchors:

   a. Non-caulking single unit type: Federal Specification: FS FF-S-325, Group II, Type 2, Class 2, Style 1.

   b. Non-caulking double unit type: Federal Specification: FS FF-S-325, Group II, Type 2, Class 2, Style 2.

8. Duct Sealant: Non-hardening, non-migrating mastic or liquid elastic sealant, type applicable for fabrication/installation detail, as compounded and recommended by manufacturer specifically for sealing joints and seams in ductwork.

   a. All adhesives and sealants used on the construction of ductwork shall comply with the South Coast Air Quality Management District (SCAQMD) Rule #1168; VOC limits shall comply with the limits indicated in Table 1 of LEED Version 2.2, Indoor Environmental Quality Section, Credit EQ-4.1. Those limits correspond to an effective date of the SCAQMD Rule #1168 of July 1, 2005, and Rule Amendment date of January 7, 2005.

2.02 FABRICATION – GENERAL

PART 391 -

A. Fabricate ductwork from galvanized sheet metal of the gages specified in SMACNA HVAC Duct Construction Standards Third Edition – 2005.

B. Exhaust duct shall be installed with no screws ending inside duct, and no protuberances or any other interior irregularities which might be functioning as lint hooker. The inner duct side shall be as smooth as possible, and the duct segments imbrication shall be done to facilitate the direction of air flow (no sharp duct edges against the flow).

PART 392 -
PART 393 -
PART 3 - EXECUTION

PART 394 - 3.01 SUPPLEMENTAL INSTALLATION

PART 395 - A. Provide necessary transformation pieces, and flexible fabric connections (Refer to Section 233300: Duct Accessories) for ductwork connected to air handling units or air inlet and outlet devices.

PART 396 - D. Field Fabrication: Complete fabrication of work at project as necessary to match shop-fabricated or factory-fabricated work to accommodate installation requirements.

PART 397 - E. Where the corner of an angle iron brace or joint member projects into a walking passage, the corner shall be mitered and shall be padded with 1/2" minimum thickness flexible foamed plastic material to minimize the possibility of injury to personnel.

PART 398 -
PART 399 -
PART 400 -

3.02 HANGER ATTACHMENTS

Reference: SMACNA HVAC Duct Construction Standards, Third Edition-2005 Figures 4-1, 4-2, 4-3.

PART 401 - A. General

1. Secure upper hanger attachments to structural steel or steel bar joists wherever possible.

2. Do not attach hangers to steel decks.

3. Metallic fasteners installed with electrically operated or powder driven tools may be used as hanger attachments in accordance with the SMACNA HVAC Duct Construction Standards, Third Edition-2005**.**

PART 402 - B. Attachment to Steel Frame Construction: Provide intermediate structural steel members where required by ductwork support spacing. Select steel members for use as intermediate supports based on a minimum safety factor of 5.

1. Secure upper hanger attachments to steel bar joists at panel point of joists.

2. Do not drill holes in main structural steel members.

PART 403 - 3.03 HANGERS FOR DUCTS, 2 INCHES W.G. AND UNDER

A. Install hangers for ducts as specified in the SMACNA HVAC Duct Construction Standards, Third Edition-2005

B. Prime coat plain steel rods threaded at the site immediately after installation as per Section 099000: Painting. Galvanized rods shall not be primed.

PART 404 - 3.08 HANGERS FOR DUCTS OVER 2 INCHES W.G.

PART 405 - A. Install trapeze hangers for ducts as specified in the SMACNA HVAC Duct Construction Standards Third Edition-2005**,** Strap hangers shall not be used in this application.

PART 406 - 3.09 CONNECTIONS

PART 407 - A. General Contractor shall arrange to have the connections of metal ductwork to equipment and shall provide flexible connection for each ductwork connection to equipment mounted on vibration isolators, and/or equipment containing rotating machinery.

PART 408 - B. Coordinate as necessary to ensure that access doors have been provided in hung ceilings and any other required places for proper operation and maintenance.

PART 409 - 3.11 ADJUSTING AND CLEANING FOR START UP AND WARRANTEE

PART 410 - A. Clean dust and debris out of ductwork internally, unit by unit, as units are installed. Clean external surfaces of foreign substances that might cause corrosive deterioration of metal. Clean external surface where ductwork is to be painted that might interfere with painting or cause paint deterioration.

PART 411 - B. Paint the required duct as per Section 230000: Basic HVAC Requirements.

A. Balancing: Refer to Section 233113: Balancing of Systems for air distribution balancing of metal ductwork. Seal any leaks in ductwork that become apparent during the balancing procedure.

END OF SECTION

PART 412 - SECTION 233200
PART 413 - DUCTWORK INSULATION

PART 1 - GENERAL

PART 414 - 1.01 DESCRIPTION OF WORK

PART 415 - A. Provide thermal insulation on the ductwork installed and required on this Project shown on the Drawings, specified herein and needed for a complete and proper installation. Product specific requirements are contained herein; Section 230000, Basic HVAC Requirements, shall be referred to for general requirements.

All insulation materials shall be free of asbestos.

PART 416 - 1.02 RELATED SECTIONS

A. Division 23 Sections

PART 417 - 1.03 SUPPLEMENTAL SUBMITTALS

PART 418 - A. Submit schedule showing manufacturer's product number, k-value, thickness and furnished accessories for each duct system requiring insulation.

PART 419 - 1.04 SUPPLEMENTAL QUALITY ASSURANCE

PART 420 - A. Installer's Qualifications: Firm with at least three years successful installation experience on projects with mechanical insulations similar to that required for this Project.

PART 421 - B. Flame/Smoke Ratings: Provide mechanical insulation with flame spread index of 25 or less and smoke developed index of 50 or less, as tested by ASTM E-84 method and as defined in the NYC Building Code.

PART 422 - C. Code and Standards: Comply with New York City Building Code, New York State Energy Conservation Construction Code and ASHRAE Standards.

PART 2 - PRODUCTS

PART 423 - 2.01 MANUFACTURERS

PART 424 - A. Approved Manufacturers:

Armstrong World Industries, Inc.
Babcock & Wilcox; Insulating Products Div.
Certain Teed Corp.
Knauf Fiber Glass.
Johns Manville

Owens-Corning Fiberglass Corp.
Pittsburgh Corning Corp.
Rubatex Corp.
Thermal Ceramics
3M
Venture Tape Corp.
Unifrax FyreWrap
Or approved equal

PART 425 - 2.02 MATERIALS

PART 426 - A. Adhesives and Sealants for Insulation: All sealants used on interior building insulation shall comply with the South Coast Air Quality Management District (SCAQMD) Rule #1168; VOC limits shall comply with the limits indicated in Table 1 of LEED Version 2.2, Indoor Environmental Quality Section, Credit EQ-4.1. Those limits correspond to an effective date of the SCAQMD Rule #1168 of July 1, 2005, and Rule Amendment date of January 7, 2005.

PART 427 -

PART 428 - B. Board Type: Fiberglass board: 3-lb minimum density, thermal conductivity not exceeding 0.23 at 75o F mean temperature, factory applied facing of aluminum foil reinforced with fiberglass yarn mesh and laminated to 40 lb kraft paper chemically treated to give the permanent flamespread and smoke-developed characteristics required. The use of plain (unfaced) fiberglass board on ductwork serving only as heating supply ducts is also acceptable.

PART 429 -

PART 430 - C. Flexible Type: Flexible (blanket) type fiberglass: 1-lb nominal density, thermal conductivity not exceeding 0.29 at 75o F mean temperature; factory applied foil reinforced kraft facing as specified for the fiberglass board.

PART 431 -

PART 432 - D. Jackets for Ductwork Insulation: ASTM C-921; Type I for ductwork with temperatures below ambient; Type II for ductwork with temperatures above ambient. (Type I-Vapor Barrier, Type II-Water Vapor Permeable).

PART 433 - E. Ductwork Insulation Accessories: Provide staples, bands, wires, tape, anchors, corner angles and all other items and accessories recommended by insulation manufacturer for applications indicated.

F. Ductwork Insulation Compounds: Provide cements, adhesives, coatings, sealers, protective finishes and all other items and compounds recommended by insulation manufacturer for applications indicated.

PART 434 -

PART 435 - G. Vapor barrier and weatherproofing jacket shall be a laminated five-ply self-adhesive permanent acrylic system; suitable operating range from -30° F to 300° F; weather resistant; high puncture, tear resistant; product shall be used both indoors and outdoors; zero permeability; manufactured with mold inhibitors: VentureClad 1577CW-All Grade.

PART 3 - EXECUTION

PART 436 - 3.01 COMPLETION OF TESTS

PART 437 - A. Before applying the insulation, all tests specified in Division 1 and Division 15 Sections should have been completed. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to the NYCDOC.

PART 438 - 3.02 SUPPLEMENTAL INSTALLATION

PART 439 - A. Fire Seal Application: Where pipes pass through fire walls, fire partitions, fire rated pipe chase walls or floors above grade, insulation shall be interrupted and a fire seal shall be provided as specified in Section 07270: Firestopping.

PART 440 - B. Fiberglass board shall be used to insulate ductwork that is exposed in fan or equipment rooms or spaces.

PART 441 - C. Flexible type duct insulation shall be used to insulate ductwork which is installed in concealed spaces (hung ceilings, furred spaces, pipe and duct spaces, crawl spaces and tunnels).

PART 442 - D. Facing and Finishing:

1. Exposed Ducts: Insulation on ductwork exposed to view in Mechanical Rooms shall have facing or finish as specified herein: Facing or finish shall be reinforced with metal corner beads and shall have a glass cloth finish installed in the following manner: Brush a full coat of lagging adhesive on all surfaces of the ductwork insulation. Imbed glass cloth in the wet coating, smoothing to avoid wrinkles. Overlap cloth seams 4", locating seams so as to be hidden from view, wherever practicable. Apply a second coat of lagging adhesive.

2. Concealed Ducts: Insulation on warm air ductwork installed within pipe and duct spaces, storerooms, hung ceilings, furred spaces, or pipe tunnels shall have no additional finishing, other than the foil- reinforced-kraft facing. All cold air ductwork for the above spaces shall be provided with two coats of a vapor retardant coating at least 1/16” thick with a layer of glass cloth in between or vapor barrier and weatherproofing jacket.

PART 443 - E. Installation of Board Type Insulation

1. Insulation shall be applied with edges tightly butted. It shall be impaled on pins welded to the duct and secured with speed clips impaled over the pins. Pins shall be cut off close to speed clips. On horizontal ducts, pins shall be spaced not less than one per square foot for the bottom

surface, and not less than one per two square feet on the sides and top surface. On vertical ducts, the pins shall be spaced not less than one clip per two square feet of duct surface. For faced insulation, point all joints and cracks with vapor barrier coating, and seal all joints and speed clips with a 3" wide strip of foil-reinforced-kraft facing adhered with insulation adhesive. The use of pressure sensitive tape of the same facing material also is acceptable for this purpose. For cold air ductwork, the laminated self-adhesive vapor barrier and weatherproofing jacket will be accepted.

2. Where, because of space or size restriction, the welded pin method cannot be used, the use of stick clips will be approved and the insulation shall be additionally secured to the duct with insulation adhesive. The adhesive shall cover the entire surface of the sheet metal when applied to underside of horizontal duct, but may be applied in strips for application to top and sides with a minimum of 50% coverage. Insulation shall be additionally secured with No. 16 gage soft annealed galvanized steel wire on not more than 12" centers. Continuous metal, corner angles shall be used to protect edges of the insulation.

PART 444 - F. Installation of Flexible Type Insulation: Flexible type insulation shall be cut slightly longer than the perimeter of the duct to insure full thickness at corners. Insulation shall be applied with edges tightly butted, and seams stapled approximately 6" on centers with outward clinching staples. Insulation shall be additionally secured with No. 16 gage soft annealed galvanized steel wire on not more than 12" centers. When the width of a horizontal duct is 24" or more, the insulation shall also be fastened with welded pins or stick clips spaced on 18" centers on the bottom surface of the duct. All joints and clips shall be taped and sealed with 3" wide strips of foil-reinforced-kraft facing applied with insulation adhesive. The use of pressure sensitive tape of the same facing material also is acceptable for this purpose. For cold air ductwork the laminated self-adhesive vapor barrier and weatherproofing jacket will be accepted.

PART 445 -

PART 446 - G. Clean and dry ductwork prior to insulating. Butt insulation joints firmly together to ensure complete and tight fit over surfaces to be covered.

PART 447 - H. Maintain integrity of vapor-barrier on ductwork insulation, and protect it to prevent puncture and other damage.

PART 448 - I. Extend ductwork insulation without interruption through walls, floors and similar ductwork penetrations, except where otherwise indicated such as rated penetrations.

PART 449 - 3.03 SCHEDULES OF DUCTWORK INSULATION

PART 450 - A. Insulation Omitted: Do not insulate the following:

1. Access door, test hole fittings, damper quadrants, except as otherwise specified. The adjoining insulation shall be neatly finished around such devices.

PART 451 -

PART 452 - 2. Exhaust ductwork need not be insulated, except the portion of the duct between motorized spill damper and spill louver.

PART 453 - B. Exposed Ducts/Plenums in Mechanical Rooms

1. Insulate

PART 454 -

a. All outside air intake plenums not pre-insulated at the factory

b. Outdoor air intake ducts in their entirety.

c. Exhaust duct from motorized spill damper to spill louver.

PART 455 -

d. Supply and return ducts

2. Insulate the above with rigid fiberglass board, 2" thick.

PART 456 -

C. Cold Duct Work:

PART 457 -

1. Insulate concealed supply and return ductwork in its entirety from the fans (or blower unit) to room terminal inlets and outlets.

PART 458 -

PART 459 - 2. Insulate the above with flexible fiberglass 2" thick.

END OF SECTION

LIST OF SUBMITTALS

SUBMITTAL	DATE SUBMITTED	DATE APPROVED
Product Data:	_____	_____
1. Manufacturers Product Data 2. Installation Instructions		
Shop Drawings:	_____	_____
Schedule		

* * *

PART 460 - SECTION 233300
PART 461 - DUCTWORK ACCESSORIES

PART 1 – GENERAL

PART 462 - 1.01 DESCRIPTION OF WORK

A. Provide duct accessories specified herein, shown on the Drawings along with all the auxiliary work needed for a complete and proper installation. The types of ductwork accessories specified in this Section include the following: turning vanes, duct hardware, duct access doors and flexible connections.

PART 463 -

PART 464 - 1.02 RELATED SECTIONS

A. Division 23 Sections

B. Division 26 Sections

PART 465 - 1.03 SUPPLEMENTAL SUBMITTALS

PART 466 - A. Shop Drawings: Submit manufacturer's assembly-type shop drawings and shop standards. Submit SMACNA Figure Numbers for each shop fabricated item.

PART 467 - 1.04 SUPPLEMENTAL QUALITY ASSURANCE

PART 468 - A. Codes and Standards

1. SMACNA Compliance: Comply with applicable portions of SMACNA: HVAC Duct Construction Standards, Metal and Flexible, 2005 edition.

2. Industry Standards: Comply with SMACNA recommendations pertaining to construction of ductwork accessories, except as otherwise indicated on the Drawings.

3. NYC Mechanical Code Compliance: Comply with applicable provisions of the NYC Mechanical Code Chapters 5, 6 and 7 and the manufacturer’s installation instructions pertaining to installation of ductwork accessories.

PART 2 - PRODUCTS

PART 469 - 2.01 MATERIALS AND MANUFACTURERS

PART 470 - A. Duct Hardware

1. Provide test hole fittings for making air readings for the proper adjusting and testing of the ventilating systems. Material and gauge of the fittings shall be compatible with the duct material. Include screw cap and gasket. Size of fitting shall allow insertion of testing instruments and of length of fitting shall allow for the duct insulation thickness. "Duro Dyne", instrument test port, "Ventlock 699" are suitable for this purpose. If required, provide test hole fitting for microprocessor type of instrument reading either local or remote.

2. Provide shop fabricated duct hardware or provide from of one of the following manufacturers:

   Duro Dyne Corp.
   Young Regulator Co.
   Approved equal.

D. Flex Connections (Flexible Connections): (Ref. SMACNA HVAC Duct Construction Standards - Latest Edition)

1. Provide an airtight fabric neck at the inlet and at the outlet connections of all air handling units, supply fans and exhaust fans and where ductwork connects to vibration isolation equipment in accordance with MC.603.18.

2. Necks shall be not less than 3" nor more than 10" in width and both sides shall be secured with crimped lock seam the entire perimeter with galvanized sheet steel bands 3" wide. This assembly shall be securely fastened to ducts and fans, and the joints shall be made air tight. Necks shall not be oiled or painted. Neck fabric shall be one of the following materials:

   a. Cotton duck, 10-ounces per square yard minimum weight, conforming to Federal Specifications CCC-C-428D (treated for fire, water, and mildew resistance)

   b. Flameproof elastomeric coated glass fabric, weighing not less than 14-ounces per square yard, having a tensile strength of 200 psi (minimum) and having a heat resistance of up to 500^{o} F. ("Thermafab", manufactured by Duro Dyne Corp., is an example of this material).

   c. Close woven glass cloth, double neoprene coated, 28-ounces per square yard minimum weight.

E. Smoke Detecting Devices: Provide opening in the ductwork for the smoke detecting devices at various locations, and as indicated on the Mechanical and Electrical Contract Drawings and Approved Shop Drawings. Mechanical Contractor shall install duct smoke detectors in the ductwork. Electrical Contractor shall furnish duct smoke detectors, and provide power wiring and control wiring for the duct smoke detectors.

PART 3 – SUPPLEMENTAL EXECUTION

PART 471 - 3.01 INSTALLATION OF DUCTWORK ACCESSORIES

PART 472 - A. Install ductwork accessories in accordance with manufacturer's installation instructions, with applicable portions of details of construction as shown in SMACNA standards, and in accordance with recognized industry practices to ensure that products serve intended function.

PART 473 - B. Install turning vanes in square throat elbows in supply and exhaust air systems, and elsewhere as indicated on the Drawings.

PART 474 -

PART 475 - C. Install test hole fittings for making air readings, on both (opposite) sides of discharge duct from all supply and exhaust fans, at set dampers on supply and return branch ducts, and at other locations where shown on the Drawings for the proper adjusting and testing of the ventilating systems.

PART 476 -

PART 477 - D. Install doors in built-up casing to open against system air pressure, with latches operable from both sides.

PART 478 - E. Coordinate as necessary to interface installation of ductwork accessories with other work.

3.02 FIELD QUALITY CONTROL

PART 479 -

PART 480 - A. Operate installed ductwork accessories to demonstrate compliance with requirements. Test for air leakage while system is operating. Repair or replace faulty accessories, as required to insure proper operation.

PART 481 - 3.03 ADJUSTING AND CLEANING

PART 482 - A. Adjusting: Adjust ductwork accessories for proper settings.

PART 483 - B. Label access doors in accordance Section 230553: HVAC Identification.

PART 484 - C. Cleaning: Clean factory-finished surfaces. Repair any marred or scratched surfaces with manufacturer's touch-up paint (Refer to Section 099101: Construction Painting).

END OF SECTION

PART 485 - SECTION 233313
PART 486 - DAMPERS

PART 1 - GENERAL

PART 487 - 1.01 DESCRIPTION OF WORK

A. Provide dampers specified herein, shown on the Drawings, needed for a complete and proper installation. Dampers provided as part of factory-fabricated equipment are specified as part of the equipment assembly in their respective sections. Product specific requirements are contained herein; 230000, Basic Heating, Ventilating and Air Conditioning Requirements, shall be referred to for general requirements.

PART 488 - 1.02 RELATED SECTIONS

A. Division 23 Sections

B. Division 26 Sections

1.03 SUPPLEMENTAL SUBMITTALS

PART 489 -

PART 490 - A. Product Data: Submit manufacturer's product data and shop fabricated drawings. Submit charts indicating free area for flow through damper. Submit lab testing results indicating pressure drop through the dampers.

PART 491 - B. Shop Drawings

1. Submit manufacturer's assembly-type shop drawings for each type of damper showing interfacing requirements with ductwork, method of fastening or support, and methods of assembly of components.

PART 492 - C. Certification: Manufacturer's UL installation affidavit for all fire, smoke and combination fire smoke dampers.

PART 493 - D. Maintenance materials (extra fusible links)

PART 494 -

PART 495 - E. Maintenance data (spare parts lists and maintenance manuals)

PART 496 - 1.04 SUPPLEMENTAL QUALITY ASSURANCE

PART 497 - A. Codes and Standards

1. SMACNA Compliance: Comply with applicable portions of SMACNA: HVAC Duct Construction Standards, Metal and Flexible, 2005 edition or later, and Fire, Smoke & Radiation Damper Installation Guide for HVAC Systems - Latest Edition.

2. UL Compliance: Construct, test, and label fire dampers smoke dampers and combination fire/smoke dampers in accordance with the 1999 editions of UL Standard 555 and UL Standard 555S.

3. All appliances regulated by the New York City Construction Codes shall be listed and labeled (reference MC 301.4, MC 301.6). Testing of material and equipment shall be in accordance with 28-113 of the Administrative Code (reference MC 301.5). Whenever the NYC Construction Codes or the Rules of the Department of Buildings requires that material be listed or labeled and material proposed to be used is not so listed or labeled, the use of such material shall be subject to prior approval by the Commissioner (Office of Technical Certification and Research OTCR) and such material shall be used only to the extent set forth in such approval. Materials that were previously approved by the Board of Standards and Appeal (BSA) or by the Department (MEA) before the effective date of the NYC Construction Codes may continue to be used, but only to the extent set forth in such approval, and only if such approval is not specifically amended or repealed by the Commissioner.

4. Per NYC Mechanical Code MC 513.10, equipment utilized in Smoke Control systems such as automatic dampers and balance dampers shall be suitable for their intended use, suitable for the probable exposure temperatures and shall be as approved by the Commissioner. Components shall suitable for the probable temperature rise to which the components will be exposed. This temperature rise is as Per MC 513.10.4, automatic dampers, regardless of the purpose for which they are installed within the smoke control system, shall be listed and conform to the requirements of approved recognized standards. Per BC 909.5.2.1, ducts and air transfer openings are required to be protected with a minimum Class II, 250ºF smoke damper complying with BC 716 when used as part of smoke control systems.

PART 498 - 1.05 MAINTENANCE

PART 499 - A. Furnish extra fusible links to the Commissioner, one link for every 10 installed at each temperature range. Obtain receipt.

PART 2 - PRODUCTS

PART 500 - 2.01 MANUFACTURERS

A. Subject to compliance with requirements, provide shop fabricated dampers or from one of the following manufacturers:

Air Balance, Inc.
Ruskin Mfg.
Greenheck Fan Corp.
Approved equal.

PART 501 - B. Subject to compliance with requirements, provide fire dampers from one of the following manufacturers:

Ruskin Mfg.
Greenheck Fan Corp.
Pottorff, Div. of PCI Industries
Approved equal.

PART 502 -
PART 503 - 2.02 DAMPER ACTUATORS

A. Damper actuators shall be furnished by Temperature Control Contractor (TCC) when not provided as part of the factory assembly of the air intake hood. TCC to coordinate with Mechanical Contractor (MC) and General Contractor (GC))

PART 504 -
PART 505 - Manufacturers:
PART 506 -
PART 507 - Belimo Aircontrols (USA) Inc.
PART 508 - Siemens Building Technologies, Inc. - Talon Controls, (formerly by Staefa Control Systems),
PART 509 - Approved equal.

PART 510 -

PART 511 -

PART 3 - EXECUTION

PART 512 - 3.01 INSTALLATION

PART 513 - A. Install damper in accordance with damper manufacturer's recommendations and all applicable codes.

PART 514 - B. Coordinate with other work, including ductwork, as necessary to interface installation of damper properly with other work.

PART 515 - D. Provide a neoprene gasket, 1/4" thick, full width of flange, wherever a galvanized duct connects to aluminum outside air intake.

PART 516 -
PART 517 - 3.02 FIELD QUALITY CONTROL

PART 518 -

A. Operate damper to demonstrate compliance with requirements. Test for air leakage while system is operating. Repair or replace faulty components, as required to obtain proper operation.

PART 519 -

PART 520 - 3.03 ADJUSTING AND CLEANING

PART 521 - A. Adjusting: Adjust damper for proper settings, install fusible links in fire dampers and adjust for proper action.

PART 522 - B. Cleaning: Clean factory-finished surfaces. Repair any marred or scratched surfaces with manufacturer's touch-up paint.

END OF SECTION

SECTION 233416
CENTRIFUGAL FANS AND CURBS

PART 1 GENERAL

1.01 SUBMITTALS

A. Product Data: Catalog sheets, include rated capacities of each unit, dimensional data, operating weights, accessories, material finishes and installation instructions.

B. Shop Drawings: Manufacturer's detailed dimensional drawings showing equipment, assemblies, dimensions, loadings, required clearances, method of field assembly, components, and location and size of each field connection.

C. Quality Control Submittals:
1. Certified fan performance curves.
2. Certified fan sound power ratings at operating conditions.

1.02 QUALITY ASSURANCE

A. Regulatory Requirements:
1. Each fan shall bear AMCA Seal indicating that fans comply with AMCA 211, Certified Ratings Program - Air Performance, and AMCA 311, Certified Sound Ratings Program For Air Moving Devices.
2. Operating Limits: Classify according to AMCA 99-2408.
3. Sound power level ratings shall comply with AMCA Standard 301, Method for Calculating Fan Sound Ratings from Laboratory Test Data.

1.03 REFERENCES

A. ABMA: American Bearing Manufacturer's Association (formerly AFBMA).

B. AMCA: Air Movement and Control Association.

C. ASHRAE: American Society of Heating, Refrigeration, and Air Conditioning Engineers, Inc.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver fans as factory-assembled units to the extent allowable by shipping limitations, with protective crating and coverings.

B. Disassemble and reassemble units as required for movement to the final locations in accordance with manufacturer's printed instructions.

C. Lift and support units at the manufacturer's designated lifting or supporting points.

1.07 PROJECT CONDITIONS

A. Do not operate fans until ductwork is clean, filters, if any, are in place and bearings are lubricated.

B. Field Measurements: Verify dimensions and clearances by field measurements.

PART 2 PRODUCTS

2.01 FANS

A. Belt driven centrifugal fans, factory fabricated, assembled, finished and tested; consisting of housing, wheel, fan shaft, bearings, motor (see Section 260221), drive assembly, and support structures.

B. Equip fan unit with unitary base.

2.02 HOUSINGS

A. Materials and Fabrication: Formed and reinforced steel curved scroll housing panels, spun metal inlet bell, and the doors or panels for access to internal parts and components.

1. Bracing: Steel angle or channel-iron member supports for mounting and supporting fan scroll, wheel, motor, and accessories.

2.03 WHEELS

A. Backward Inclined Wheel: Steel or aluminum construction with curved inlet flange, back plate, backwardly inclined blades welded or riveted to flange and back plate; cast iron or cast steel hub riveted to back plate and fastened to shaft with set screws.

B. Airfoil Wheel: Steel construction with smooth curved inlet flange; heavy back plate; hollow die formed airfoil shaped blades continuously welded at the tip flange and back plate; cast iron or cast steel hub riveted to back plate and fastened to shaft with set screws.

2.04 SHAFTS

A. Turned, ground, and polished hot-rolled steel with keyway and drive end counter sunk for tachometer readings. Ship with protective coating of lubricating oil. Statically and dynamically balanced and selected for continuous operation at maximum rated fan speed and motor horsepower.

1. Size shaft so that first critical speed is at least 25 percent over maximum operating speed.

2.05 BEARINGS

A. Ball, roller, or taper roller type. Select bearings in accordance with ABMA Standards for Ball and Roller Bearings.

1. Sealed and Pre-lubricated Shaft Bearings: Self-aligning, pillow block type ball bearings. ABMA Bearing Rated Life: L-10 with minimum bearing life of 100,000 hours.
2. Grease Lubricated Shaft Bearings: Self-aligning, pillow block type; ball, roller or tapered roller bearings with double locking collars and split two-piece, cast iron housing. ABMA Bearing Rated Life: L-10 with minimum bearing life of 100,000 hours.

2.06 BELT DRIVES

A. Service Factor:

1. Design belt drive to operate at the horsepower equivalent to the highest bhp of the fan multiplied by service factor of 1.5.
2. Design belt drive to operate at total developed hp of the motor multiplied by motor service factor.

B. Fan Pulleys: Cast iron or cast steel with interchangeable split, tapered bushing, dynamically balanced at factory prior to assembly.

C. Motor Pulleys:

1. Motors 5 hp and Smaller: Adjustable pitch type with pitch adjustment at the middle of adjustment range at fan application design conditions.
2. Motor 5 hp and Larger: Fixed pitch type.

D. Belts: Oil resistant, non-sparking, and non-static.

1. Match belt lengths and manufacturer for multiple belt drives.

E. Belt Guards: Comply with OSHA and SMACNA requirements. Fabricate from flattened expanded metal 1/2 inch diamond mesh screen welded to steel angle frame, prime coated.

1. Include provision for adjustment of belt tension, lubrication, and use of tachometer with guard in place.

2.07 Roof Curbs

A. Provide factory fabricated roof curbs, designed to be installed in and become an integral part of the roof construction. Curbs shall mate to the air conditioning units required to be installed on same. Curbs shall be the product of the air conditioner manufacturer and shall be approved for use by the National Roofing Contractors Association.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine areas and conditions for compliance with requirements for installation tolerances and other conditions affecting performance of fans. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A. Install fans in accordance with manufacturer's printed installation instructions.

3.03 FIELD QUALITY CONTROL

A. Inspect exposed finish. Remove burrs, dirt, and construction debris, and repair damaged finishes including chips, scratches, and abrasions.

B. Pre-start Up:

1. Remove shipping blocking, and bracing.
2. Verify lubrication for grease bearings and other moving parts.
3. Set dampers in connected ductwork in proper position.
4. Belt Driven Fans: Disconnect fan drive from motor, verify proper motor rotation direction, and verify fan wheel free rotation and smooth bearing operation. Reconnect fan drive system, align and adjust belts, and install belt guard.

C. Start Up:

1. Energize motor, verify proper operation of drive system, and fan wheel.
2. Belt Driven Fans:

a. Adjust fan pulley to indicate initial rpm, further adjust pulley to obtain system design conditions if required.

b. Replace fan and motor pulleys if required to achieve design conditions.

c. Measure and record motor voltage and amperage.

END OF SECTION

SECTION 235500
HVAC IDENTIFICATION

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. Provide all the mechanical (HVAC) identification work shown in the Drawing Schedules, specified in other Division-23 Sections and needed for a complete and proper installation. Product specific requirements are contained herein; Section 230000, Basic Heating, Ventilating and Air Conditioning Requirements, shall be referred to for general requirements. The types of identification devices specified in this Section include the following:

Painted Identification Materials
Plastic Pipe Markers
Plastic Duct Markers
Plastic Equipment Markers
Plasticized Tags
Plastic Labels
Access Panel and Door Markers

1.02 RELATED SECTIONS

1.03 SUPPLEMENTAL SUBMITTALS

A. Shop Drawings: Provide list of identification wording, symbols, letter size, and color-coding.

1.04 SUPPLEMENTAL QUALITY ASSURANCE

A. Codes and Standards

1. ANSI Standards: Comply with ANSI A13.1-**2015** for lettering size, length of color field, colors, and viewing angles.

PART 2 - PRODUCTS

2.01 MATERIALS AND MANUFACTURERS

A. Provide manufacturer's standard products of categories and types required for each application as referenced in other Division 23 Sections (HVAC), shown on the Drawings and/or Schedules. Where more than single type is specified for

application, selection is the NYCDOC's Representative's option, but provide single selection for each product category.

B. Paintings and coatings used in the interior of building to cover insulation for identification purposes shall not exceed the VOC content limits established in the Green Seal Standard GS-11 Paints, first edition, May 20, 1993.

C. Paints and coatings used in the interior of building for identification purposes of piping shall not:

a. Exceed the VOC content limits established in the Green Seal Standard GS-11 Paints, first edition, May 20, 1993.

b. Exceed the VOC content limit of 250 g/L established in the Green Seal Standard GC-03, Anti-Corrosive Paints, second edition, January 7, 1997.

D. All adhesives and sealants used for tags and charts shall comply with the South Coast Air Quality Management District (SCAQMD) Rule #1168; VOC limits shall comply with the limits indicated in Table 1 of LEED Version 3.0, Indoor Environmental Quality Section, Credit IEQ 4.1. Those limits correspond to an effective date of the SCAQMD Rule #1168 of July 1, 2005, and Rule Amendment date of January 7, 2005.

E. Painted Identification Materials:

1. Stencils: fiberboard stencils, prepared for required applications with letter sizes generally complying with recommendations of ANSI A13.1-**2015**.

a. Stencil Paint: exterior type stenciling enamel except as otherwise indicated on the Drawings; either brushing grade or pressurized spray-can form and grade.

b. Identification Paint: enamel of colors indicated or, if not otherwise indicated for piping systems, comply with ANSI A13.1-**2015** for colors or as selected by the Project Architect.

F. Plastic Pipe Markers:

1. Snap-On Type: Pre-printed, semi-rigid snap-on, color-coded pipe markers, complying with ANSI A13.1-**2015** or as selected by the Project Architect.

2. Provide 1" thick molded fiberglass insulation with jacket for the plastic pipe marker to be installed on uninsulated pipes subjected to fluid temperatures of 125^{o}F or greater. Cut length to extend 2" beyond each end of plastic pipe marker.

3. Small Pipes: For external diameters less than 6" (including insulation if any), provide full-band pipe markers, extending 360^{o} around pipe, fastened by snap-on application of pre-tensioned semi-rigid plastic pipe marker.

4. Large Pipes: For external diameters of 6" and larger (including insulation if any), provide either full-band or strip-type pipe markers, but not narrower than 3 times letter height, fastened by strapped-to-pipe (or insulation) application of semi-rigid type, with stainless steel bands.

5. Lettering: Pre-printed nomenclature that best describes piping system in each instance, as shown on the Drawings or as selected by the Project Architect or Engineer in cases of variance with name shown or specified.

   a. Arrows: Print each pipe marker with arrows indicating direction of flow, either integrally with piping system service lettering (to accommodate both directions), or as separate unit of plastic.

G. Plastic Duct Markers:

1. Laminated plastic, color-coded duct markers. Conform to the following color code if not specified:

   Green: Cold air.

   Yellow: Hot air.

   Yellow/Green: Supply air.

   Blue: Exhaust, outside, return, and mixed air.

   For hazardous exhausts, use colors and designs recommended by ANSI A13.1-**2015.**

2. Nomenclature: Include the following:

   Direction of air flow

   Duct service (supply, return, exhaust, and all other items and accessories)

   Duct origin (from).

   Duct destination (to).

   Design cfm.

K. Plastic Equipment Markers:

1. Laminated plastic, color-coded equipment markers. Conform to the following color code if not specified otherwise:

   Green: Cooling equipment and components.
   Yellow: Heating equipment and components.
   Yellow/Green: Combination cooling and heating equipment and components.
   Brown: Energy reclamation equipment and components.
   Blue: Equipment and components that do not meet any of the above criteria.
   For hazardous equipment, use colors and designs recommended by ANSI A13.1-**2015**.

2. Nomenclature: Include the following matching terminology on schedules and Drawings as closely as possible:

   Name and plan number
   Equipment service
   Design capacity
   Other design parameters such as pressure drop, entering and leaving conditions, rpm, and all other items and accessories

3. Size: approximate 2½" x 4" markers for control devices, dampers and valves; and 4½" x 6" for equipment.

L. Plasticized Tags: Pre-printed or partially pre-printed accident-prevention tags, of plasticized card stock with matt finish suitable for writing, approximately 3¼ " x $5^{5}/_{8}$", with brass grommets and wire fasteners, and with appropriate pre-printed wording including large-size primary wording (as examples: DANGER, CAUTION, DO NOT OPERATE).

M. Plastic Labels: Printed labels created with label printer/maker similar to Brother P-Touch for marking white iron of ceiling grid for equipment and access concealed by the hung ceiling. Labels shall be 1/2" high black letters on clear background.

N. Key Identification Tag: Provide identification tag on every key provided as part of the maintenance materials specified in their respective sections. Tags shall be plastic stamped or engraved with 1/4" high letter for abbreviated name of unit and/or equipment and 1/2" for the number and with 5/32" hole for fastener. The tag shall be of the same color as the equipment with black lettering. Provide 2" square or round tags. Tag Fasteners: solid brass chain (wire link or beaded type), or solid brass S-hooks of the size required for proper attachment of tags to valves, and manufactured specifically for that purpose.

O. Lettering and Graphics:

1. Coordinate names, abbreviations and other designations used in the identification work with corresponding designations shown on the Drawings or Schedules, or specified. Provide numbers, lettering and wording as indicated or, if not otherwise indicated, as recommended by manufacturers or as required for proper identification and operation/maintenance of systems and equipment.

2. Multiple Systems: Where multiple systems of same generic name are shown on the Drawings or Schedules and specified, provide identification that indicates individual system number as well as service (as examples: Boiler No. 2, Air Supply No. 1).

P. Approved Manufacturers

Allen Systems, Inc.
Brady (W.H.) Co.; Signmark Div.
Industrial Safety Supply Co., Inc.
Seton Name Plate Corp.
Brimar Industries, Inc.
Marking Services Inc.
EMED Co., Inc.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Coordination: Where identification is to be applied to surfaces that require insulation, painting or other covering or finish, including valve tags in finished mechanical spaces, install identification after completion of covering and painting. Install identification prior to installation of acoustical ceilings and similar removable concealment.

B. Ductwork Identification:

1. Identify air supply, return, exhaust and intake ductwork with duct markers or painted identification materials and provide arrows showing ductwork service and direction of flow, in black or white (whichever provides most contrast with ductwork color).

2. Location: In each space where ductwork is exposed, or concealed only by removable ceiling system, locate signs near points where ductwork originates or continues into concealed enclosures (shaft, underground or similar concealment), and at 50' spacings along exposed runs.

3. Access Doors: Provide plastic duct markers on each access door in ductwork and housings, indicating purpose of access (to what equipment) and other maintenance and operating instructions, and appropriate safety and procedural information.

4. Concealed Doors: Where access doors are concealed above acoustical ceilings or similar concealment, provide plastic labels installed on the exposed white iron adjacent to the acoustical ceiling tile that when removed will provide access to the access door. Provide plastic duct marker on the door itself as described in 3 above.

C. Piping System Identification: Install pipe markers and color bands and include arrows to show direction wherever piping is exposed to view in occupied spaces, machine rooms, accessible maintenance spaces (shafts, tunnels, plenums) and exterior non-concealed locations.

1. Near each valve and control device

2. Near each branch, excluding short take-offs for terminal units; mark each pipe at branch, where there could be question of flow pattern.

3. Near locations where pipes pass through walls or floors/ceilings, or enter non-accessible enclosures.

4. Near major equipment items and other points of origination and termination.

5. Spaced intermediately at maximum spacing of 50' along each piping run, except reduce spacing to 25' in congested areas of piping and equipment.

6. On piping above removable acoustical ceilings except omit intermediately spaced markers.

F. A permanent factory-applied name-plate(s) shall be affixed to appliances (reference Section MC 301.6 of the 2014 NYC Mechanical Code) on which shall appear in legible lettering, the manufacturer’s name or trademark, the model number, serial number and the seal or mark of the approved agency. A label shall also include the following:

1. Electrical equipment and appliances: Electrical rating in volts, amperes and motor phase; identification of individual electrical components in volts, amperes or watts, motor phase; Btu/h output; and required clearances.

2. Absorption units: Hourly rating in Btu/h; minimum hourly rating for units having step or automatic modulating controls; type of fuel; type of

refrigerant; cooling capacity in Btu/h; and required clearances.

3. Fuel-burning units: Hourly rating in Btu/h; type of fuel approved for use with the appliances; and required clearances.

4. Electric comfort heating appliances: Name and trade-mark of the manufacturer; the model number or equivalent; the electric rating in volts, ampacity and phase; Btu/h (W) output rating; individual marking for each electrical component in amperes or watts, volts and phase; required clearances from combustibles; and a seal indicating approval of the appliance by an approved agency.

G. Mechanical Equipment Identification:

1. Install plastic equipment marker near each major item of mechanical equipment and each operational device, as specified herein if not otherwise specified for each item or device in their respective sections. Provide signs for the following general categories of equipment and operational devices

a. Main control and operating valves, including safety devices

b. Meters, gauges, thermometers and similar units

c. Strainers, filters, humidifiers, water treatment systems, thermostatic traps and similar equipment

d. Primary balancing dampers, mixing boxes

2. Provide permanent factory-applied nameplate(s) for all appliances as defined in Article 3.01.F above including but not limited to the following:

a. Fuel-burning units including boilers, furnaces and heaters units

b. Pumps, compressors, chillers, condenser and similar motor-driven units

c. Converters, heat exchangers, coils, evaporators, heat recovery units and similar equipment

d. Fans, blowers and VAV terminals

e. Packaged HVAC central-station, zone-type units, heat pumps, air handling units, heating and ventilating units

f. Tanks and pressure vessels

3. Plastic equipment marker lettering Size: Minimum 1/4" high lettering for name of unit where viewing distance is less than 2', 1/2" high for distances up to 6', and proportionally larger lettering for greater distances. Provide secondary lettering 2/3 to 3/4 of size of principal lettering.

4. Text of Signs: In addition to name of identified unit, provide lettering to distinguish between multiple units, inform operator of operational requirements, indicate safety and emergency precautions, and warn of hazards and improper operations.

5. Optional Use of Plasticized Tags: At the NYCDOC's Representative option, where equipment to be identified is concealed above acoustical ceiling or similar concealment, plasticized tags shall be installed within concealed space to reduce amount of text in exposed sign (outside concealment).

    a. Operational valves, dampers and similar minor items located in non-occupied spaces (including machine rooms) shall be identified by plasticized tags.

H. Concealed Equipment, Dampers, Access Doors, etc.

1. Equipment (e.g. VAV boxes), dampers, access doors, filters, etc. concealed above the hung ceiling shall have plastic labels placed on the white iron of the hung ceiling before the ceiling tiles are installed to allow easy location of the devices once the hung ceiling is installed.

2. Devices shall be labeled by type and the number utilized on the final approved drawings to identify the device (if item is numbered).

END OF SECTION

LIST OF SUBMITTALS

SUBMITTAL	DATE SUBMITTED	DATE APPROVED
Product Data:	_____	_____
1. Manufacturers Product Data 2. Installation Instructions		
Shop Drawings:	_____	_____
Schedules: Valve Schedule	_____	_____
Key Identification Schedule	_____	_____

* * *

SECTION 235900

CLEANING AND TESTING

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

1.02 SUBMITTALS

A. Quality Control Submittals

1. Test Reports (Field Tests):

a. Propylene Glycol System Test: Submit test results in a format acceptable to the Director's Representative.

b. Submit data for each system tested, and/or disinfected; include date performed, description, and test results for each system.

1.03 QUALITY ASSURANCE

A. Regulatory Requirements:

1. Perform factory testing of factory fabricated equipment in complete accordance with the agencies having jurisdiction.

2. Perform field testing of piping systems in complete accordance with the local utilities and other agencies having jurisdiction and as specified.

1.04 PROJECT CONDITIONS

A. Protection: During test Work, protect controls, gages and accessories which are not designed to withstand test pressures. Do not utilize permanently installed gages for field testing of systems.

1.05 SEQUENCING AND SCHEDULING

A. Transmit written notification of proposed date and time of operational tests to the Director's Representative at least 5 days in advance of such tests.

B. Perform cleaning and testing Work in the presence of the Director's Representative.

C. Pressure test piping systems, at the roughing-in stage of installation, before piping is enclosed by construction Work, and at other times as directed. Perform test operations in sections as required and directed, to progress the Work in a satisfactory manner and not delay the general

construction of the building. Valve or cap-off sections of piping to be tested, utilizing valves required to be installed in the permanent piping systems, or temporary valves or caps as required to perform the Work.

PART 2 PRODUCTS

2.01 MATERIALS

A. Test Equipment and Instruments: Type and kind as required for the particular system under test. B. Test Media (water): As specified for the particular piping or system under test.

C. Cleaning Agent (chemical solution, steam, water): As specified for the particular piping, apparatus or system being cleaned.

D. Propylene Glycol: Permanent type anti-freeze solution as manufactured by Dow Chemical Co. or Union Carbide.

1. Percentage of Propylene Glycol: 35 percent.

PART 3 EXECUTION

3.01 PRELIMINARY WORK

A. Thoroughly clean pipe and tubing prior to installation. During installation, prevent foreign matter from entering systems. Prevent if possible and remove stoppages or obstructions from piping and systems.

3.02 PRESSURE TESTING OF PIPING

A. Piping shall be tight under test and shall not show loss in pressure or visible leaks, during test operations or after the minimum duration of time as specified. Remove piping which is not tight under test; remake joints and repeat test until no leaks occur.

B. General:

1. Pressure test piping systems inside buildings, at the roughing-in stage of installation, before piping is enclosed by construction Work, and at other times as directed.
2. Perform test operations in sections as required and directed, to progress the Work in a satisfactory manner and not delay the general construction of the building.
3. Valve or cap-off sections of piping to be tested, utilizing valves required to be installed in the permanent piping systems, or temporary valves or caps as required to perform the Work.
4. Isolate existing piping from pressure testing.
5. Pressure test only new piping unless otherwise specified or directed by Director's Representative.

C. Water Systems:

1. Circulating water systems, including propylene glycol solution systems and cold water make-up piping connections to heating, ventilating, air conditioning and refrigeration systems, unless otherwise specified:

a. Before final connections are made perform hydrostatic test at 1-1/2 times the maximum working pressure, but not less than 125 psig, for 4 hours.

b. After final connections are made perform hydrostatic retest at a pressure equal to maximum operating system design pressure, but not less than 30 psig, for 4 hours.

3.02 HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS - CLEANING AND OPERATIONAL TESTING

A. Circulating Chilled Water Systems in ship:

1. Cleaning:

a. Flush systems and apparatus, upon completion of pressure test(s).

b. Completely open valves and flush each system with clean water, prior to chemical cleaning.

c. Repeatedly flush at short intervals until twice the system water capacity has been flushed through.

d. Chemically clean systems immediately following flushing operations.

e. Circulate a solution consisting of trisodium phosphate, in a proportion of one pound of chemical to every 50 gallons of water in the system.

f. Completely fill system with cleaning solution; vent as required, and place in operation, with automatic controls operating and valves fully open.

g. Allow system to reach design operating temperature or an operating temperature designated by the Director’s Representative.

h. Circulate the solution through the system for a minimum of 4 consecutive hours; immediately drain system and flush with clean water until the pH at the farthest drain matches the clean water input.

i. Provide temporary pipe and /or hose required to drain system.

j. Keep strainers unplugged during cleaning operations. Remove and clean strainer screens prior to operational test.

k. Refill system with clean water and correct pH to 7.

l. Upon completion of flushing, remove temporary piping and reconnect steam coil.

2. Operational Test:

a. Run system in an automatic mode for a minimum of 120 consecutive hours.

b. During this time, make final adjustments, including the setting of the balancing valves.

B. Propylene Glycol Systems:

1. Clean as specified for circulating water systems.

2. Perform operational test as specified for circulating water systems with propylene glycol solution in system.

END OF SECTION

SECTION 237413

AIR CONDITIONERS - ROOFTOP

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Metal Ductwork: Section 23 31 13.

1.02 PERFORMANCE REQUIREMENTS

A. N/A

1.02 SUBMITTALS

A. Shop Drawings: Submit drawings for each size of factory fabricated roof curb.

B. Product Data: Manufacturer's catalog sheets, brochures, performance charts, standard schematic drawings, specifications and installation instructions for each size unit

1. Name, address, and telephone number of nearest fully equipped service organization.

C. Contract Closeout Submittals:

1. Operation and Maintenance Data: Deliver 2 copies, covering the installed products, to the Director's Representative.

1.03 QUALITY ASSURANCE

A. Regulatory Requirements:

1. Unit shall be factory tested and the design, construction and installation shall be in accordance with the following: ARI Standard 210, NFPA, UL, ASHRAE 15, Safety Code for Mechanical Refrigeration, and all State and Local codes or regulations having jurisdiction.
2. Rate cooling capacities in accordance with ARI Standard 210.
3. Electrical components shall be UL listed.

PART 2 PRODUCTS

2.01 A. Roof Curbs: Provide factory fabricated roof curbs, designed to be installed in and become an integral part of the roof construction. Curbs shall mate to the air conditioning units required to be installed on same. Curbs shall be the

product of the air conditioner manufacturer and shall be approved for use by the National Roofing Contractors Association.

PART 3 EXECUTION

3.01 INSTALLATION

A. Roof Curbs:

1. Install curbs in complete accordance with the manufacturer's printed instructions, and as indicated.
2. Deliver roof curbs to construction contractor for installation.

3.02 FIELD QUALITY CONTROL

A. Preliminary Requirements: Employ the services of a Company Field Advisor of the rooftop air conditioner manufacturer for the following:

1. Inspect air conditioner installations prior to start-up.
2. Supervise initial start-up of machine.
3. Instruction of State Personnel.
4. Service.

B. Pre-Start-Up, Start-Up and Instruction: Upon completion of the installation of the air conditioner, to the satisfaction of the Company Field Advisor, start-up and preliminary testing shall be accomplished under the Company Field Advisor's supervision. When all necessary adjustments have been made and air conditioner is properly operating, the Company Field Advisor shall instruct State Personnel in the operation and maintenance of the air conditioner and accessories. Provide a minimum of 8 hours for instruction purposes exclusive of all pre-start-up and start-up time.

END OF SECTION

PART 523 - SECTION 265001

PART 524 - GENERAL PROVISIONS FOR ELECTRICAL WORK

PART 1 – GENERAL

PART 525 - 1.01 SCOPE OF WORK

A. Provide labor, materials, tools, machinery, equipment, and services necessary to complete the Electrical Work under this Contract. All systems and equipment shall be complete in every aspect and all items of material, equipment and labor shall be provided for a fully operational system and ready for use. Coordinate the work with the work of the other trades in order to resolve all conflicts without impeding the job progress.

PART 526 -

PART 527 -

PART 528 - 1.02 EXAMINATION OF SITE

A. The Contractor shall be held to have examined the site and to have compared it with the Drawings and Specifications, and deemed to have been satisfied as to the conditions existing at the site, as relating to the actual conditions of the site at the time estimating the Work, the storage and handling of materials, and all other matters as may be incidental to the Work under the Contract, before bidding, and no allowance will subsequently be made to the Contractor by reason of any error due to the Contractor's neglect to comply with the requirements of this clause.

PART 529 -

PART 530 - 1.03 RELATED DOCUMENTS

PART 531 -

PART 532 - A. Drawings and General Provisions of the Contract.

PART 533 -

1.05 SUBMITTALS

PART 534 -

Provide as outlined in each individual section of these Specifications, including but not limited to:

PART 535 -

A. Shop Drawings: Submit manufacture's shop drawings for conduit, cable, box, etc.

PART 536 -

A. Interpretation

1. The electric work detailed in these Specifications and shown on Drawings shall be under the jurisdiction of the Commissioner.

2. The Commissioner shall be the sole source for interpretation of the Contract Documents. Any discrepancies or conflicts shall be brought to the attention of the Commissioner for clarification.

PART 537 - 1.08 GENERAL REQUIREMENTS OF WORK

A. Removals, Replacements, Adjustments

1. The Contractor shall remove, relocate, replace, adjust or adapt, all existing conduit, wiring and other electric equipment or apparatus, as required, to provide a complete installation.

2. The Work shall include, providing all materials, all necessary extensions, connections, cuttings, repairing, adapting and other Work incidental thereto, together with such temporary connections as may be required to maintain service pending the completion of the permanent Work. All Work shall be left in good working order and in a condition equal to the adjacent new or existing Work.

B. Care in Removing Existing Conductors

1. The Contractor shall use due care and diligence in disconnecting existing feeders and relocation of conduits prior to roof replacement. The feeders removed shall be kept safe for reinstallation after roof is replaced.

C. Cutting and Repairing

3. Whenever the cutting, or drilling, or removal of any part of the structure (ceilings, walls, floors, etc.), is required in order to remove, relocate, alter or install any article of electrical equipment (including conduits, boxes, fittings, etc.), the Contractor shall perform all cutting, drilling, etc., and remove the section of structure required. After removal and installation of the electric equipment, the Contractor shall repair the section of structure, as directed by the Commissioner, with new materials, equal to that of adjacent structure of the same type.

   Note that in general, all holes through existing structures for conduit installation shall be core drilled, unless prior written approval is provided by the Commissioner.

4. Whenever holes are cut in fire-rated walls or floor slabs in order to permit the installation of conduit or electrical equipment, these holes shall be repaired with material that will restore the fire rating of the wall or floor slab to its original condition.

5. Whenever holes are cut in the bulkhead, they shall be fitted with steel sleeves, welded in place. After the installation of conduits, the area around shall be firmly packed with compressible, fire proof fill, topped with high grade caulk.

6. Wherever any part of the structure is marred or damaged, the Contractor shall repair the damaged or marred areas of the structure and restore to original condition.

7. Where a piece of electrical equipment is removed, the Contractor shall finish that part of the surface to match surroundings.

D. Damaged Apparatus: Should any damage, due to the execution of this Contract, occur to the furniture, fixtures, or any equipment or apparatus, such damage shall be properly repaired and/or replaced by the Contractor without charge.

PART 538 -

PART 539 - 1.09 TESTS

A. The Contractor shall demonstrate to the Commissioner operation of all equipment and systems. All tests shall be completed to the satisfaction of the Commissioner. Each test shall be performed as indicated in the individual specification section.

PART 540 -

PART 541 -

PART 542 - PART 2 – PRODUCTS – NOT USED.
PART 543 -
PART 544 -
PART 545 - PART 3 – EXECUTION – NOT USED.

PART 546 - END OF SECTION

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SECTION 265220

WIRING SYSTEMS

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

Install all conductors as required for the proper operation of the various systems specified. All connections shall be made complete, and all systems shall be energized and tested for proper operation.

1.02 QUALITY ASSURANCE

A. Wire manufactured over one year prior to delivery to the site will not be accepted.

B. Tapes for splices or termination shall be dated by the tape manufacturer to indicate that they have been manufactured no longer than six months prior to use in the Work of this Section.

1.03 DELIVERY, STORAGE AND HANDLING

A. Conductors shall be delivered at the building in original packages or on reels and shall have the tag of the manufacturer attached thereto indicating: Contractor's name, Project title and number, Date of manufacturing.

B. Store material in a clean, dry space and protect from weather.

1.04 SUPPLEMENTAL SUBMITTALS

A. Submit a Product Schedule indicating the item description and manufacturer name. The Schedule will be accepted by the Commissioner for record purposes only, provided that the items are in full compliance with the Specifications.

B. Certificates

Provide affidavit stating that all items used are UL listed and meet the specifications.

C. Submit field test results for wires and cables, including "Megger" readings with the method used.

PART 2 – PRODUCTS

2.01 WIRES AND CABLES

A. General

1. Conductors shall conform to A.S.T.M., MILL Standards for Shipboard cable and I.P.C.E.A. standards, and be UL listed and labeled.

2. Conductors shall have a minimum of 600 volts insulation and shall be of soft-annealed-uncoated copper of 98% conductivity. Copper clad or aluminum conductors are not acceptable.

3. All conductors shall have identifiable lettering on the insulator jacket as to voltage rating, wire type, A.W.G. size, insulation, and manufacturer I.D.

B. Wire Description

1. Type THHN/THWN: 75ºC, THHN: 90ºC shall have a thermo-plastic polyvinyl chloride insulation with nylon jacket for 600 volts, and shall comply with ASTM, IPCEA S-61-402 (latest edition) and NEMA WC5 (latest edition).

2. MIL-C-24643/20 (LS7SGU and LS7SGA) 7 conductor #14 AWG. Insulation material, Silicon Rubber/Glass, Braid/Braid covering, Jacket Halogen-Free (LSZH) Cross-Link Polyolefin (XLPO) Water Tight Cable.

3. MIL-DTL-24640/14-18 Lightweight Low Smoke Watertight Wire Cable. Jacket: Irradiation Cross-Linked Modified Low Smoke Polyolefin, compounded without Halogens. Cable shall be of multi-strands, twisted pairs, shielded with an outer jacket.

4. Type MTW (Machine Tool Wire) multi-strand, extra flex, for use in wet and dry locations. Primary use for control purposes.

5. 16 AWG. Single Twisted Pair, copper, Shielded, with PVC overall Jacket. (similar to Belden #8719 of approved equal).

6. Metal Clad Cable (Type MC) shall be a factory assembly of conductors, each insulated and enclosed in a metallic flexible interlocking metal tape armor of galvanized steel or aluminum. A bare internal grounding conductor shall be included and insulated from the outer metal armor. All conductors, including grounding conductor, shall be a minimum of #12 AWG. The assembly shall be UL listed and rated 600 volts, 90□C.

7. Mineral Insulated Cable (type MI) shall consist of one or more solid copper conductors insulated with highly compressed magnesium oxide and enclosed in a continuous copper sheath. The MI cable shall be rated at 600V. The MI cable sheath shall be grounded. MI cable shall be 2 hours fire rated.

8. Type MTW-90^{o}C nylon jacket, moisture resistant, oil and heat resistant, thermoplastic stranded. Minimum wire gauge #16 control instrumentation.

2.02 SPLICES AND TERMINATIONS

A. General

1. All materials for making splices and terminations shall be specifically designed for use with the type of wire, the cable insulation, the installation and the operating conditions of the specific application and be UL listed.

2. Grounding conductors and bonding jumpers shall be connected by exothermic welding, listed pressure connectors, listed clamps, or other listed means**.**

PART 3 – EXECUTION

3.01 PREPARATION

A. Prior to pulling wires and cable, clean raceway systems of all foreign matter and perform all operations necessary so as not to cause damage to wires and cables while pulling.

3.02 INSTALLATION

A. General

1. Use approved lubrication when installing cables in conduits and raceways. Any pulling compounds shall be compatible with the finish of the wires and cables furnished.

B. Type THHN/THWN, MTW wire

1. Feeder and Branch Circuits.

2. Remote-Control Signaling and Power-Limited Circuits: - Circuit Classes 1, 2 or 3, unless otherwise indicated.

C. Type MC Cable - Use in concealed installation of hung ceiling and gypsum board for:

1. Power branch circuit**.**

D. Identifications of Wires and Cables

1. Each wire and cable shall be identified by its circuit in all cabinets, boxes, and other enclosures and access locations, and at all terminal points.

E. Terminations

1. For Conductor Sizes Larger Than Terminal Capacity On Equipment:

Reduce the larger conductor to the maximum conductor size that terminal can accommodate (reduce section no longer than 1 ft.). Cutting of cable strands to fit terminal is not acceptable.

3.03 FIELD TESTS

A. Test all feeder cables installed under this Contract with a 1000-volt Megohmmeter. Furnish the Commissioner with a copy of the "Megger" test report, together with an outline of the method used. Any cable not attaining the minimum reading established in the code shall be replaced.

3.04 COMMON NEUTRAL CONDUCTOR

A. A common neutral may be used for 2 or 3 branch circuits where the circuits are indicated on the Drawings to be enclosed within the same raceway, provided each branch circuit is connected to different phase busses in the panelboard.

B. Exceptions - The following circuits shall have a separate neutral:

1. Circuits containing ground fault circuit interrupter devices.
2. Circuits containing solid-state dimmers.
3. Circuits for computers, peripherals and related equipment.
4. Circuits recommended by equipment manufacturers to have separate neutrals.

3.05 EQUIPMENT GROUNDING CONDUCTOR

Note that equipment-grounding conductors are not shown on the Contract Drawings, but it shall be provided when and as required by Code.

END OF SECTION

PART 547 - SECTION 265320

PART 548 - CONDUIT, WIREWAY AND FITTINGS

PART 549 -

PART 1 – GENERAL

1.01 CONDUIT AND FITTINGS

A. Conduit to be UL labeled approved and sized in accordance with NEC minimum size 1/2". Conduit limited use for control and instrumentation wiring and single conductor used for grounding for purpose or location in which it is to be minimum used.

B. All wiring for low tension, controls, communications and all other systems shall be in raceway specified for branch circuits unless specifically noted in other sections.

1.02 TYPES AND APPLICATIONS

A. Types of conduit to be as follows for all feeders and distribution circuits, unless otherwise noted:

Application	Types of Conduit
Surface-Mounted Exposed Outdoors	Rigid, Galvanized Steel. Rigid Galvanized Steel Conduit
Final connection to motors or Equipment	PVC Coated Liquid Tight Flexible Steel Conduit

1.03 CONTINUITY AND GROUNDING

A. Fasten all conduits to each adjacent section and to all boxes, fittings, and equipment with firm clean metallic contact so that the entire conduit system is well and continuously grounded.

1.04 LOCATION OF CONDUIT.

A. Run conduit carefully and coordinate with mechanical trades.

1.05 BUSHINGS AND LOCKNUTS

A. Provide insulating bushings or connectors on all conduits. Install capped bushings on all conduits as soon as installed and remove only when wires are pulled. Conduit terminations within sheet metal enclosures and outlet boxes shall be secured by two locknuts, one on the inside and one on the outside. Provide an insulating bushing for each conduit or flexible conduit where entering a panel, pull box or outlet box. Locknuts and bushings shall be steel body.

PART 2 – PRODUCTS

2.01 CONDUIT

A. Rigid Steel Conduit: Straight lengths, couplings, elbows, bends, and nipples shall be hot-dipped galvanized rigid steel complying with U/L Standard UL6 and ANSI Standard C80.1..

B. Liquid-Tight Flexible Steel Conduit: U/L approved flexible galvanized steel tubing having a copper bonding conductor wound in the conduit convolutions, and is oil resistant, gray colored, outer polyvinyl chloride jacket.

C. Securely fasten rigid steel conduits to cast metal outlet, junction and pull boxes, provide insulating bushings, with insulated throat. Provide hub fittings for sheet metal boxes and cabinets. Hub fittings shall be equipped with 'O' rings for liquid tight installations.

D. Liquid-tight connectors shall be cast malleable iron body and gland nut, cadmium plated with brass ground bushing and molded vinyl sealing ring.

E. Provide pull boxes, terminal and junction boxes where shown on the drawings and where required by Code to facilitate proper pulling or wires and cables. No more than Three (4) 90° bends shall be permitted between pull boxes. Vertical runs of conduit shall be equipped with pull boxes and cable supports, as required by Article 300-19 of the N.E.C.

F. Unless otherwise noted, all UL listed manufacturers are approved provided they subscribe to UL reinspection services for the type of conduit or fittings indicated and/or specified.

PART 3 – EXECUTION

3.01 INSTALLATION

A. Install in accordance with the applicable provisions of the National Electrical Code, manufacturer's recommendations and the drawings.

.

END OF SECTION

PART 550 - SECTION 265812
PART 551 -
PART 552 - SAFETY SWITCHES

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

A. The following shall apply to work in this section:

1. Section 265001: “General Provisions for Electrical Work”.

PART 553 - 1.02 DESCRIPTION OF THE WORK

PART 554 - A. Provide Safety Switches as and where shown on the Drawings for service use. Switches shall be fusible type where noted with Service Entrance Label as required.

PART 555 - 1.03 SUBMITTALS

PART 556 - A. Product Data

Catalog sheets, Specifications and Installation Instructions.

PART 557 - 1.04 SPARE PARTS

PART 558 - A. Three spare fuses for each type and size installed.

PART 2 – PRODUCTS

PART 559 - 2.01 SAFETY SWITCHES (SINGLE THROW)

PART 560 - A. NEMA 1 & 3R.

Challenger, Cutler-Hammer, General Electric, Siemens, Square D or Westinghouse Electric, heavy duty type, having:

1. Fused, or unfused as indicated on Drawings and shall be of applicable H. P. rating.
2. Fused switches equipped with fuseholders to match existing.
3. NEMA 1 enclosure unless otherwise indicated on Drawing.
4. Voltage Ratings
    a. 250V rating for 120V, 208V, or 240V, circuits.
    b. 600V rating for 277V and 480V circuits.
5. Solid neutral bar when neutral conductor is included with circuit.

6. Ground bar when equipment grounding conductor is included with circuit.

7. Current rating and number of poles as indicated on Drawings.

PART 561 - 2.02 NAMEPLATES

PART 562 - A. General

Precision engrave letters and numbers with uniforms margins, character size minimum 3/16" high.

1. Phenolic: Two color laminated engravers stock, 1/16" minimum thickness, machine engraved to expose inner core color (white).

2. Aluminum: Standard aluminum alloy plate stock, minimum .032" thick, engraved areas enamel filled or background enameled with natural aluminum engraved characters.

3. Materials for Outdoor Applications: As recommended by nameplate manufacturer to suit environmental conditions.

PART 3 – EXECUTION

PART 563 - 3.01 INSTALLATION

PART 564 - A. Install switches so that the maximum height above the floor to the center of the operating handle does not exceed 6'-6". When shown as wall mounted switches shall be mounted to horizontal strut supports. Free standing units shall be mounted on a free-standing strut system anchored to the floor, ceiling, and walls.

PART 565 - B. Identify each safety switch, indicating purpose or load served:

1. NEMA 1 Enclosures: Rivet or bolt nameplate to the cover.

2. NEMA 3R Enclosures: Attach nameplate to the cover using adhesive specifically designed for the purpose, or mount nameplate on wall or other conspicuous location adjacent to switch. Do not penetrate enclosure with fasteners.

PART 566 - C. Provide fusing as indicated on the Drawings.

PART 567 - END OF SECTION

SECTION II - LIST OF DRAWINGS

SECTION 000150
LIST OF DRAWINGS AND TABLE OF CONTENTS FOR SPECIFICATIONS

1.01 DRAWINGS

A. The Contract Drawings, which accompany this Project Manual and form a part of the Contract Documents, are listed on the Title Sheet of the Drawings.

B. The drawings for related contracts may be listed on the Title Sheet for reference only. Examine the drawings for related contracts to ascertain the relationship of the Work to the related contracts.

List of Drawings

Dwg. No. Dwg. Title
T001 Title Sheet, Location Plan
T001 Title Sheet, Location Plan and List of Drawings
T002 Restoration Summary, Plot Plan, Document Organization
T003 DOB Notes, General Notes, Special & Progress Inspections
T004 NYC ECC Notes, Tabular Analysis, NYC ECC Required Progress Inspections

HazMat:

H101 Hazardous Materials Removal Roof Plan

Architectural:

A101 Roof Removals Plan
A102 Roof Plan
A201 Penthouse Elevations
A202 East Elevation
A301 Masonry Details - 1
A302 Masonry Details - 2
A303 Masonry Details - 3
A304 Masonry Details -4
A401 Roofing Details - 1
A402 Roofing Details - 2
A403 Roofing Details - 3
A404 Roofing Details - 4
A405 Roofing Details - 5
A406 Roofing Details - 6
A407 Roofing Details - 7
A408 Roofing Details – 8
A409 Roofing Details – 9

A410 Roofing Details – 10
A411 Roofing Details – 11
A501 Railing Modification Detail
A502 Ladder Details – 1
A503 Ladder Details – 2
A504 Stair Platform Details
A910 Door Schedule, Elevations and Details
A911 Door Details

Structural:

S001 Structural Notes
S201 SLB 01
S202 SLB 01 (Alternate)
S203 CRB 01

Mechanical:

M100 Mechanical General Notes, Legend, Abbreviations and Details
M101 Roof Plan
M201 Details Type 1 & 2 Work

Fire Suppression Systems:

SP100 Sprinkler General Notes, Legend, Abbreviations and Details
SP101 Roof & 7th Floor Part Plan – Sprinkler Modification

Plumbing:

P100 Plumbing General Notes, Legend, Abbreviations and Details
P101 Roof Plan

Electrical:

E100 Electrical General Notes, Legend, Abbreviations and Details
E101 Electrical Roof Plan & 7th Floor Part Plan – Fire Alarm Modification
E102 Site Photo Location Plan
E103 Site Photos

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014339 – Mockups and Physical Quality Assurance Aids
016000 – Materials and Equipment
016100 – Product Requirements
017300 – Removals, Cutting, and Patching
017310 – Execution
017700 – Contract Closeout
019000 – Existing Premises Work
017700 – Contract Closeout
019000 – Existing Premises Work

Technical Specifications

024119 – Selective Demolition
028200 – Asbestos Removal
030100 – Concrete Restoration
033000 – Cast-In-Place Concrete
034500 – Precast Architectural Concrete
040120 – Unit Masonry Restoration
040513 – Masonry Mortar
040519 – Masonry Anchorage and Reinforcing
051200 – Structural Steel Restoration
053100 – Steel Decking
055000 – Metal Fabrications
055100 – Metal Grating Stairs
055300 – Bar Gratings
061000 – Rough Carpentry
075200 – Modified Bituminous Membrane Roofing
075600 – Fluid Applied Roofing
076100 – Sheet Metal Roofing
076200 – Flashing (Sheet Metal and Flexible)
077113 – Manufactured Copings and Fascias
077123 – Manufactured Gutters, Downspouts and Scuppers
078400 – Firestopping
079200 – Joint Sealants
083463 – Detention Doors and Frames
087163 – Detention Door Hardware
089100 – Stationary Metal Wall Louvers
099000 – Construction Painting
099713 – Steel Coatings

Fire Protection Specifications
210000 – General FP Work
213300 – Sprinkler Systems

Plumbing Specifications
221400 – Facility Storm Drainage
221426 – Drains

Mechanical Specifications
230000 – General HVAC
230001 – HVAC Piping
230700 – HVAC Piping Insulation
233113 – Metal Ductwork
232000 – Ductwork Insulation
233300 – Ductwork Accessories
233313 – Dampers
233416 – Centrifugal Fans
235900 – Cleaning and Testing
237413 – Air Conditioners Rooftop

Electrical Specifications
265001 – General Provisions for Electrical Work
265220 – Wiring Systems
265320 – Conduit, Wireway and Fittings
265812 – Safety Switches

End of List of Specifications

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CITY OF NEW YORK

STANDARD CONSTRUCTION CONTRACT

March 2017

CITY OF NEW YORK
STANDARD CONSTRUCTION CONTRACT

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WITNESSETH:

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

CHAPTER I: THE CONTRACT AND DEFINITIONS

ARTICLE 1. THE CONTRACT

1.1 Except for titles, subtitles, headings, running headlines, tables of contents and indices (all of which are printed herein merely for convenience), the following, except for such portions thereof as may be specifically excluded, shall be deemed to be part of this **Contract**:

1.1.1 All provisions required by law to be inserted in this **Contract**, whether actually inserted or not;

1.1.2 The Contract Drawings and Specifications;

1.1.3 The General Conditions and Special Conditions, if any;

1.1.4 The **Contract**;

1.1.5 The Information for Bidders; Request for Proposals; Notice of Solicitation and Proposal For Bids; Bid or Proposal, and, if used, the Bid Booklet;

1.1.6 All Addenda issued prior to the receipt of the bids; the Notice of Award; Performance and Payment Bonds, if required; and the Notice to Proceed or the Order to Work.

1.2 Should any conflict occur in or between the Drawings and Specifications, the **Contractor** shall be deemed to have estimated the most expensive way of doing the **Work**, unless the **Contractor** shall have asked for and obtained a decision in writing from the **Commissioner** of the **Agency** that is entering into this **Contract**, before the submission of its bid, as to what shall govern.

ARTICLE 2. DEFINITIONS

2.1 The following words and expressions, or pronouns used in their stead, shall, wherever they appear in this Contract, be construed as follows, unless a different meaning is clear from the context:

2.1.1 **"Addendum"** or **"Addenda"** shall mean the additional Contract provisions and/or technical clarifications issued in writing by the Commissioner prior to the receipt of bids.

2.1.2 **"Agency"** shall mean a city, county, borough or other office, position, department, division, bureau, board or commission, or a corporation, institution or agency of government, the expenses of which are paid in whole or in part from the City treasury.

2.1.3 **"Agency Chief Contracting Officer" (ACCO)** shall mean a person delegated authority by the Commissioner to organize and supervise the procurement activity of subordinate Agency staff in conjunction with the CCPO, or his/her duly authorized representative.

2.1.4 **"Allowance"** shall mean a sum of money which the Agency may include in the total amount of the Contract for such specific contingencies as the Agency believes may be necessary to complete the Work, *e.g.*, lead or asbestos remediation, and for which the Contractor will be paid on the basis of stipulated unit prices or a formula set forth in the Contract or negotiated between the parties provided, however, that if the Contractor is not directed to use the Allowance, the Contractor shall have no right to such money and it shall be deducted from the total amount of the Contract.

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

2.1.6 **"City Chief Procurement Officer" (CCPO)** shall mean a person delegated authority by the Mayor to coordinate and oversee the procurement activity of Mayoral agency staff, including the ACCO and any offices which have oversight responsibility for the procurement of construction, or his/her duly authorized representative.

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

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

2.1.9 **"Contract"** or **"Contract Documents"** shall mean each of the various parts of the contract referred to in Article 1 hereof, both as a whole and severally.

2.1.10 **"Contract Drawings"** shall mean only those drawings specifically entitled as such and listed in the Specifications or in any Addendum, or any drawings furnished by the Commissioner, pertaining or supplemental thereto.

2.1.11 **"Contract Work"** shall mean everything required to be furnished and done by the Contractor by any one or more of the parts of the Contract referred to in Article 1, except Extra Work as hereinafter defined.

2.1.12 **"Contractor"** shall mean the entity which executed this Contract, whether a corporation, firm, partnership, joint venture, individual, or any combination thereof, and its, their, his/her successors, personal representatives, executors, administrators, and assigns, and any person, firm, partnership, joint venture, individual, or corporation which shall at any time be substituted in the place of the Contractor under this Contract.

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

2.1.14 **"Engineer"** or **"Architect"** or **"Project Manager"** shall mean the person so designated in writing by the Commissioner in the Notice to Proceed or the Order to Work to act as such in relation to this Contract, including a private Architect or Engineer or Project Manager, as the case may be. Subject to written approval by the Commissioner, the Engineer, Architect or Project Manager may designate an authorized representative.

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

2.1.16 **"Extra Work"** shall mean Work other than that required by the Contract at the time of award which is authorized by the Commissioner pursuant to Chapter VI of this Contract.

2.1.17 **"Federal-Aid Contract"** shall mean a contract in which the United States (federal) Government provides financial funding as so designated in the Information for Bidders.

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

2.1.19 **"Final Approved Punch List"** shall mean a list, approved pursuant to Article 14.2.2, specifying those items of Work to be completed by the Contractor after Substantial Completion and dates for the completion of each item of Work.

2.1.20 **"Law"** or **"Laws"** shall mean the Constitution of the State of New York, the New York City Charter, the New York City Administrative Code, a statute of the United States or of the State of New York, a local law of the City of New York, any ordinance, rule or regulation having the force of law, or common law.

2.1.21 **"Materialman"** shall mean any corporation, firm, partnership, joint venture, or individual, other than employees of the Contractor, who or which contracts with the Contractor or any Subcontractor, to fabricate or deliver, or who actually fabricates or delivers, plant, materials or equipment to be incorporated in the Work.

2.1.22 **"Means and Methods of Construction"** shall mean the labor, materials, temporary structures, tools, plant, and construction equipment, and the manner and time of their use, necessary to accomplish the result intended by this Contract.

2.1.23**"Notice to Proceed" or "Order to Work"** shall mean the written notice issued by the Commissioner specifying the time for commencement of the Work and the Engineer, Architect or Project Manager.

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

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

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

2.1.27 **"Procurement Policy Board" (PPB)** shall mean the Agency of the City of New York whose function is to establish comprehensive and consistent procurement policies and rules which shall have broad application throughout the City.

2.1.28 **"Required Quantity"** in a unit price Contract shall mean the actual quantity of any item of Work or materials which is required to be performed or furnished in order to comply with the Contract.

2.1.29 **"Resident Engineer"** shall mean the representative of the Commissioner duly designated by the Commissioner to be his/her representative at the site of the Work.

2.1.30 **"Site"** shall mean the area upon or in which the Contractor's operations are carried on, and such other areas adjacent thereto as may be designated as such by the Engineer.

2.1.31 **"Small Tools"** shall mean items that are ordinarily required for a worker's job function, including but not limited to, equipment that ordinarily has no licensing, insurance or substantive storage costs associated with it; such as circular and chain saws, impact drills, threaders, benders, wrenches, socket tools, etc.

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

2.1.33 **"Subcontractor"** shall mean any person, firm or corporation, other than employees of the Contractor, who or which contracts with the Contractor or with its subcontractors to furnish, or actually furnishes labor, or labor and materials, or labor and equipment, or superintendence, supervision and/or management at the Site. Wherever the word Subcontractor appears, it shall also mean sub-Subcontractor.

2.1.34 **"Substantial Completion"** shall mean the written determination by the Engineer that the Work required under this Contract is substantially, but not entirely, complete and the approval of the **Final Approved Punch List**.

2.1.35 **"Work"** shall mean all services required to complete the Project in accordance with the Contract Documents, including without limitation, labor, material, superintendence, management, administration, equipment, and incidentals, and obtaining any and all permits, certifications and licenses as may be necessary and required to complete the Work, and shall include both Contract Work and Extra Work.

CHAPTER II: THE WORK AND ITS PERFORMANCE

ARTICLE 3. CHARACTER OF THE WORK

3.1 Unless otherwise expressly provided in the **Contract Drawings**, **Specifications,** and **Addenda**, the **Work** shall be performed in accordance with the best modern practice, utilizing, unless otherwise specified in writing, new and unused materials of standard first grade quality and workmanship and design of the highest quality, to the satisfaction of the **Commissioner**.

ARTICLE 4. MEANS AND METHODS OF CONSTRUCTION

4.1 Unless otherwise expressly provided in the **Contract Drawings**, **Specifications,** and **Addenda**, the **Means and Methods of Construction** shall be such as the **Contractor** may choose; subject, however, to the **Engineer's** right to reject the **Means and Methods of Construction** proposed by the **Contractor** which in the opinion of the **Engineer**:

4.1.1 Will constitute or create a hazard to the **Work**, or to persons or property; or

4.1.2 Will not produce finished **Work** in accordance with the terms of the **Contract**; or

4.1.3 Will be detrimental to the overall progress of the **Project**.

4.2 The **Engineer's** approval of the **Contractor's Means and Methods of Construction**, or his/her failure to exercise his/her right to reject such means or methods, shall not relieve the **Contractor**

of its obligation to complete the **Work** as provided in this **Contract**; nor shall the exercise of such right to reject create a cause of action for damages.

ARTICLE 5. COMPLIANCE WITH LAWS

5.1 The **Contractor** shall comply with all **Laws** applicable to this **Contract** and to the **Work** to be done hereunder.

5.2 Procurement Policy Board Rules: This **Contract** is subject to the Rules of the **PPB** ("**PPB** Rules") in effect at the time of the bid opening for this **Contract**. In the event of a conflict between the **PPB** Rules and a provision of this **Contract**, the **PPB** Rules shall take precedence.

5.3 Noise Control Code provisions.

5.3.1 In accordance with the provisions of Section 24-216(b) of the Administrative Code of the **City** ("Administrative Code"), Noise Abatement Contract Compliance, devices and activities which will be operated, conducted, constructed or manufactured pursuant to this **Contract** and which are subject to the provisions of the **City** Noise Control Code shall be operated, conducted, constructed, or manufactured without causing a violation of the Administrative Code. Such devices and activities shall incorporate advances in the art of noise control development for the kind and level of noise emitted or produced by such devices and activities, in accordance with regulations issued by the **Commissioner** of the **City** Department of Environmental Protection.

5.3.2 The **Contractor** agrees to comply with Section 24-219 of the Administrative Code and implementing rules codified at 15 Rules of the City of New York ("RCNY") Section 28-100 *et seq*. In accordance with such provisions, the **Contractor**, if the **Contractor** is the responsible party under such regulations, shall prepare and post a Construction Noise Mitigation Plan at each **Site**, in which the **Contractor** shall certify that all construction tools and equipment have been maintained so that they operate at normal manufacturers operating specifications. If the **Contractor** cannot make this certification, it must have in place an Alternative Noise Mitigation Plan approved by the **City** Department of Environmental Protection. In addition, the **Contractor**'s certified Construction Noise Mitigation Plan is subject inspection by the **City** Department of Environmental Protection in accordance with Section 28-101 of Title 15 of RCNY. No **Contract Work** may take place at a **Site** unless there is a Construction Noise Mitigation Plan or approved Alternative Noise Mitigation Plan in place. In addition, the **Contractor** shall create and implement a noise mitigation training program. Failure to comply with these requirements may result in fines and other penalties pursuant to the applicable provisions of the Administrative Code and RCNY.

5.4 Ultra Low Sulfur Diesel Fuel: In accordance with the provisions of Section 24-163.3 of the Administrative Code, the **Contractor** specifically agrees as follows:

5.4.1 Definitions. For purposes of this Article 5.4, the following definitions apply:

5.4.1(a) "Contractor" means any person or entity that enters into a Public Works Contract with a **City Agency**, or any person or entity that enters into an agreement with such person or entity, to perform work or provide labor or services related to such Public Works Contract.

5.4.1(b) "Motor Vehicle" means any self-propelled vehicle designed for transporting persons or property on a street or highway.

5.4.1(c) "Nonroad Engine" means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.

5.4.1(d) "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower and greater, and that is not a Motor Vehicle or a vehicle used solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except that this term shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) horsepower or less and that are not used in any construction program or project.

5.4.1(e) "Public Works Contract" means a contract with a **City Agency** for a construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; a contract with a **City Agency** for the preparation for any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge; or a contract with a **City Agency** for any final work involved in the completion of any construction program or project involving the construction, demolition, restoration, rehabilitation, repair, renovation, or abatement of any building, structure, tunnel, excavation, roadway, park or bridge.

5.4.1(f) "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million (15 ppm).

5.4.2 Ultra Low Sulfur Diesel Fuel

5.4.2(a) All **Contractors** shall use Ultra Low Sulfur Diesel Fuel in diesel-powered Nonroad Vehicles in the performance of this **Contract**.

5.4.2(b) Notwithstanding the requirements of Article 5.4.2(a), **Contractors** may use diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) to fulfill the requirements of this Article 5.4.2, where the Commissioner of the **City** Department of Environmental Protection ("DEP Commissioner") has issued a determination that a sufficient quantity of Ultra Low Sulfur Diesel Fuel is not available to meet the needs of **Agencies** and **Contractors**. Any such determination shall expire after six (6) months unless renewed.

5.4.2(c) **Contractors** shall not be required to comply with this Article 5.4.2 where the **City Agency** letting this **Contract** makes a written finding, which is approved, in writing, by the DEP Commissioner, that a sufficient quantity of Ultra Low Sulfur Diesel Fuel, or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) is not available to meet the requirements of Section 24-163.3 of the Administrative Code, provided that such **Contractor** in its fulfillment of the

requirements of this **Contract**, to the extent practicable, shall use whatever quantity of Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm) is available. Any finding made pursuant to this Article 5.4.2(c) shall expire after sixty (60) **Days**, at which time the requirements of this Article 5.4.2 shall be in full force and effect unless the **City Agency** renews the finding in writing and such renewal is approved by the DEP Commissioner.

5.4.2(d) **Contractors** may check on determinations and approvals issued by the DEP Commissioner pursuant to Section 24-163.3 of the Administrative Code, if any, at www.dep.nyc.gov or by contacting the **City Agency** letting this **Contract**.

5.4.2(e) The requirements of this Article 5.4.2 do not apply where they are precluded by federal or State funding requirements or where the **Contract** is an emergency procurement.

5.4.3 Best Available Technology

5.4.3(a) All **Contractors** shall utilize the best available technology for reducing the emission of pollutants for diesel-powered Nonroad Vehicles in the performance of this **Contract**. For determinations of best available technology for each type of diesel-powered Nonroad Vehicle, **Contractors** shall comply with the regulations of the **City** Department of Environmental Protection, as and when adopted, Chapter 14 of Title 15 of the Rules of the City of New York (RCNY). The **Contractor** shall fully document all steps in the best available technology selection process and shall furnish such documentation to the **City Agency** or the DEP Commissioner upon request. The **Contractor** shall retain all documentation generated in the best available technology selection process for as long as the selected best available technology is in use.

5.4.3(b) No **Contractor** shall be required to replace best available technology for reducing the emission of pollutants or other authorized technology utilized for a diesel-powered Nonroad Vehicle in accordance with the provisions of this Article 5.4.3 within three (3) years of having first utilized such technology for such vehicle.

5.4.3(c) This Article 5.4.3 shall not apply to any vehicle used to satisfy the requirements of a specific Public Works Contract for fewer than twenty (20) **Days**.

5.4.3(d) The **Contractor** shall not be required to comply with this Article 5.4.3 with respect to a diesel-powered Nonroad Vehicle under the following circumstances:

5.4.3(d)(i) Where the **City Agency** makes a written finding, which is approved, in writing, by the DEP Commissioner, that the best available technology for reducing the emission of pollutants as required by this Article 5.4.3 is unavailable for such vehicle, the **Contractor** shall use whatever technology for reducing the emission of pollutants, if any, is available and appropriate for such vehicle.

5.4.3(d)(ii) Where the DEP Commissioner has issued a written waiver based upon the **Contractor** having demonstrated to the DEP Commissioner that the use of the best available technology for reducing the emission of pollutants might endanger the operator of such vehicle or those working near such vehicle, due to engine malfunction, the **Contractor** shall use whatever technology for

reducing the emission of pollutants, if any, is available and appropriate for such vehicle, which would not endanger the operator of such vehicle or those working near such vehicle.

5.4.3(d)(iii) In determining which technology to use for the purposes of Articles 5.4.3(d)(i) and 5.4.3(d)(ii) above, the **Contractor** shall primarily consider the reduction in emissions of particulate matter and secondarily consider the reduction in emissions of nitrogen oxides associated with the use of such technology, which shall in no event result in an increase in the emissions of either such pollutant.

5.4.3(d)(iv) The **Contractor** shall submit requests for a finding or a waiver pursuant to this Article 5.4.3(d) in writing to the DEP Commissioner, with a copy to the **ACCO** of the **City Agency** letting this **Contract**. Any finding or waiver made or issued pursuant to Articles 5.4.3(d)(i) and 5.4.3(d)(ii) above shall expire after one hundred eighty (180) **Days**, at which time the requirements of Article 5.4.3(a) shall be in full force and effect unless the **City Agency** renews the finding, in writing, and the DEP Commissioner approves such finding, in writing, or the DEP Commissioner renews the waiver, in writing.

5.4.3(e) The requirements of this Article 5.4.3 do not apply where they are precluded by federal or State funding requirements or where the **Contract** is an emergency procurement.

5.4.4 Section 24-163 of the Administrative Code. The **Contractor** shall comply with Section 24-163 of the Administrative Code related to the idling of the engines of motor vehicles while parking.

5.4.5 Compliance

5.4.5(a) The **Contractor's** compliance with Article 5.4 may be independently monitored. If it is determined that the **Contractor** has failed to comply with any provision of Article 5.4, any costs associated with any independent monitoring incurred by the **City** shall be reimbursed by the **Contractor**.

5.4.5(b) Any **Contractor** who violates any provision of Article 5.4, except as provided in Article 5.4.5(c) below, shall be liable for a civil penalty between the amounts of one thousand ($1,000) and ten thousand ($10,000) dollars, in addition to twice the amount of money saved by such **Contractor** for failure to comply with Article 5.4.

5.4.5(c) No **Contractor** shall make a false claim with respect to the provisions of Article 5.4 to a **City Agency**. Where a **Contractor** has been found to have done so, such **Contractor** shall be liable for a civil penalty of twenty thousand ($20,000) dollars, in addition to twice the amount of money saved by such **Contractor** in association with having made such false claim.

5.4.6 Reporting

5.4.6(a) For all Public Works Contracts covered by this Article 5.4, the **Contractor** shall report to the **City Agency** the following information:

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

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

5.4.6(a)(iii) The number of such Nonroad Vehicles that utilized the best available technology for reducing the emission of pollutants, including a breakdown by vehicle model and the type of technology;

5.4.6(a)(iv) The number of such Nonroad Vehicles that utilized such other authorized technology in accordance with Article 5.4.3, including a breakdown by vehicle model and the type of technology used for each such vehicle;

5.4.6(a)(v) The locations where such Nonroad Vehicles were used; and

5.4.6(a)(vi) Where a determination is in effect pursuant to Article 5.4.2(b) or 5.4.2(c), detailed information concerning the **Contractor's** efforts to obtain Ultra Low Sulfur Diesel Fuel or diesel fuel that has a sulfur content of no more than thirty parts per million (30 ppm).

5.4.6(b) The **Contractor** shall submit the information required by Article 5.4.6(a) at the completion of **Work** under the Public Works Contract and on a yearly basis no later than August 1 throughout the term of the Public Works Contract. The yearly report shall cover **Work** performed during the preceding fiscal year (July 1 - June 30).

5.5 Ultra Low Sulfur Diesel Fuel. In accordance with the Coordinated Construction Act for Lower Manhattan, as amended:

5.5.1 Definitions. For purposes of this Article 5.5, the following definitions apply:

5.5.1(a) "Lower Manhattan" means the area to the south of and within the following lines: a line beginning at a point where the United States pierhead line in the Hudson River as it exists now or may be extended would intersect with the southerly line of West Houston Street in the Borough of Manhattan extended, thence easterly along the southerly side of West Houston Street to the southerly side of Houston Street, thence easterly along the southerly side of Houston Street to the southerly side of East Houston Street, thence northeasterly along the southerly side of East Houston Street to the point where it would intersect with the United States pierhead line in the East River as it exists now or may be extended, including tax lots within or immediately adjacent thereto.

5.5.1(b) "Lower Manhattan Redevelopment Project" means any project in Lower Manhattan that is funded in whole or in part with federal or State funding, or any project intended to improve transportation between Lower Manhattan and the two air terminals in the **City** known as LaGuardia Airport and John F. Kennedy International Airport, or between Lower Manhattan and the air terminal in Newark known as Newark Liberty International Airport, and that is funded in whole or in part with federal funding.

5.5.1(c) "Nonroad Engine" means an internal combustion engine (including the fuel system) that is not used in a Motor Vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under Section 7411 or Section 7521 of Title 42 of the United States Code, except that this term shall apply to internal combustion engines used to power generators, compressors or similar equipment used in any construction program or project.

5.5.1(d) "Nonroad Vehicle" means a vehicle that is powered by a Nonroad Engine, fifty (50) horsepower (HP) and greater, and that is not a Motor Vehicle or a vehicle used solely for competition, which shall include, but not be limited to, excavators, backhoes, cranes, compressors, generators, bulldozers, and similar equipment, except that this terms shall not apply to horticultural maintenance vehicles used for landscaping purposes that are powered by a Nonroad Engine of sixty-five (65) HP or less and that are not used in any construction program or project.

5.5.1(e) "Ultra Low Sulfur Diesel Fuel" means diesel fuel that has a sulfur content of no more than fifteen parts per million (15 ppm).

5.5.2 Requirements. **Contractors** and **Subcontractors** are required to use only Ultra Low Sulfur Diesel Fuel to power the diesel-powered Nonroad Vehicles with engine HP rating of fifty (50) HP and above used on a Lower Manhattan Redevelopment Project and, where practicable, to reduce the emission of pollutants by retrofitting such Nonroad Vehicles with oxidation catalysts, particulate filters, or technology that achieves lowest particulate matter emissions.

5.6 Pesticides. In accordance with Section 17-1209 of the Administrative Code, to the extent that the **Contractor** or any **Subcontractor** applies pesticides to any property owned or leased by the **City**, the **Contractor,** and any **Subcontractor** shall comply with Chapter 12 of the Administrative Code.

5.7 Waste Treatment, Storage, and Disposal Facilities and Transporters. In connection with the **Work**, the **Contractor** and any **Subcontractor** shall use only those waste treatment, storage, and disposal facilities and waste transporters that possess the requisite license, permit or other governmental approval necessary to treat, store, dispose, or transport the waste, materials or hazardous substances.

5.8 Environmentally Preferable Purchasing. The **Contractor** shall ensure that products purchased or leased by the **Contractor** or any **Subcontractor** for the **Work** that are not specified by the **City** or are submitted as equivalents to a product specified by the **City** comply with the requirements of the New York City Environmentally Preferable Purchasing Program contained in Chapter 11 of Title 43 of the RCNY, pursuant to Chapter 3 of Title 6 of the Administrative Code.

ARTICLE 6. INSPECTION

6.1 During the progress of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall at all times afford the representatives of the **City** every reasonable, safe, and proper facility for inspecting all **Work** done or being done at the **Site** and also for inspecting the manufacture or preparation of materials and equipment at the place of such manufacture or preparation.

6.2 The **Contractor's** obligation hereunder shall include the uncovering or taking down of finished **Work** and its restoration thereafter; provided, however, that the order to uncover, take down and restore shall be in writing, and further provided that if **Work** thus exposed proves satisfactory, and if the **Contractor** has complied with Article 6.1, such uncovering or taking down and restoration shall be

considered an item of **Extra Work** to be paid for in accordance with the provisions of Article 26. If the **Work** thus exposed proves unsatisfactory, the **City** has no obligation to compensate the **Contractor** for the uncovering, taking down or restoration.

6.3 Inspection and approval by the **Commissioner**, the **Engineer**, **Project Manager**, or **Resident Engineer**, of finished **Work** or of **Work** being performed, or of materials and equipment at the place of manufacture or preparation, shall not relieve the **Contractor** of its obligation to perform the **Work** in strict accordance with the **Contract**. Finished or unfinished **Work** not found to be in strict accordance with the **Contract** shall be replaced as directed by the **Engineer**, even though such **Work** may have been previously approved and paid for. Such corrective **Work** is **Contract Work** and shall not be deemed **Extra Work**.

6.4 Rejected **Work** and materials shall be promptly taken down and removed from the **Site**, which must at all times be kept in a reasonably clean and neat condition.

ARTICLE 7. PROTECTION OF WORK AND OF PERSONS AND PROPERTY; NOTICES AND INDEMNIFICATION

7.1 During the performance of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall be under an absolute obligation to protect the finished and unfinished **Work** against any damage, loss, injury, theft and/or vandalism and in the event of such damage, loss, injury, theft and/or vandalism, it shall promptly replace and/or repair such **Work** at the **Contractor's** sole cost and expense, as directed by the **Resident Engineer**. The obligation to deliver finished **Work** in strict accordance with the **Contract** prior to **Final Acceptance** shall be absolute and shall not be affected by the **Resident Engineer's** approval of, or failure to prohibit, the **Means and Methods of Construction** used by the **Contractor**.

7.2 During the performance of the **Work** and up to the date of **Final Acceptance**, the **Contractor** shall take all reasonable precautions to protect all persons and the property of the **City** and of others from damage, loss or injury resulting from the **Contractor's**, and/or its **Subcontractors'** operations under this **Contract.** The **Contractor's** obligation to protect shall include the duty to provide, place or replace, and adequately maintain at or about the **Site** suitable and sufficient protection such as lights, barricades, and enclosures.

7.3 The **Contractor** shall comply with the notification requirements set forth below in the event of any loss, damage or injury to **Work**, persons or property, or any accidents arising out of the operations of the **Contractor** and/or its **Subcontractors** under this **Contract**.

7.3.1 The **Contractor** shall make a full and complete report in writing to the **Resident Engineer** within three (3) **Days** after the occurrence.

7.3.2 The **Contractor** shall also send written notice of any such event to all insurance carriers that issued potentially responsive policies (including commercial general liability insurance carriers for events relating to the **Contractor**'s own employees) no later than twenty (20) days after such event and again no later than twenty (20) days after the initiation of any claim and/or action resulting therefrom. Such notice shall contain the following information: the number of the insurance policy, the name of the Named Insured, the date and location of the incident, and the identity of the persons injured or property damaged. For any policy on which the **City** and/or the **Engineer**, **Architect**, or **Project Manager** are Additional Insureds, such notice shall expressly specify that "this notice is

being given on behalf of the City of New York as Additional Insured, such other Additional Insureds, as well as the Named Insured."

7.3.2(a) Whenever such notice is sent under a policy on which the **City** is an Additional Insured, the **Contractor** shall provide copies of the notice to the **Comptroller,** the **Commissioner** and the **City** Corporation Counsel. The copy to the **Comptroller** shall be sent to the Insurance Unit, NYC Comptroller's Office, 1 Centre Street – Room 1222, New York, New York, 10007. The copy to the **Commissioner** shall be sent to the address set forth in Schedule A of the General Conditions. The copy to the **City** Corporation Counsel shall be sent to Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.

7.3.2(b) If the **Contractor** fails to provide any of the foregoing notices to any appropriate insurance carrier(s) in a timely and complete manner, the **Contractor** shall indemnify the **City** for all losses, judgments, settlements, and expenses, including reasonable attorneys' fees, arising from an insurer's disclaimer of coverage citing late notice by or on behalf of the **City**.

7.4 To the fullest extent permitted by law, the **Contractor** shall defend, indemnify, and hold the **City**, its employees, and officials (the "Indemnitees") harmless against any and all claims (including but not limited to claims asserted by any employee of the **Contractor** and/or its **Subcontractors**) and costs and expenses of whatever kind (including but not limited to payment or reimbursement of attorneys' fees and disbursements) allegedly arising out of or in any way related to the operations of the **Contractor** and/or its **Subcontractors** in the performance of this **Contract** or from the **Contractor's** and/or its **Subcontractors'** failure to comply with any of the provisions of this **Contract** or of the **Law**. Such costs and expenses shall include all those incurred in defending the underlying claim and those incurred in connection with the enforcement of this Article 7.4 by way of cross-claim, third-party claim, declaratory action or otherwise. The parties expressly agree that the indemnification obligation hereunder contemplates (1) full indemnity in the event of liability imposed against the Indemnitees without negligence and solely by reason of statute, operation of **Law** or otherwise; and (2) partial indemnity in the event of any actual negligence on the part of the Indemnitees either causing or contributing to the underlying claim (in which case, indemnification will be limited to any liability imposed over and above that percentage attributable to actual fault whether by statute, by operation of **Law**, or otherwise). Where partial indemnity is provided hereunder, all costs and expenses shall be indemnified on a pro rata basis.

7.4.1 Indemnification under Article 7.4 or any other provision of the **Contract** shall operate whether or not **Contractor** or its **Subcontractors** have placed and maintained the insurance specified under Article 22.

7.5 The provisions of this Article 7 shall not be deemed to create any new right of action in favor of third parties against the **Contractor** or the **City**.

CHAPTER III: TIME PROVISIONS

ARTICLE 8. COMMENCEMENT AND PROSECUTION OF THE WORK

8.1 The **Contractor** shall commence the **Work** on the date specified in the **Notice to Proceed** or the **Order to Work**. The time for performance of the **Work** under the **Contract** shall be computed from

the date specified in the **Notice to Proceed** or the **Order to Work**. **TIME BEING OF THE ESSENCE** to the **City**, the **Contractor** shall thereafter prosecute the **Work** diligently, using such **Means and Methods of Construction** as are in accord with Article 4 herein and as will assure its completion not later than the date specified in this Contract, or on the date to which the time for completion may be extended.

ARTICLE 9. PROGRESS SCHEDULES

9.1 To enable the **Work** to be performed in an orderly and expeditious manner, the **Contractor**, within fifteen (15) **Days** after the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Engineer**, shall submit to the **Engineer** a proposed progress schedule based on the Critical Path Method in the form of a bar graph or in such other form as specified by the **Engineer**, and monthly cash flow requirements, showing:

9.1.1 The anticipated time of commencement and completion of each of the various operations to be performed under this **Contract**; and

9.1.2 The sequence and interrelation of each of these operations with the others and with those of other related contracts; and

9.1.3 The estimated time required for fabrication or delivery, or both, of all materials and equipment required for the **Work**, including the anticipated time for obtaining required approvals pursuant to Article 10; and

9.1.4 The estimated amount in dollars the **Contractor** will claim on a monthly basis.

9.2 The proposed schedule shall be revised as directed by the **Engineer**, until finally approved by the **Engineer**, and after such approval, subject to the provisions of Article 11, shall be strictly adhered to by the **Contractor**.

9.3 If the **Contractor** shall fail to adhere to the approved progress schedule, or to the schedule as revised pursuant to Article 11, it shall promptly adopt such other or additional **Means and Methods of Construction**, at its sole cost and expense, as will make up for the time lost and will assure completion in accordance with the approved progress schedule. The approval by the **City** of a progress schedule which is shorter than the time allotted under the **Contract** shall not create any liability for the **City** if the approved progress schedule is not met.

9.4 The **Contractor** will not receive any payments until the proposed progress schedule is submitted.

ARTICLE 10. REQUESTS FOR INFORMATION OR APPROVAL

10.1 From time to time as the **Work** progresses and in the sequence indicated by the approved progress schedule, the **Contractor** shall submit to the **Engineer** a specific request in writing for each item of information or approval required by the **Contractor**. These requests shall state the latest date upon which the information or approval is actually required by the **Contractor**, and shall be submitted in a reasonable time in advance thereof to provide the **Engineer** a sufficient time to act upon such submissions, or any necessary re-submissions thereof.

10.2 The **Contractor** shall not have any right to an extension of time on account of delays due to the **Contractor's** failure to submit requests for the required information or the required approval in accordance with the above requirements.

ARTICLE 11. NOTICE OF CONDITIONS CAUSING DELAY AND DOCUMENTATION OF DAMAGES CAUSED BY DELAY

11.1 After the commencement of any condition which is causing or may cause a delay in completion of the **Work**, including conditions for which the **Contractor** may be entitled to an extension of time, the following notifications and submittals are required:

11.1.1 Within fifteen (15) **Days** after the **Contractor** becomes aware or reasonably should be aware of each such condition, the **Contractor** must notify the **Resident Engineer** or **Engineer**, as directed by the **Commissioner**, in writing of the existence, nature and effect of such condition upon the approved progress schedule and the **Work**, and must state why and in what respects, if any, the condition is causing or may cause a delay. Such notice shall include a description of the construction activities that are or could be affected by the condition and may include any recommendations the **Contractor** may have to address the delay condition and any activities the **Contractor** may take to avoid or minimize the delay.

11.1.2 If the **Contractor** shall claim to be sustaining damages for delay as provided for in this Article 11,within forty-five (45) **Days** from the time such damages are first incurred for each such condition, the **Contractor** shall submit to the **Commissioner** a verified written statement of the details and estimates of the amounts of such damages, including categories of expected damages and projected monthly costs, together with documentary evidence of such damages as the **Contractor** may have at the time of submission ("statement of delay damages"), as further detailed in Article 11.6. The **Contractor** may submit the above statement within such additional time as may be granted by the **Commissioner** in writing upon written request therefor.

11.1.3 Articles 11.1.1 and 11.1.2 do not relieve the **Contractor** of its obligation to comply with the provisions of Article 44.

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

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

11.4 Compensable Delays

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

compensated, if at all, solely by an extension of time to complete the performance of the **Work**.

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

11.4.1.2 Unreasonable delays attributable to the review of shop drawings, the issuance of change orders, or the cumulative impact of change orders that were not brought about by any act or omission of the **Contractor**.

11.4.1.3 The unavailability of the **Site** caused by acts or omissions of the **City**..

11.4.1.4 The issuance by the **Engineer** of a stop work order that was not brought about through any act or omission of the **Contractor**.

11.4.1.5 Differing site conditions or environmental hazards that were neither known nor reasonably ascertainable on a pre-bid inspection of the **Site** or review of the bid documents or other publicly available sources, and that are not ordinarily encountered in the **Project**'s geographical area or neighborhood or in the type of **Work** to be performed.

11.4.1.6 Delays caused by the **City's** bad faith or its willful, malicious, or grossly negligent conduct;

11.4.1.7 Delays not contemplated by the parties;

11.4.1.8 Delays so unreasonable that they constitute an intentional abandonment of the **Contract** by the **City**; and

11.4.1.9 Delays resulting from the **City's** breach of a fundamental obligation of the **Contract**.

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

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

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

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

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

11.5.3 Restraining orders, injunctions or judgments issued by a court which were caused by a Contractor's submission, action or inaction or by a Contractor's **Means and Methods of Construction**, or by third parties, unless such order, injunction or judgment was the result of an act or omission by the **City**;

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

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

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

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

11.6 Required Content of Submission of Statement of Delay Damages

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

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

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

11.6.1.3 The estimated amount of additional compensation sought and a breakdown of that amount into categories as described in Article 11.7.

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

11.7 Recoverable Costs

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

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

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

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

11.7.1.4 Additional insurance and bond costs;

11.7.1.5 Extended **Site** overhead, field office rental, salaries of field office staff, on-site project managers and superintendents, field office staff vehicles, **Project-**specific storage, field office utilities and telephone, and field office consumables;

11.7.1.6 Labor escalation costs based on actual costs;

11.7.1.7 Materials and equipment escalation costs based on applicable industry indices unless documentation of actual increased cost is provided;

11.7.1.8 Additional material and equipment storage costs based on actual documented costs and additional costs necessitated by extended manufacturer warranty periods; and

11.7.1.9 Extended home office overhead calculated based on the following formula:

(1) Subtract from the original **Contract** amount the amount earned by original contractual **Substantial Completion** date (not including change orders);

(2) Remove 15% overhead and profit from the calculation in item (1) by dividing the results of item (1) by 1.15;

(3) Multiply the result of item (2) by 7.25% for the total home office overhead;

(4) Multiply the result of item (3) by 7.25% for the total profit; and

(5) The total extended home office overhead will be the total of items (3) and (4).

11.7.2 Recoverable Subcontractor Costs. When the **Work** is performed by a **Subcontractor**, the **Contractor** may be paid the actual and necessary costs of such subcontracted **Work** as outlined above in Articles 11.7.1.1 through 11.7.1.8, and an additional overhead of 5% of the costs outlined in Articles 11.7.1.1 through 11.7.1.3.

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

11.7.3.1 Profit, or loss of anticipated or unanticipated profit, except as provided in Article 11.7.1.9;

11.7.3.2 Consequential damages, including, but not limited to, construction or bridge loans or interest paid on such loans, loss of bonding capacity, bidding opportunities, or interest in investment, or any resulting insolvency;

11.7.3.3 Indirect costs or expenses of any nature except those included in Article 11.7.1;

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

11.7.3.5 Attorneys' fees and dispute and claims preparation expenses.

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

11.9 Any compensation provided to the **Contractor** in accordance with this Article 11 will be made pursuant to a claim filed with the **Comptroller**. Nothing in this Article 11 extends the time for the **Contractor** to file an action with respect to a claim within six months after **Substantial Completion** pursuant to Article 56.

ARTICLE 12. COORDINATION WITH OTHER CONTRACTORS

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

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

12.3 The **Contractor** shall notify the **Engineer** in writing if any **Other Contractor** on this **Project** is failing to coordinate its work with the **Work** of this **Contract**. If the **Engineer** finds such charges to be true, the **Engineer** shall promptly issue such directions to the **Other Contractor** with respect thereto as the situation may require. The **City** shall not, however, be liable for any damages suffered by any **Other Contractor's** failure to coordinate its work with the **Work** of this **Contract** or by reason of the **Other Contractor's** failure to promptly comply with the directions so issued by the **Engineer**, or by reason of any **Other Contractor's** default in performance, it being understood that the **City** does not guarantee the responsibility or continued efficiency of any contractor. The **Contractor** agrees to make no claim against the **City** for any damages relating to or arising out of any directions issued by the **Engineer** pursuant to this Article 12 (including but not limited to the failure of any **Other Contractor** to comply or promptly comply with such directions), or the failure of any **Other Contractor** to coordinate its work, or the default in performance of any **Other Contractor**.

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

12.5 Should the **Contractor** sustain any damage through any act or omission of any **Other Contractor** having a contract with the **City** for the performance of work upon the **Site** or of work which may be necessary to be performed for the proper prosecution of the **Work** to be performed hereunder, or through any act or omission of a subcontractor of such **Other Contractor**, the **Contractor** shall have no claim against the **City** for such damage, but shall have a right to recover such damage from the **Other**

Contractor under the provision similar to the following provisions which apply to this **Contract** and have been or will be inserted in the contracts with such **Other Contractors**:

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

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

ARTICLE 13. EXTENSION OF TIME FOR PERFORMANCE

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

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

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

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

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

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

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

13.4 The **Contractor** shall not be entitled to receive a separate extension of time for each of several causes of delay operating concurrently, but, if at all, only for the actual period of delay in completion of the **Work** as determined by the **ACCO** or the Board, irrespective of the number of causes contributing to produce such delay. If one of several causes of delay operating concurrently results from any act, fault or omission of the **Contractor** or of its **Subcontractors** or **Materialmen**, and would of itself (irrespective

of the concurrent causes) have delayed the **Work**, no extension of time will be allowed for the period of delay resulting from such act, fault or omission.

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

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

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

13.8 Application for Extension of Time:

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

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

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

13.8.1(c) Original total bid price;

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

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

13.8.1(f) The extension of time requested.

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

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

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

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

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

13.9 Analysis and Approval of Time Extensions:

13.9.1 For time extensions for partial payments, a written determination shall be made by the **ACCO** who may, for good and sufficient cause, extend the time for the performance of the **Contract** as follows:

13.9.1(a) If the **Work** is to be completed within six (6) months, the time for performance may be extended for sixty (60) **Days**;

13.9.1(b) If the **Work** is to be completed within less than one (1) year but more than six (6) months, an extension of ninety (90) **Days** may be granted;

13.9.1(c) If the **Contract** period exceeds one (1) year, besides the extension granted in Article 13.9.1(b), an additional thirty (30) **Days** may be granted for each multiple of six (6) months involved beyond the one (1) year period; or

13.9.1(d) If exceptional circumstances exist, the **ACCO** may extend the time for performance beyond the extensions in Articles 13.9.1(a), 13.9.1(b), and 13.9.1(c). In that event, the **ACCO** shall file with the Mayor's Office of Contract Services a written explanation of the exceptional circumstances.

13.9.2 For extensions of time for **Substantial Completion** and final completion payments, the **Engineer**, in consultation with the **ACCO**, shall prepare a written analysis of the delay (including a preliminary determination of the causes of delay, the beginning and end dates for each such cause of delay, and whether the delays are excusable under the terms of this **Contract**). The report shall be subject to review by and approval of the Board, which shall have authority to question its analysis and determinations and request additional facts or documentation. The report as reviewed and made final by the Board shall be made a part of the **Agency** contract file. Neither the report itself nor anything contained therein shall operate as a waiver or release of any claim the **City** may have against the **Contractor** for either actual or liquidated damages.

13.9.3 Approval Mechanism for Time Extensions for **Substantial Completion** or Final Completion Payments: An extension shall be granted only with the approval of the Board which is comprised of the **ACCO** of the **Agency**, the **City** Corporation Counsel, and the **Comptroller**, or their authorized representatives.

13.9.4 Neither the granting of any application for an extension of time to the **Contractor** or any **Other Contractor** on this **Project** nor the papers, records or reports related to any application for or grant of an extension of time or determination related thereto shall be referred to or offered in evidence by the **Contractor** or its attorneys in any action or proceeding.

13.10 No Damage for Delay: The **Contractor** agrees to make no claim for damages for delay in the performance of this **Contract** occasioned by any act or omission to act of the **City** or any of its representatives, except as provided for in Article 11.

ARTICLE 14. COMPLETION AND FINAL ACCEPTANCE OF THE WORK

14.1 Date for **Substantial Completion**: The **Contractor** shall substantially complete the **Work** within the time fixed in Schedule A of the General Conditions, or within the time to which such **Substantial Completion** may be extended.

14.2 Determining the Date of **Substantial Completion**: The **Work** will be deemed to be substantially complete when the two conditions set forth below have been met.

14.2.1 Inspection: The **Engineer** or **Resident Engineer**, as applicable, has inspected the **Work** and has made a written determination that it is substantially complete.

14.2.2 Approval of **Final Approved Punch List** and Date for **Final Acceptance**: Following inspection of the **Work**, the **Engineer/Resident Engineer** shall furnish the **Contractor** with a final punch list, specifying all items of **Work** to be completed and proposing dates for the completion of each specified item of **Work**. The **Contractor** shall then submit in writing to the **Engineer/Resident Engineer** within ten (10) **Days** of the **Engineer/Resident Engineer** furnishing the final punch list either acceptance of the dates or proposed alternative dates for the completion of each specified item of **Work**. If the **Contractor** neither accepts the dates nor proposes alternative dates within ten (10) **Days**, the schedule proposed by the **Engineer/Resident Engineer** shall be deemed accepted. If the **Contractor** proposes alternative dates, then, within a reasonable time after receipt, the **Engineer/Resident Engineer**, in a written notification to the **Contractor**, shall approve the **Contractor's** completion dates or, if they are unable to agree, the **Engineer/Resident Engineer** shall establish dates for the completion of each item of **Work**. The latest completion date specified shall be the date for **Final Acceptance** of the **Work**.

14.3 Date of **Substantial Completion**. The date of approval of the **Final Approved Punch List**, shall be the date of **Substantial Completion**. The date of approval of the **Final Approved Punch List** shall be either (a) if the **Contractor** approves the final punch list and proposed dates for completion furnished by the **Engineer/Resident Engineer**, the date of the **Contractor**'s approval; or (b) if the **Contractor** neither accepts the dates nor proposes alternative dates, ten (10) **Days** after the **Engineer/Resident Engineer** furnishes the **Contractor** with a final punch list and proposed dates for completion; or (c) if the **Contractor** proposes alternative dates, the date that the **Engineer/Resident Engineer** sends written notification to the **Contractor** either approving the **Contractor**'s proposed alternative dates or establishing dates for the completion for each item of **Work**.

14.4 Determining the Date of **Final Acceptance**: The **Work** will be accepted as final and complete as of the date of the **Engineer**'s/**Resident Engineer**'s inspection if, upon such inspection, the **Engineer/Resident Engineer** finds that all items on the **Final Approved Punch List** are complete and no further **Work** remains to be done. The **Commissioner** will then issue a written determination of **Final Acceptance**.

14.5 Request for Inspection: Inspection of the **Work** by the **Engineer/Resident Engineer** for the purpose of **Substantial Completion** or **Final Acceptance** shall be made within fourteen (14) **Days** after receipt of the **Contractor's** written request therefor.

14.6 Request for Re-inspection: If upon inspection for the purpose of **Substantial Completion** or **Final Acceptance**, the **Engineer/Resident Engineer** determines that there are items of **Work** still to be performed, the **Contractor** shall promptly perform them and then request a re-inspection. If upon re-inspection, the **Engineer/Resident Engineer** determines that the **Work** is substantially complete or finally accepted, the date of such re-inspection shall be the date of **Substantial Completion** or **Final Acceptance**. Re-inspection by the **Engineer/Resident Engineer** shall be made within ten (10) **Days** after receipt of the **Contractor's** written request therefor.

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

ARTICLE 15. LIQUIDATED DAMAGES

15.1 In the event the **Contractor** fails to substantially complete the **Work** within the time fixed for such **Substantial Completion** in Schedule A of the General Conditions, plus authorized time extensions, or if the **Contractor**, in the sole determination of the **Commissioner**, has abandoned the **Work**, the **Contractor** shall pay to the **City** the sum fixed in Schedule A of the General Conditions, for each and every **Day** that the time consumed in substantially completing the **Work** exceeds the time allowed therefor; which said sum, in view of the difficulty of accurately ascertaining the loss which the **City** will suffer by reason of delay in the **Substantial Completion** of the **Work** hereunder, is hereby fixed and agreed as the liquidated damages that the **City** will suffer by reason of such delay, and not as a penalty. This Article 15 shall also apply to the **Contractor** whether or not the **Contractor** is defaulted pursuant to Chapter X of this **Contract**. Neither the failure to assess liquidated damages nor the granting of any time extension shall operate as a waiver or release of any claim the **City** may have against the **Contractor** for either actual or liquidated damages.

15.2 Liquidated damages received hereunder are not intended to be nor shall they be treated as either a partial or full waiver or discharge of the **City's** right to indemnification, or the **Contractor's** obligation to indemnify the **City**, or to any other remedy provided for in this **Contract** or by **Law**.

15.3 The **Commissioner** may deduct and retain out of the monies which may become due hereunder, the amount of any such liquidated damages; and in case the amount which may become due hereunder shall be less than the amount of liquidated damages suffered by the **City**, the **Contractor** shall be liable to pay the difference.

ARTICLE 16. OCCUPATION OR USE PRIOR TO COMPLETION

16.1 Unless otherwise provided for in the **Specifications**, the **Commissioner** may take over, use, occupy or operate any part of the **Work** at any time prior to **Final Acceptance**, upon written notification to the **Contractor**. The **Engineer** or **Resident Engineer**, as applicable, shall inspect the part of the **Work** to be taken over, used, occupied, or operated, and will furnish the **Contractor** with a written statement of the **Work**, if any, which remains to be performed on such part. The **Contractor** shall not object to, nor interfere with, the **Commissioner's** decision to exercise the rights granted by Article 16. In the event the **Commissioner** takes over, uses, occupies, or operates any part of the **Work:**

16.1.1 the **Engineer/Resident Engineer** shall issue a written determination of **Substantial Completion** with respect to such part of the **Work**;

16.1.2 the **Contractor** shall be relieved of its absolute obligation to protect such part of the unfinished **Work** in accordance with Article 7;

16.1.3 the **Contractor's** guarantee on such part of the **Work** shall begin on the date of such use by the **City**; and;

16.1.4 the **Contractor** shall be entitled to a return of so much of the amount retained in accordance with Article 21 as it relates to such part of the **Work**, except so much thereof as may be retained under Articles 24 and 44.

CHAPTER IV: SUBCONTRACTS AND ASSIGNMENTS

ARTICLE 17. SUBCONTRACTS

17.1 The **Contractor** shall not make subcontracts totaling an amount more than the percentage of the total **Contract** price fixed in Schedule A of the General Conditions, without prior written permission from the **Commissioner**. All subcontracts made by the **Contractor** shall be in writing. No **Work** may be performed by a **Subcontractor** prior to the **Contractor** entering into a written subcontract with the **Subcontractor** and complying with the provisions of this Article 17.

17.2 Before making any subcontracts, the **Contractor** shall submit a written statement to the **Commissioner** giving the name and address of the proposed **Subcontractor**; the portion of the **Work** and materials which it is to perform and furnish; the cost of the subcontract; the VENDEX questionnaire if required; the proposed subcontract if requested by the **Commissioner**; and any other information tending to prove that the proposed **Subcontractor** has the necessary facilities, skill, integrity, past experience, and financial resources to perform the **Work** in accordance with the terms and conditions of this **Contract**.

17.3 In addition to the requirements in Article 17.2, **Contractor** is required to list the **Subcontractor** in the web based Subcontractor Reporting System through the City's Payee Information Portal (PIP), available at www.nyc.gov/pip.[1] For each **Subcontractor** listed, **Contractor** is required to provide the following information: maximum contract value, description of **Subcontractor's** Work, start and end date of the subcontract and identification of the **Subcontractor**'s industry. Thereafter, **Contractor** will be required to report in the system the payments made to each **Subcontractor** within 30 days of making the payment. If any of the required information changes throughout the Term of the **Contract**, **Contractor** will be required to revise the information in the system.

Failure of the **Contractor** to list a **Subcontractor** and/or to report **Subcontractor** payments in a timely fashion may result in the **Commissioner** declaring the **Contractor** in default of the **Contract** and will subject **Contractor** to liquidated damages in the amount of $100 per day for each day that the **Contractor** fails to identify a **Subcontractor** along with the required information about the **Subcontractor** and/or fails to report payments to a **Subcontractor**, beyond the time frames set forth herein or in the notice from the **City**. Article 15 shall govern the issue of liquidated damages.

17.4 If an approved **Subcontractor** elects to subcontract any portion of its subcontract, the proposed sub-subcontract shall be submitted in the same manner as directed above.

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

17.6 Before entering into any subcontract hereunder, the **Contractor** shall provide the proposed **Subcontractor** with a complete copy of this document and inform the proposed **Subcontractor** fully and completely of all provisions and requirements of this **Contract** relating either directly or indirectly to the **Work** to be performed and the materials to be furnished under such subcontract, and every such

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

Subcontractor shall expressly stipulate that all labor performed and materials furnished by the **Subcontractor** shall strictly comply with the requirements of this **Contract**.

17.7 Documents given to a prospective **Subcontractor** for the purpose of soliciting the **Subcontractor's** bid shall include either a copy of the bid cover or a separate information sheet setting forth the **Project** name, the **Contract** number (if available), the **Agency** (as noted in Article 2.1.6), and the **Project's** location.

17.8 The **Commissioner's** approval of a **Subcontractor** shall not relieve the **Contractor** of any of its responsibilities, duties, and liabilities hereunder. The **Contractor** shall be solely responsible to the **City** for the acts or defaults of its **Subcontractor** and of such **Subcontractor's** officers, agents, and employees, each of whom shall, for this purpose, be deemed to be the agent or employee of the **Contractor** to the extent of its subcontract.

17.9 If the **Subcontractor** fails to maintain the necessary facilities, skill, integrity, past experience, and financial resources (other than due to the **Contractor's** failure to make payments where required) to perform the **Work** in accordance with the terms and conditions of this **Contract**, the **Contractor** shall promptly notify the **Commissioner** and replace such **Subcontractor** with a newly approved **Subcontractor** in accordance with this Article 17.

17.10 The **Contractor** shall be responsible for ensuring that all **Subcontractors** performing **Work** at the **Site** maintain all insurance required by **Law**.

17.11 The **Contractor** shall promptly, upon request, file with the **Engineer** a conformed copy of the subcontract and its cost. The subcontract shall provide the following:

17.11.1 Payment to **Subcontractors**: The agreement between the **Contractor** and its **Subcontractor** shall contain the same terms and conditions as to method of payment for **Work**, labor, and materials, and as to retained percentages, as are contained in this **Contract**.

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

17.11.3 Section 6-123 of the Administrative Code: Pursuant to the requirements of Section 6-123 of the Administrative Code, every agreement between the **Contractor** and a **Subcontractor** in excess of fifty thousand ($50,000) dollars shall include a provision that the **Subcontractor** shall not engage in any unlawful discriminatory practice as defined in Title VIII of the Administrative Code (Section 8-101 *et seq*.).

17.11.4 All requirements required pursuant to federal and/or state grant agreement(s), if applicable to the **Work**.

17.12 The **Commissioner** may deduct from the amounts certified under this **Contract** to be due to the **Contractor**, the sum or sums due and owing from the **Contractor** to the **Subcontractors** according to the terms of the said subcontracts, and in case of dispute between the **Contractor** and its **Subcontractor**, or **Subcontractors**, as to the amount due and owing, the **Commissioner** may deduct and withhold from the amounts certified under this **Contract** to be due to the **Contractor** such sum or sums as may be claimed by such **Subcontractor**, or **Subcontractors**, in a sworn affidavit, to be due and owing until such time as such claim or claims shall have been finally resolved.

17.13 On contracts where performance bonds and payment bonds are executed, the **Contractor** shall include on each requisition for payment the following data: **Subcontractor's** name, value of the subcontract, total amount previously paid to **Subcontractor** for **Work** previously requisitioned, and the amount, including retainage, to be paid to the **Subcontractor** for **Work** included in the requisition.

17.14 On **Contracts** where performance bonds and payment bonds are not executed, the **Contractor** shall include with each requisition for payment submitted hereunder, a signed statement from each and every **Subcontractor** and/or **Materialman** for whom payment is requested in such requisition. Such signed statement shall be on the letterhead of the **Subcontractor** and/or **Materialman** for whom payment is requested and shall (i) verify that such **Subcontractor** and/or **Materialman** has been paid in full for all **Work** performed and/or material supplied to date, exclusive of any amount retained and any amount included on the current requisition, and (ii) state the total amount of retainage to date, exclusive of any amount retained on the current requisition.

ARTICLE 18. ASSIGNMENTS

18.1 The **Contractor** shall not assign, transfer, convey or otherwise dispose of this **Contract**, or the right to execute it, or the right, title or interest in or to it or any part thereof, or assign, by power of attorney or otherwise any of the monies due or to become due under this **Contract**, unless the previous written consent of the **Commissioner** shall first be obtained thereto, and the giving of any such consent to a particular assignment shall not dispense with the necessity of such consent to any further or other assignments.

18.2 Such assignment, transfer, conveyance or other disposition of this **Contract** shall not be valid until filed in the office of the **Commissioner** and the **Comptroller**, with the written consent of the **Commissioner** endorsed thereon or attached thereto.

18.3 Failure to obtain the previous written consent of the **Commissioner** to such an assignment, transfer, conveyance or other disposition, may result in the revocation and annulment of this **Contract**. The **City** shall thereupon be relieved and discharged from any further liability to the **Contractor**, its assignees, transferees or sublessees, who shall forfeit and lose all monies therefor earned under the **Contract**, except so much as may be required to pay the **Contractor's** employees.

18.4 The provisions of this clause shall not hinder, prevent, or affect an assignment by the **Contractor** for the benefit of its creditors made pursuant to the **Laws** of the State of New York.

18.5 This **Contract** may be assigned by the **City** to any corporation, agency or instrumentality having authority to accept such assignment.

CHAPTER V: CONTRACTOR'S SECURITY AND GUARANTEE

ARTICLE 19. SECURITY DEPOSIT

19.1 If performance and payment bonds are required, the **City** shall retain the bid security to ensure that the successful bidder executes the **Contract** and furnishes the required payment and performance security within ten (10) **Days** after notice of the award of the **Contract**. If the successful bidder fails to execute the **Contract** and furnish the required payment and performance security, the **City** shall retain such bid security as set forth in the Information for Bidders. If the successful bidder executes the

Contract and furnishes the required payment and performance security, the **City** shall return the bid security within a reasonable time after the furnishing of such bonds and execution of the **Contract** by the **City**.

19.2 If performance and payment bonds are not required, the bid security shall be retained by the **City** as security for the **Contractor**'s faithful performance of the **Contract**. If partial payments are provided, the bid security will be returned to the **Contractor** after the sum retained under Article 21 equals the amount of the bid security, subject to other provisions of this **Contract**. If partial payments are not provided, the bid security will be released when final payment is certified by the **City** for payment.

19.3 If the **Contractor** is declared in default under Article 48 prior to the return of the deposit, or if any claim is made such as referred to in Article 23, the amount of such deposit, or so much thereof as the **Comptroller** may deem necessary, may be retained and then applied by the **Comptroller**:

19.3.1 To compensate the **City** for any expense, loss or damage suffered or incurred by reason of or resulting from such default, including the cost of re-letting and liquidated damages; or

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

ARTICLE 20. PAYMENT GUARANTEE

20.1 On **Contracts** where one hundred (100%) percent performance bonds and payment bonds are executed, this Article 20 does not apply.

20.2 In the event the terms of this **Contract** do not require the **Contractor** to provide a payment bond or where the **Contract** does not require a payment bond for one hundred (100%) percent of the **Contract** price, the **City** shall, in accordance with the terms of this Article 20, guarantee payment of all lawful claims for:

20.2.1 Wages and compensation for labor performed and/or services rendered; and

20.2.2 Materials, equipment, and supplies provided, whether incorporated into the **Work** or not, when demands have been filed with the **City** as provided hereinafter by any person, firm, or corporation which furnished labor, material, equipment, supplies, or any combination thereof, in connection with the **Work** performed hereunder (hereinafter referred to as the "beneficiary") at the direction of the **City** or the **Contractor**.

20.3 The provisions of Article 20.2 are subject to the following limitations and conditions:

20.3.1 If the **Contractor** provides a payment bond for a value that is less than one hundred (100%) percent of the value of the **Contract Work**, the payment bond provided by the **Contractor** shall be primary (and non-contributing) to the payment guarantee provided under this Article 20.

20.3.2 The guarantee is made for the benefit of all beneficiaries as defined in Article 20.2 provided that those beneficiaries strictly adhere to the terms and conditions of Article 20.3.4 and 20.3.5.

20.3.3 Nothing in this Article 20 shall prevent a beneficiary providing labor, services or material for the **Work** from suing the **Contractor** for any amounts due and owing the beneficiary by the **Contractor**.

20.3.4 Every person who has furnished labor or material, to the **Contractor** or to a **Subcontractor** of the **Contractor**, in the prosecution of the **Work** and who has not been paid in full therefor before the expiration of a period of ninety (90) **Days** after the date on which the last of the labor was performed or material was furnished by him/her for which the claim is made, shall have the right to sue on this payment guarantee in his/her own name for the amount, or the balance thereof, unpaid at the time of commencement of the action; provided, however, that a person having a direct contractual relationship with a **Subcontractor** of the **Contractor** but no contractual relationship express or implied with the **Contractor** shall not have a right of action upon the guarantee unless he/she shall have given written notice to the **Contractor** within one hundred twenty (120) **Days** from the date on which the last of the labor was performed or the last of the material was furnished, for which his/her claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the material was furnished or for whom the labor was performed. The notice shall be served by delivering the same personally to the **Contractor** or by mailing the same by registered mail, postage prepaid, in an envelope addressed to the **Contractor** at any place where it maintains an office or conducts its business; provided, however, that where such notice is actually received by the **Contractor** by other means, such notice shall be deemed sufficient.

20.3.5 Except as provided in Labor Law Section 220-g, no action on this payment guarantee shall be commenced after the expiration of the one-year limitations period set forth in Section 137(4)(b) of the State Finance Law.

20.3.6 The **Contractor** shall promptly forward to the **City** any notice or demand received pursuant to Article 20.3.4. The **Contractor** shall inform the **City** of any defenses to the notice or demand and shall forward to the **City** any documents the **City** requests concerning the notice or demand.

20.3.7 All demands made against the **City** by a beneficiary of this payment guarantee shall be presented to the **Engineer** along with all written documentation concerning the demand which the **Engineer** deems reasonably appropriate or necessary, which may include, but shall not be limited to: the subcontract; any invoices presented to the **Contractor** for payment; the notarized statement of the beneficiary that the demand is due and payable, that a request for payment has been made of the **Contractor** and that the demand has not been paid by the **Contractor** within the time allowed for such payment by the subcontract; and copies of any correspondence between the beneficiary and the **Contractor** concerning such demand. The **City** shall notify the **Contractor** that a demand has been made. The **Contractor** shall inform the **City** of any defenses to the demand and shall forward to the **City** any documents the **City** requests concerning the demand.

20.3.8 The **City** shall make payment only if, after considering all defenses presented by the **Contractor**, it determines that the payment is due and owing to the beneficiary making the demand.

20.3.9 No beneficiary shall be entitled to interest from the **City**, or to any other costs, including, but not limited to, attorneys' fees, except to the extent required by State Finance Law Section 137.

20.4 Upon the receipt by the **City** of a demand pursuant to this Article 20, the **City** may withhold from any payment otherwise due and owing to the **Contractor** under this **Contract** an amount sufficient to satisfy the demand.

20.4.1 In the event the **City** determines that the demand is valid, the **City** shall notify the **Contractor** of such determination and the amount thereof and direct the **Contractor** to immediately pay such amount to the beneficiary. In the event the **Contractor**, within seven (7) **Days** of receipt of such notification from the **City**, fails to pay the beneficiary, such failure shall constitute an automatic and irrevocable assignment of payment by the **Contractor** to the beneficiary for the amount of the demand determined by the **City** to be valid. The **Contractor**, without further notification or other process, hereby gives its unconditional consent to such assignment of payment to the beneficiary and authorizes the **City**, on its behalf, to take all necessary actions to implement such assignment of payment, including without limitation the execution of any instrument or documentation necessary to effectuate such assignment.

20.4.2 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, the **Contractor** shall provide Commercial General Liability Insurance with limits of at least those required by 1 RCNY section 101-08 or greater limits required by the Agency in accordance with Schedule A. If the **Work** does not require such a permit, the minimum limits shall be those provided for in Schedule A.

22.1.1(d) If any of the **Work** includes repair of a waterborne vessel owned by or to be delivered to the **City**, such Commercial General Liability shall include, or be endorsed to include, Ship Repairer's Legal Liability Coverage to protect against, without limitation, liability arising from navigation of such vessels prior to delivery to and acceptance by the **City**.

22.1.2 Workers' Compensation Insurance, Employers' Liability Insurance, and Disability Benefits Insurance: The **Contractor** shall provide, and shall cause its **Subcontractors** to provide, Workers Compensation Insurance, Employers' Liability Insurance, and Disability Benefits Insurance in accordance with the **Laws** of the State of New York on behalf of all employees providing services under this **Contract** (except for those employees, if any, for which the **Laws** require insurance only pursuant to Article 22.1.3).

22.1.3 United States Longshoremen's and Harbor Workers Act and/or Jones Act Insurance: If specified in Schedule A of the General Conditions or if required by **Law**, the **Contractor** shall provide insurance in accordance with the United States Longshoremen's and Harbor Workers Act and/or the Jones Act, on behalf of all qualifying employees providing services under this **Contract**.

22.1.4 Builders Risk Insurance: If specified in Schedule A of the General Conditions, the **Contractor** shall provide Builders Risk Insurance on a completed value form for the total value of the **Work** through **Substantial Completion** of the **Work** in its entirety. Such insurance shall be provided on an All Risk basis and include coverage, without limitation, for windstorm (including named windstorm), storm surge, flood and earth movement. Unless waived by the **Commissioner**, it shall include coverage for ordinance and law, demolition and increased costs of construction, debris removal, pollutant clean up and removal, and expediting costs. Such insurance shall cover, without limitation, (a) all buildings and/or structures involved in the **Work**, as well as temporary structures at the **Site**, and (b) any property that is intended to become a permanent part of such building or structure, whether such property is on the **Site**, in transit or in temporary storage. Policies shall name the **Contractor** as Named Insured and list the **City** as both an Additional Insured and a Loss Payee as its interest may appear.

22.1.4(a) Policies of such insurance shall specify that, in the event a loss occurs at an occupied facility, occupancy of such facility is permitted without the consent of the issuing insurance company.

22.1.4(b) Such insurance may be provided through an Installation Floater, at the **Contractor's** option, if it otherwise conforms with the requirements of this Article 22.1.4.

22.1.5 Commercial Automobile Liability Insurance: The **Contractor** shall provide Commercial Automobile Liability Insurance for liability arising out of ownership,

maintenance or use of any owned (if any), non-owned and hired vehicles to be used in connection with this **Contract**. Coverage shall be at least as broad as the latest edition of ISO Form CA0001. If vehicles are used for transporting hazardous materials, the Automobile Liability Insurance shall be endorsed to provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as well as proof of MCS 90.

22.1.6 Contractors Pollution Liability Insurance: If specified in Schedule A of the General Conditions, the **Contractor** shall maintain, or cause the **Subcontractor** doing such **Work** to maintain, Contractors Pollution Liability Insurance covering bodily injury and property damage. Such insurance shall provide coverage for actual, alleged or threatened emission, discharge, dispersal, seepage, release or escape of pollutants (including asbestos), including any loss, cost or expense incurred as a result of any cleanup of pollutants (including asbestos) or in the investigation, settlement or defense of any claim, action, or proceedings arising from the operations under this **Contract**. Such insurance shall be in the **Contractor's** name and list the **City** as an Additional Insured and any other entity specified in Schedule A. Coverage shall include, without limitation, (a) loss of use of damaged property or of property that has not been physically injured, (b) transportation, and (c) 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 thereunder; (c) in the event insurance is required pursuant to Article 22.1.6 and/or Article 22.1.7, that the City is an Additional Insured thereunder; (d) the company code issued to the insurance company by the National Association of Insurance Commissioners (the NAIC number); and (e) the number assigned to the **Contract** by the **City**. All such Certificates of Insurance shall be accompanied by either a duly executed "Certification by Insurance Broker or Agent" in the form contained in Part III of Schedule A or copies of all policies referenced in such Certificate of Insurance as certified by an authorized representative of the issuing insurance carrier. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

22.3.4 Documentation confirming renewals of insurance shall be submitted to the **Commissione**r prior to the expiration date of coverage of policies required under this **Contract**. Such proofs of insurance shall comply with the requirements of Articles 22.3.2 and 22.3.3.

22.3.5 The **Contractor** shall be obligated to provide the **City** with a copy of any policy of insurance provided pursuant to this Article 22 upon the demand for such policy by the **Commissioner** or the **City** Corporation Counsel.

22.4 Operations of the **Contractor**:

22.4.1 The **Contractor** shall not commence the **Work** unless and until all required certificates have been submitted to and accepted by the **Commissioner**. Acceptance by the **Commissioner** of a certificate does not excuse the **Contractor** from securing insurance consistent with all provisions of this Article 22 or of any liability arising from its failure to do so.

22.4.2 The **Contractor** shall be responsible for providing continuous insurance coverage in the manner, form, and limits required by this **Contract** and shall be authorized to perform **Work** only during the effective period of all required coverage.

22.4.3 In the event that any of the required insurance policies lapse, are revoked, suspended or otherwise terminated, for whatever cause, the **Contractor** shall immediately stop all **Work**, and shall not recommence **Work** until authorized in writing to do so by the **Commissioner**. Upon quitting the **Site**, except as otherwise directed by the **Commissioner**, the **Contractor** shall leave all plant, materials, equipment, tools, and supplies on the **Site**. **Contract** time shall continue to run during such periods and no extensions of time will be granted. The **Commissioner** may also declare the **Contractor** in default for failure to maintain required insurance.

22.4.4 In the event the **Contractor** receives notice, from an insurance company or other person, that any insurance policy required under this Article 22 shall be cancelled or terminated (or has been cancelled or terminated) for any reason, the **Contractor** shall immediately forward a copy of such notice to both the **Commissioner** and the New York City Comptroller, attn: Office of Contract Administration, Municipal Building, One Centre Street, room 1005, New York, New York 10007. Notwithstanding the foregoing, the **Contractor** shall ensure that there is no interruption in any of the insurance coverage required under this Article 22.

22.4.5 Where notice of loss, damage, occurrence, accident, claim or suit is required under an insurance policy maintained in accordance with this Article 22, the **Contractor** shall notify in writing all insurance carriers that issued potentially responsive policies of any such event relating to any operations under this **Contract** (including notice to Commercial General Liability insurance carriers for events relating to the **Contractor**'s own employees) no later than 20 days after such event. For any policy where the **City** is an Additional Insured, such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Insured as well as the Named Insured." Such notice shall also contain the following information: the number of the insurance policy, the name of the named insured, the date and location of the damage, occurrence, or accident, and the identity of the persons or things injured, damaged or lost. The **Contractor** shall simultaneously send a copy of such notice to the City of New York c/o Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.

22.4.6 In the event of any loss, accident, claim, action, or other event that does or can give rise to a claim under any insurance policy required under this Article 22, the **Contractor** shall at all times fully cooperate with the **City** with regard to such potential or actual claim.

22.5 **Subcontractor** Insurance: In the event the **Contractor** requires any **Subcontractor** to procure insurance with regard to any operations under this **Contract** and requires such **Subcontractor** to name the **Contractor** as an **Additional Insured** thereunder, the **Contractor** shall ensure that the **Subcontractor** name the **City**, including its officials and employees, as an Additional Insured with coverage at least as broad as the most recent edition of ISO Form CG 20 26.

22.6 Wherever reference is made in Article 7 or this Article 22 to documents to be sent to the **Commissioner** (e.g., notices, filings, or submissions), such documents shall be sent to the address set forth in Schedule A of the General Conditions. In the event no address is set forth in Schedule A, such documents are to be sent to the **Commissioner's** address as provided elsewhere in this **Contract**.

22.7 Apart from damages or losses covered by insurance provided pursuant to Articles 22.1.2, 22.1.3, or 22.1.5, the **Contractor** waives all rights against the **City**, including its officials and employees, for any damages or losses that are covered under any insurance required under this Article 22 (whether or

not such insurance is actually procured or claims are paid thereunder) or any other insurance applicable to the operations of the **Contractor** and/or its employees, agents, or **Subcontractors**.

22.8 In the event the **Contractor** utilizes a self-insurance program to satisfy any of the requirements of this Article 22, the **Contractor** shall ensure that any such self-insurance program provides the **City** with all rights that would be provided by traditional insurance under this Article 22, including but not limited to the defense and indemnification obligations that insurers are required to undertake in liability policies.

22.9 Materiality/Non-Waiver: The **Contractor's** failure to secure policies in complete conformity with this Article 22, or to give an insurance company timely notice of any sort required in this **Contract** or to do anything else required by this Article 22 shall constitute a material breach of this **Contract**. Such breach shall not be waived or otherwise excused by any action or inaction by the **City** at any time.

22.10 Pursuant to General Municipal Law Section 108, this **Contract** shall be void and of no effect unless **Contractor** maintains Workers' Compensation Insurance for the term of this **Contract** to the extent required and in compliance with the New York State Workers' Compensation Law.

22.11 Other Remedies: Insurance coverage provided pursuant to this Article 22 or otherwise shall not relieve the **Contractor** of any liability under this **Contract**, nor shall it preclude the **City** from exercising any rights or taking such other actions available to it under any other provisions of this **Contract** or **Law**.

ARTICLE 23. MONEY RETAINED AGAINST CLAIMS

23.1 If any claim shall be made by any person or entity (including **Other Contractors** with the **City** on this **Project**) against the **City** or against the **Contractor** and the **City** for any of the following:

(a) An alleged loss, damage, injury, theft or vandalism of any of the kinds referred to in Articles 7 and 12, plus the reasonable costs of defending the **City**, which in the opinion of the **Comptroller** may not be paid by an insurance company (for any reason whatsoever); or

(b) An infringement of copyrights, patents or use of patented articles, tools, etc., as referred to in Article 57; or

(c) Damage claimed to have been caused directly or indirectly by the failure of the **Contractor** to perform the **Work** in strict accordance with this **Contract,**

the amount of such claim, or so much thereof as the **Comptroller** may deem necessary, may be withheld by the **Comptroller**, as security against such claim, from any money due hereunder. The **Comptroller**, in his/her discretion, may permit the **Contractor** to substitute other satisfactory security in lieu of the monies so withheld.

23.2 If an action on such claim is timely commenced and the liability of the **City**, or the **Contractor**, or both, shall have been established therein by a final judgment of a court of competent jurisdiction, or if such claim shall have been admitted by the **Contractor** to be valid, the **Comptroller** shall pay such judgment or admitted claim out of the monies retained by the **Comptroller** under the provisions of this Article 23, and return the balance, if any, without interest, to the **Contractor**.

ARTICLE 24. MAINTENANCE AND GUARANTY

24.1 The **Contractor** shall promptly repair, replace, restore or rebuild, as the **Commissioner** may determine, any finished **Work** in which defects of materials or workmanship may appear or to which damage may occur because of such defects, during the one (1) year period subsequent to the date of **Substantial Completion** (or use and occupancy in accordance with Article 16), except where other periods of maintenance and guaranty are provided for in Schedule A.

24.2 As security for the faithful performance of its obligations hereunder, the **Contractor**, upon filing its requisition for payment on **Substantial Completion**, shall deposit with the **Commissioner** a sum equal to one (1%) percent of the price (or the amount fixed in Schedule A of the General Conditions) in cash or certified check upon a state or national bank and trust company or a check of such bank and trust company signed by a duly authorized officer thereof and drawn to the order of the **Comptroller**, or obligations of the **City**, which the **Comptroller** may approve as of equal value with the sum so required.

24.3 In lieu of the above, the **Contractor** may make such security payment to the **City** by authorizing the **Commissioner** in writing to deduct the amount from the **Substantial Completion** payment which shall be deemed the deposit required above.

24.4 If the **Contractor** has faithfully performed all of its obligations hereunder the **Commissioner** shall so certify to the **Comptroller** within five (5) **Days** after the expiration of one (1) year from the date of **Substantial Completion** and acceptance of the **Work** or within thirty (30) **Days** after the expiration of the guarantee period fixed in the **Specifications**. The security payment shall be repaid to the **Contractor** without interest within thirty (30) **Days** after certification by the **Commissioner** to the **Comptroller** that the **Contractor** has faithfully performed all of its obligations hereunder.

24.5 Notice by the **Commissioner** to the **Contractor** to repair, replace, rebuild or restore such defective or damaged **Work** shall be timely, pursuant to this article, if given not later than ten (10) **Days** subsequent to the expiration of the one (1) year period or other periods provided for herein.

24.6 If the **Contractor** shall fail to repair, replace, rebuild or restore such defective or damaged **Work** promptly after receiving such notice, the **Commissioner** shall have the right to have the **Work** done by others in the same manner as provided for in the completion of a defaulted **Contract**, under Article 51.

24.7 If the security payment so deposited is insufficient to cover the cost of such **Work**, the **Contractor** shall be liable to pay such deficiency on demand by the **Commissioner**.

24.8 The **Engineer's** certificate setting forth the fair and reasonable cost of repairing, replacing, rebuilding or restoring any damaged or defective **Work** when performed by one other than the **Contractor**, shall be binding and conclusive upon the **Contractor** as to the amount thereof.

24.9 The **Contractor** shall obtain all manufacturers' warranties and guaranties of all equipment and materials required by this **Contract** in the name of the **City** and shall deliver same to the **Commissioner**. All of the **City's** rights and title and interest in and to said manufacturers' warranties and guaranties may be assigned by the **City** to any subsequent purchasers of such equipment and materials or lessees of the premises into which the equipment and materials have been installed.

CHAPTER VI: CHANGES, EXTRA WORK, AND DOCUMENTATION OF CLAIM

ARTICLE 25. CHANGES

25.1 Changes may be made to this **Contract** only as duly authorized in writing by the **Commissioner** in accordance with the **Law** and this **Contract**. All such changes, modifications, and amendments will become a part of the **Contract**. **Work** so ordered shall be performed by the **Contractor**.

25.2 **Contract** changes will be made only for **Work** necessary to complete the **Work** included in the original scope of the **Contract** and/or for non-material changes to the scope of the **Contract**. Changes are not permitted for any material alteration in the scope of **Work** in the **Contract**.

25.3 The **Contractor** shall be entitled to a price adjustment for **Extra Work** performed pursuant to a written change order. Adjustments to price shall be computed in one or more of the following ways:

25.3.1 By applicable unit prices specified in the **Contract**; and/or

25.3.2 By agreement of a fixed price; and/or

25.3.3 By time and material records; and/or

25.3.4 In any other manner approved by the **CCPO**.

25.4 All payments for change orders are subject to pre-audit by the **Engineering Audit Officer** and may be post-audited by the **Comptroller** and/or the **Agency**.

ARTICLE 26. METHODS OF PAYMENT FOR OVERRUNS AND EXTRA WORK

26.1 Overrun of Unit Price Item: An overrun is any quantity of a unit price item which the **Contractor** is directed to provide which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule.

26.1.1For any unit price item, the **Contractor** will be paid at the unit price bid for any quantity up to one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule. If during the progress of the **Work**, the actual quantity of any unit price item required to complete the **Work** approaches the estimated quantity for that item, and for any reason it appears that the actual quantity of any unit price item necessary to complete the **Work** will exceed the estimated quantity for that item by twenty-five (25%) percent, the **Contractor** shall immediately notify the **Engineer** of such anticipated overrun. The **Contractor** shall not be compensated for any quantity of a unit price item provided which is in excess of one hundred twenty-five (125%) percent of the estimated quantity for that item set forth in the bid schedule without written authorization from the **Engineer**.

26.1.2 If the actual quantity of any unit price item necessary to complete the **Work** will exceed one hundred twenty five (125%) percent of the estimated quantity for that item set forth in the bid schedule, the **City** reserves the right and the **Contractor** agrees to negotiate a new unit price for such item. In no event shall such negotiated new unit price exceed the unit bid price. If the **City** and **Contractor** cannot agree on a new unit price, then the **City** shall order the **Contractor** and the **Contractor** agrees to provide additional quantities of

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

26.2 **Extra Work:** For **Extra Work** where payment is by agreement on a fixed price in accordance with Article 25.3.2, the price to be paid for such **Extra Work** shall be based on the fair and reasonable estimated cost of the items set forth below. For **Extra Work** where payment is based on time and material records in accordance with Article 25.3.3, the price to be paid for such **Extra Work** shall be the actual and reasonable cost of the items set forth below, calculated in accordance with the formula specified therein, if any.

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

26.2.2 Necessary direct labor, including payroll taxes (subject to statutory wage caps) and supplemental benefits; plus

26.2.3 Sales and personal property taxes, if any, required to be paid on materials not incorporated into such **Extra Work**; plus

26.2.4 Reasonable rental value of **Contractor**-owned (or **Subcontractor**-owned, as applicable), necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per operating hour: (.035) x (HP rating) x (Fuel cost/gallon). Reasonable rental value is defined as the lower of either seventy-five percent of the monthly prorated rental rates established in "The AED Green Book, Rental Rates and Specifications for Construction Equipment" published by Equipment Watch (the "Green Book"), or seventy-five percent of the monthly prorated rental rates established in the "Rental Rate Blue Book for Construction Equipment" published by Equipment Watch (the "Blue Book") (the applicable Blue Book rate being for rental only without the addition of any operational costs listed in the Blue Book). The reasonable rental value is deemed to be inclusive of all operating costs except for fuel/energy consumption and equipment operator's wages/costs. For multiple shift utilization, reimbursement shall be calculated as follows: first shift shall be seventy-five (75%) percent of such rental rates; second shift shall be sixty (60%) percent of the first shift rate; and third shift shall be forty (40%) percent of the first shift rate. Equipment on standby shall be reimbursed at one-third (1/3) the prorated monthly rental rate. **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment includes equipment from rental companies affiliated with or controlled by the **Contractor** (or **Subcontractor**, as applicable)**,** as determined by the **Commissioner**. In establishing cost reimbursement for non-operating **Contractor**-owned (or **Subcontractor**-owned, as applicable) equipment (scaffolding, sheeting systems, road plates, etc.), the **City** may restrict reimbursement to a purchase-salvage/life cycle basis if less than the computed rental costs; plus

26.2.5 Necessary installation and dismantling of such plant and equipment, including transportation to and from the **Site**, if any, provided that, in the case of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) equipment rented from a third party, the cost of installation and dismantling are not allowable if such costs are included in the rental rate; plus

26.2.6 Necessary fees charged by governmental entities; plus

26.2.7 Necessary construction-related service fees charged by non-governmental entities, such as landfill tipping fees; plus

26.2.8 Reasonable rental costs of non-**Contractor**-owned (or non-**Subcontractor**-owned, as applicable) necessary plant and equipment other than **Small Tools**, plus fuel/energy costs. Except for fuel costs for pick-up trucks which shall be reimbursed based on a consumption of five (5) gallons per shift, fuel costs shall be reimbursed based on actual costs or, in the absence of auditable documentation, the following fuel consumption formula per hour of operation: (.035) x (HP rating) x (Fuel cost/gallon). In lieu of renting, the **City** reserves the right to direct the purchase of non-operating equipment (scaffolding, sheeting systems, road plates, etc.), with payment on a purchase-salvage/life cycle basis, if less than the projected rental costs; plus

26.2.9 Workers' Compensation Insurance, and any insurance coverage expressly required by the **City** for the performance of the **Extra Work** which is different than the types of insurance required by Article 22 and Schedule A of the General Conditions. The cost of Workers' Compensation Insurance is subject to applicable payroll limitation caps and shall be based upon the carrier's Manual Rate for such insurance derived from the applicable class Loss Cost ("LC") and carrier's Lost Cost Multiplier ("LCM") approved by the New York State Department of Financial Services, and with the exception of experience rating, rate modifiers as promulgated by the New York Compensation Insurance Rating Board ("NYCIRB"); plus

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

26.2.11 Twelve percent (12%) percent of the total of items in Articles 26.2.1 through 26.2.5 as compensation for overhead, except that no percentage for overhead will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes. Overhead shall include without limitation, all costs and expenses in connection with administration, management superintendence, small tools, and insurance required by Schedule A of the General Conditions other than Workers' Compensation Insurance; plus

26.2.12 Ten (10%) percent of the total of items in Articles 26.2.1 through 26.2.5, plus the items in Article 26.2.11, as compensation for profit, except that no percentage for profit will be allowed on **Payroll Taxes** or on the premium portion of overtime pay or on sales and personal property taxes; plus

26.2.13 Five (5%) percent of the total of items in Articles 26.2.6 through 26.2.10 as compensation for overhead and profit.

26.3 Where the **Extra Work** is performed in whole or in part by other than the **Contractor's** own forces pursuant to Article 26.2, the **Contractor** shall be paid, subject to pre-audit by the **Engineering Audit Officer**, the cost of such **Work** computed in accordance with Article 26.2 above, plus an additional allowance of five (5%) percent to cover the **Contractor's** overhead and profit.

26.4 Where a change is ordered, involving both **Extra Work** and omitted or reduced **Contract Work,** the **Contract** price shall be adjusted, subject to pre-audit by the **EAO**, in an amount based on the difference between the cost of such **Extra Work** and of the omitted or reduced **Work**.

26.5 Where the **Contractor** and the **Commissioner** can agree upon a fixed price for **Extra Work** in accordance with Article 25.3.2 or another method of payment for **Extra Work** in accordance with

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

ARTICLE 27. RESOLUTION OF DISPUTES

27.1 All disputes between the **City** and the **Contractor** of the kind delineated in this Article 27.1 that arise under, or by virtue of, this **Contract** shall be finally resolved in accordance with the provisions of this Article 27 and the **PPB** Rules. This procedure for resolving all disputes of the kind delineated herein shall be the exclusive means of resolving any such disputes.

27.1.1 This Article 27 shall not apply to disputes concerning matters dealt with in other sections of the **PPB** Rules, or to disputes involving patents, copyrights, trademarks, or trade secrets (as interpreted by the courts of New York State) relating to proprietary rights in computer software.

27.1.2 This Article 27 shall apply only to disputes about the scope of **Work** delineated by the **Contract**, the interpretation of **Contract** documents, the amount to be paid for **Extra Work** or disputed work performed in connection with the **Contract**, the conformity of the **Contractor's Work** to the **Contract**, and the acceptability and quality of the **Contractor's Work**; such disputes arise when the **Engineer**, **Resident Engineer**, **Engineering Audit Officer**, or other designee of the **Commissioner** makes a determination with which the **Contractor** disagrees.

27.2 All determinations required by this Article 27 shall be made in writing clearly stated, with a reasoned explanation for the determination based on the information and evidence presented to the party making the determination. Failure to make such determination within the time required by this Article 27 shall be deemed a non-determination without prejudice that will allow application to the next level.

27.3 During such time as any dispute is being presented, heard, and considered pursuant to this Article 27, the **Contract** terms shall remain in force and the **Contractor** shall continue to perform **Work** as directed by the **ACCO** or the **Engineer**. Failure of the **Contractor** to continue **Work** as directed shall constitute a waiver by the **Contractor** of its claim.

27.4 Presentation of Disputes to **Commissioner**.

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

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

27.4.1 **Commissioner** Inquiry. The **Commissioner** shall examine the material and may, in his or her discretion, convene an informal conference with the **Contractor**, the **ACCO**, and the **Engineer**, **Resident Engineer**, **Engineering Audit Officer**, or other designee of the **Commissioner** to resolve the issue by mutual consent prior to reaching a determination. The **Commissioner** may seek such technical or other expertise as he or she shall deem appropriate, including the use of neutral mediators, and require any such additional material from either or both parties as he or she deems fit. The **Commissioner's** ability to render, and the effect of, a decision hereunder shall not be impaired by any negotiations in connection with the dispute presented, whether or not the **Commissioner** participated therein. The **Commissioner** may or, at the request of any party to the dispute, shall compel the participation of any **Other Contractor** with a contract related to the **Work** of this **Contract**, and that **Contractor** shall be bound by the decision of the **Commissioner**. Any **Other Contractor** thus brought into the dispute resolution proceeding shall have the same rights and obligations under this Article 27 as the **Contractor** initiating the dispute.

27.4.2 **Commissioner** Determination. Within thirty (30) **Days** after the receipt of all materials and information, or such longer time as may be agreed to by the parties, the **Commissioner** shall make his or her determination and shall deliver or send a copy of such determination to the **Contractor**, the **ACCO,** and **Engineer**, **Resident Engineer**, **Engineering Audit Officer**, or other designee of the **Commissioner**, as applicable, together with a statement concerning how the decision may be appealed.

27.4.3 Finality of **Commissioner's** Decision. The **Commissioner's** decision shall be final and binding on all parties, unless presented to the Contract Dispute Resolution Board pursuant to this Article 27. The **City** may not take a petition to the Contract Dispute Resolution Board. However, should the **Contractor** take such a petition, the **City** may seek, and the Contract Dispute Resolution Board may render, a determination less favorable to the **Contractor** and more favorable to the **City** than the decision of the **Commissioner**.

27.5 Presentation of Dispute to the **Comptroller**. Before any dispute may be brought by the **Contractor** to the Contract Dispute Resolution Board, the **Contractor** must first present its claim to the **Comptroller** for his or her review, investigation, and possible adjustment.

27.5.1 Time, Form, and Content of Notice. Within thirty (30) **Days** of its receipt of a decision by the **Commissioner,** the **Contractor** shall submit to the **Comptroller** and to the **Commissioner** a Notice of Claim regarding its dispute with the **Agency**. The Notice of Claim shall consist of (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written decision of the **Commissioner**; and (iii) a copy of all materials submitted by the **Contractor** to the **Agency**, including the Notice of Dispute. The **Contractor** may not present to the **Comptroller** any material not presented to the **Commissioner**, except at the request of the **Comptroller**.

27.5.2 Response. Within thirty (30) **Days** of receipt of the Notice of Claim, the **Agency** shall make available to the **Comptroller** a copy of all material submitted by the **Agency** to the **Commissioner** in connection with the dispute. The **Agency** may not present to the **Comptroller** any material not presented to the **Commissioner** except at the request of the **Comptroller**.

27.5.3 **Comptroller** Investigation. The **Comptroller** may investigate the claim in dispute and, in the course of such investigation, may exercise all powers provided in Sections 7-201 and 7-203 of the Administrative Code. In addition, the **Comptroller** may demand of either party, and such party shall provide, whatever additional material the **Comptroller** deems pertinent to the claim, including original business records of the **Contractor**. Willful failure of the **Contractor** to produce within fifteen (15) **Days** any material requested by the **Comptroller** shall constitute a waiver by the **Contractor** of its claim. The **Comptroller** may also schedule an informal conference to be attended by the **Contractor**, **Agency** representatives, and any other personnel desired by the **Comptroller**.

27.5.4 Opportunity of **Comptroller** to Compromise or Adjust Claim. The **Comptroller** shall have forty-five (45) **Days** from his or her receipt of all materials referred to in Article 27.5.3 to investigate the disputed claim. The period for investigation and compromise may be further extended by agreement between the **Contractor** and the **Comptroller**, to a maximum of ninety (90) **Days** from the **Comptroller's** receipt of all materials. The **Contractor** may not present its petition to the Contract Dispute Resolution Board until the period for investigation and compromise delineated in this Article 27.5.4 has expired. In compromising or adjusting any claim hereunder, the **Comptroller** may not revise or disregard the terms of the **Contract** between the parties.

27.6 Contract Dispute Resolution Board. There shall be a Contract Dispute Resolution Board composed of:

27.6.1 The chief administrative law judge of the Office of Administrative Trials and Hearings (OATH) or his/her designated OATH administrative law judge, who shall act as chairperson, and may adopt operational procedures and issue such orders consistent with this Article 27 as may be necessary in the execution of the Contract Dispute Resolution Board's functions, including, but not limited to, granting extensions of time to present or respond to submissions;

27.6.2 The **CCPO** or his/her designee; any designee shall have the requisite background to consider and resolve the merits of the dispute and shall not have participated personally and substantially in the particular matter that is the subject of the dispute or report to anyone who so participated; and

27.6.3 A person with appropriate expertise who is not an employee of the **City**. This person shall be selected by the presiding administrative law judge from a prequalified panel of individuals, established and administered by OATH with appropriate background to act as decision-makers in a dispute. Such individual may not have a contract or dispute with the **City** or be an officer or employee of any company or organization that does, or regularly represents persons, companies, or organizations having disputes with the **City**.

27.7 Petition to the Contract Dispute Resolution Board. In the event the claim has not been settled or adjusted by the **Comptroller** within the period provided in this Article 27, the **Contractor**,

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

27.7.1 Form and Content of Petition by **Contractor**. The **Contractor** shall present its dispute to the Contract Dispute Resolution Board in the form of a petition, which shall include (i) a brief written statement of the substance of the dispute, the amount of money, if any, claimed, and the reason(s) the **Contractor** contends the dispute was wrongly decided by the **Commissioner**; (ii) a copy of the written Decision of the **Commissioner,** (iii) copies of all materials submitted by the **Contractor** to the Agency; (iv) a copy of the written decision of the **Comptroller**, if any, and (v) copies of all correspondence with, or written material submitted by the **Contractor**, to the **Comptroller**. The **Contractor** shall concurrently submit four (4) complete sets of the Petition: one set to the **City** Corporation Counsel (Attn: Commercial and Real Estate Litigation Division) and three (3) sets to the Contract Dispute Resolution Board at OATH's offices with proof of service on the **City** Corporation Counsel. In addition, the **Contractor** shall submit a copy of the written statement of the substance of the dispute, cited in (i) above, to both the **Commissioner** and the **Comptroller**.

27.7.2 **Agency** Response. Within thirty (30) **Days** of its receipt of the Petition by the **City** Corporation Counsel, the **Agency** shall respond to the brief written statement of the **Contractor** and make available to the Contract Dispute Resolution Board all material it submitted to the **Commissioner** and **Comptroller**. Three (3) complete copies of the **Agency** response shall be provided to the Contract Dispute Resolution Board and one to the **Contractor**. Extensions of time for submittal of the **Agency** response shall be given as necessary upon a showing of good cause or, upon consent of the parties, for an initial period of up to thirty (30) Days.

27.7.3 Further Proceedings. The Contract Dispute Resolution Board shall permit the **Contractor** to present its case by submission of memoranda, briefs, and oral argument. The Contract Dispute Resolution Board shall also permit the **Agency** to present its case in response to the **Contractor** by submission of memoranda, briefs, and oral argument. If requested by the **City** Corporation Counsel, the **Comptroller** shall provide reasonable assistance in the preparation of the **Agency's** case. Neither the **Contractor** nor the **Agency** may support its case with any documentation or other material that was not considered by the **Comptroller**, unless requested by the Contract Dispute Resolution Board. The Contract Dispute Resolution Board, in its discretion, may seek such technical or other expert advice as it shall deem appropriate and may seek, on its own or upon application of a party, any such additional material from any party as it deems fit. The Contract Dispute Resolution Board, in its discretion, may combine more than one dispute between the parties for concurrent resolution.

27.7.4 Contract Dispute Resolution Board Determination. Within forty-five (45) **Days** of the conclusion of all written submissions and oral arguments, the Contract Dispute Resolution Board shall render a written decision resolving the dispute. In an unusually complex case, the Contract Dispute Resolution Board may render its decision in a longer period, not to exceed ninety (90) **Days**, and shall so advise the parties at the commencement of this period. The Contract Dispute Resolution Board's decision must be consistent with the terms of the **Contract**. Decisions of the Contract Dispute Resolution Board shall only resolve matters before the Contract Dispute Resolution Board and shall not have precedential effect with respect to matters not before the Contract Dispute Resolution Board.

27.7.5 Notification of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board shall send a copy of its decision to the **Contractor**, the **ACCO**, the Engineer, the **Comptroller**, the **City** Corporation Counsel, the CCPO, and the **PPB**. A decision in favor of the **Contractor** shall be subject to the prompt payment provisions of the **PPB** Rules. The Required Payment Date shall be thirty (30) Days after the date the parties are formally notified of the Contract Dispute Resolution Board's decision.

27.7.6 Finality of Contract Dispute Resolution Board Decision. The Contract Dispute Resolution Board's decision shall be final and binding on all parties. Any party may seek review of the Contract Dispute Resolution Board's decision solely in the form of a challenge, filed within four (4) months of the date of the Contract Dispute Resolution Board's decision, in a court of competent jurisdiction of the State of New York, County of New York pursuant to Article 78 of the Civil Practice Law and Rules. Such review by the court shall be limited to the question of whether or not the Contract Dispute Resolution Board's decision was made in violation of lawful procedure, was affected by an error of **Law**, or was arbitrary and capricious or an abuse of discretion. No evidence or information shall be introduced or relied upon in such proceeding that was not presented to the Contract Dispute Resolution Board in accordance with this Article 27.

27.8 Any termination, cancellation, or alleged breach of the **Contract** prior to or during the pendency of any proceedings pursuant to this Article 27 shall not affect or impair the ability of the **Commissioner** or Contract Dispute Resolution Board to make a binding and final decision pursuant to this Article 27.

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

28.1 While the **Contractor** or any of its **Subcontractors** is performing **Work** on a time and material basis or **Extra Work** on a time and material basis ordered by the **Commissioner** under Article 25, or where the **Contractor** believes that it or any of its **Subcontractors** is performing **Extra Work** but a final determination by **Agency** has not been made, or the **Contractor** or any of its **Subcontractors** is performing disputed **Work** (whether on or off the **Site**), or complying with a determination or order under protest in accordance with Articles 11, 27, and 30, in each such case the **Contractor** shall furnish the **Resident Engineer** daily with three (3) copies of written statements signed by the **Contractor's** representative at the **Site** showing:

28.1.1 The name, trade, and number of each worker employed on such **Work** or engaged in complying with such determination or order, the number of hours employed, and the character of the **Work** each is doing; and

28.1.2 The nature and quantity of any materials, plant and equipment furnished or used in connection with the performance of such **Work** or compliance with such determination or order, and from whom purchased or rented.

28.2 A copy of such statement will be countersigned by the **Resident Engineer**, noting thereon any items not agreed to or questioned, and will be returned to the **Contractor** within two (2) **Days** after submission.

28.3 The **Contractor** and its **Subcontractors**, when required by the **Commissioner**, or the **Comptroller**, shall also produce for inspection, at the office of the **Contractor** or **Subcontractor**, any and all of its books, bid documents, financial statements, vouchers, records, daily job diaries and reports,

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

28.4 In connection with the examination provided for herein, the **Commissioner**, upon demand therefor, will produce for inspection by the **Contractor** such records as the **Agency** may have with respect to such **Extra Work** or disputed **Work** performed under protest pursuant to order of the **Commissioner**, except those records and reports which may have been prepared for the purpose of determining the accuracy and validity of the **Contractor's** claim.

28.5 Failure to comply strictly with these requirements shall constitute a waiver of any claim for extra compensation or damages on account of the performance of such **Work** or compliance with such determination or order.

ARTICLE 29. OMITTED WORK

29.1 If any **Contract Work** in a lump sum **Contract**, or if any part of a lump sum item in a unit price, lump sum, or percentage-bid **Contract** is omitted by the **Commissioner** pursuant to Article 33, the **Contract** price, subject to audit by the EAO, shall be reduced by a pro rata portion of the lump sum bid amount based upon the percent of **Work** omitted subject to Article 29.4. For the purpose of determining the pro rata portion of the lump sum bid amount, the bid breakdown submitted in accordance with Article 41 shall be considered, but shall not be the determining factor.

29.2 If the whole of a lump sum item or units of any other item is so omitted by the **Commissioner** in a unit price, lump sum, or percentage-bid **Contract**, then no payment will be made therefor except as provided in Article 29.4.

29.3 For units that have been ordered but are only partially completed, the unit price shall be reduced by a pro rata portion of the unit price bid based upon the percentage of **Work** omitted subject to Article 29.4.

29.4 In the event the **Contractor**, with respect to any omitted **Work**, has purchased any non-cancelable material and/or equipment that is not capable of use except in the performance of this **Contract** and has been specifically fabricated for the sole purpose of this **Contract**, but not yet incorporated into the **Work**, the **Contractor** shall be paid for such material and/or equipment in accordance with Article 64.2.1(b); provided, however, such payment is contingent upon the **Contractor's** delivery of such material and/or equipment in acceptable condition to a location designated by the **City**.

29.5 The **Contractor** agrees to make no claim for damages or for loss of overhead and profit with regard to any omitted **Work**.

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

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

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

30.2 In addition to the foregoing statements, the **Contractor** shall, upon notice from the **Commissioner**, produce for examination at the **Contractor's** office, by the **Engineer**, **Architect** or **Project Manager**, all of its books of account, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**, and submit itself and persons in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.3 In addition to the statements required under Article 28 and this Article 30, the **Contractor** and/or its **Subcontractor** shall, within thirty (30) **Days** upon notice from the **Commissioner** or **Comptroller**, produce for examination at the **Contractor's** and/or **Subcontractor's** office, by a representative of either the **Commissioner** or **Comptroller**, all of its books of account, bid documents, financial statements, accountant workpapers, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and cancelled checks, showing all of its acts and transactions in connection with or relating to or arising by reason of this **Contract**. Further, the **Contractor** and/or its **Subcontractor** shall submit any person in its employment, for examination under oath by any person designated by the **Commissioner** or **Comptroller** to investigate claims made or disputes against the **City** under this **Contract**. At such examination, a duly authorized representative of the **Contractor** may be present.

30.4 Unless the information and examination required under Article 30.3 is provided by the **Contractor** and/or its **Subcontractor** upon thirty (30) **Days'** notice from the **Commissioner** or **Comptroller**, or upon the **Commissioner's** or **Comptroller's** written authorization to extend the time to comply, the **City** shall be released from all claims arising under, relating to or by reason of this **Contract**, except for sums certified by the **Commissioner** to be due under the provisions of this **Contract**. It is further stipulated and agreed that no person has the power to waive any of the foregoing provisions and that in any action or dispute resolution procedure against the **City** to recover any sum in excess of the sums certified by the **Commissioner** to be due under or by reason of this **Contract**, the **Contractor** must allege in its complaint and prove, at trial or during such dispute resolution procedure, compliance with the provisions of this Article 30.

30.5 In addition, after the commencement of any action or dispute resolution procedure by the **Contractor** arising under or by reason of this **Contract**, the **City** shall have the right to require the **Contractor** to produce for examination under oath, up until the trial of the action or hearing before the Contract Dispute Resolution Board, the books and documents described in Article 30.3 and submit itself and all persons in its employ for examination under oath. If this Article 30 is not complied with as required, then the **Contractor** hereby consents to the dismissal of the action or dispute resolution procedure.

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

ARTICLE 31. THE RESIDENT ENGINEER

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

ARTICLE 32. THE ENGINEER OR ARCHITECT OR PROJECT MANAGER

32.1 The **Engineer** or **Architect** or **Project Manager**, in addition to those matters elsewhere herein delegated to the **Engineer** and expressly made subject to his/her determination, direction or approval, shall have the power, subject to review by the **Commissioner**:

32.1.1 To determine the amount, quality, and location of the **Work** to be paid for hereunder; and

32.1.2 To determine all questions in relation to the **Work**, to interpret the **Contract Drawings**, **Specifications**, and **Addenda**, and to resolve all patent inconsistencies or ambiguities therein; and

32.1.3 To determine how the **Work** of this **Contract** shall be coordinated with **Work** of **Other Contractors** engaged simultaneously on this **Project**, including the power to suspend any part of the **Work**, but not the whole thereof; and

32.1.4 To make minor changes in the **Work** as he/she deems necessary, provided such changes do not result in a net change in the cost to the **City** or to the **Contractor** of the **Work** to be done under the **Contract**; and

32.1.5 To amplify the **Contract Drawings**, add explanatory information and furnish additional **Specifications** and drawings, consistent with this **Contract**.

32.2 The foregoing enumeration shall not imply any limitation upon the power of the **Engineer** or **Architect** or **Project Manager**, for it is the intent of this **Contract** that all of the **Work** shall generally be subject to his/her determination, direction, and approval, except where the determination, direction or approval of someone other than the **Engineer** or **Architect** or **Project Manager** is expressly called for herein.

32.3 The **Engineer** or **Architect** or **Project Manager** shall not, however, have the power to issue an **Extra Work** order, except as specifically designated in writing by the **Commissioner**.

ARTICLE 33. THE COMMISSIONER

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

33.1.1 To review and make determinations on any and all questions in relation to this **Contract** and its performance; and

33.1.2 To modify or change this **Contract** so as to require the performance of **Extra Work** (subject, however, to the limitations specified in Article 25) or the omission of **Contract Work**; and

33.1.3 To suspend the whole or any part of the **Work** whenever in his/her judgment such suspension is required:

33.1.3(a) In the interest of the **City** generally; or

33.1.3(b) To coordinate the **Work** of the various contractors engaged on this **Project** pursuant to the provisions of Article 12; or

33.1.3(c) To expedite the completion of the entire **Project** even though the completion of this particular **Contract** may thereby be delayed.

ARTICLE 34. NO ESTOPPEL

34.1 Neither the **City** nor any **Agency**, official, agent or employee thereof, shall be bound, precluded or estopped by any determination, decision, approval, order, letter, payment or certificate made or given under or in connection with this **Contract** by the **City**, the **Commissioner**, the **Engineer**, the **Resident Engineer**, or any other official, agent or employee of the **City**, either before or after the final completion and acceptance of the **Work** and payment therefor:

34.1.1 From showing the true and correct classification, amount, quality or character of the **Work** actually done; or that any such determination, decision, order, letter, payment or certificate was untrue, incorrect or improperly made in any particular, or that the **Work**, or any part thereof, does not in fact conform to the requirements of this **Contract**; and

34.1.2 From demanding and recovering from the **Contractor** any overpayment made to it, or such damages as the **City** may sustain by reason of the **Contractor's** failure to perform each and every part of its **Contract**.

CHAPTER VIII: LABOR PROVISIONS

ARTICLE 35. EMPLOYEES

35.1 The **Contractor** and its **Subcontractors** shall not employ on the **Work**:

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

35.1.2 Any labor, materials or means whose employment, or utilization during the course of this **Contract**, may tend to or in any way cause or result in strikes, work stoppages, delays, suspension of **Work** or similar troubles by workers employed by the **Contractor** or its **Subcontractors**, or by any of the trades working in or about the buildings and premises where **Work** is being performed under this **Contract**, or by **Other Contractors** or their **Subcontractors** pursuant to other contracts, or on any other building or premises owned or operated by the **City**, its **Agencies**, departments, boards or authorities. Any violation by the **Contractor** of this requirement may, upon certification of the **Commissioner**, be considered as proper and sufficient cause for declaring the **Contractor** to be in default, and for the **City** to take action against it as set forth in Chapter X of this **Contract**, or such other article of this **Contract** as the Commissioner may deem proper; or

35.1.3 In accordance with Section 220.3-e of the Labor Law of the State of New York (hereinafter "Labor Law"), the **Contractor** and its **Subcontractors** shall not employ on the **Work** any apprentice, unless he/she is a registered individual, under a bona fide program registered with the New York State Department of Labor. The allowable ratio of apprentices to journey-level workers in any craft classification shall not be greater than the ratio permitted to the **Contractor** as to its work force on any job under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered as above, shall be paid the wage rate determined by the **Comptroller** of the **City** for the classification of **Work** actually performed. The **Contractor** or **Subcontractor** will be required to furnish written evidence of the registration of its program and apprentices as well as all the appropriate ratios and wage rates, for the area of the construction prior to using any apprentices on the **Contract Work**.

35.2 If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand ($250,000) dollars, all laborers, workers, and mechanics employed in the performance of the **Contract** on the public work site, either by the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by the **Contract**, shall be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration.

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

35.3.1 The **Contractor** shall not take an adverse personnel action with respect to an officer or employee in retaliation for such officer or employee making a report of information concerning conduct which such officer or employee knows or reasonably believes to involve corruption, criminal activity, conflict of interest, gross mismanagement or abuse of authority by any officer or employee relating to this **Contract** to (a) the Commissioner of the Department of Investigation, (b) a member of the New York City Council, the Public Advocate, or the **Comptroller**, or (c) the **CCPO**, **ACCO**, **Agency** head, or **Commissioner**.

35.3.2 If any of the **Contractor**'s officers or employees believes that he or she has been the subject of an adverse personnel action in violation of Article 35.3.1, he or she shall be entitled to bring a cause of action against the **Contractor** to recover all relief necessary to make him or her whole. Such relief may include but is not limited to: (a) an injunction to restrain continued retaliation, (b) reinstatement to the position such employee would have had but for the retaliation or to an equivalent position, (c) reinstatement of full fringe benefits and seniority rights, (d) payment of two times back

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

35.3.3 The **Contractor** shall post a notice provided by the **City** in a prominent and accessible place on any site where work pursuant to the **Contract** is performed that contains information about:

35.3.3(a) how its employees can report to the New York City Department of Investigation allegations of fraud, false claims, criminality or corruption arising out of or in connection with the **Contract**; and

35.3.3(b) the rights and remedies afforded to its employees under Administrative Code sections 7-805 (the New York City False Claims Act) and 12-113 (the Whistleblower Protection Expansion Act) for lawful acts taken in connection with the reporting of allegations of fraud, false claims, criminality or corruption in connection with the **Contract**.

35.3.4 For the purposes of this Article 35.3, "adverse personnel action" includes dismissal, demotion, suspension, disciplinary action, negative performance evaluation, any action resulting in loss of staff, office space, equipment or other benefit, failure to appoint, failure to promote, or any transfer or assignment or failure to transfer or assign against the wishes of the affected officer or employee.

35.3.5 This Article 35.3 is applicable to all of the **Contractor**'s **Subcontractors** having subcontracts with a value in excess of $100,000; accordingly, the **Contractor** shall include this rider in all subcontracts with a value a value in excess of $100,000.

35.4 Article 35.3 is not applicable to this **Contract** if it is valued at $100,000 or less. Articles 35.3.1, 35.3.2, 35.3.4, and 35.3.5 are not applicable to this **Contract** if it was solicited pursuant to a finding of an emergency.

35.5 Paid Sick Leave Law.

35.5.1 Introduction and General Provisions.

35.5.1(a) The Earned Sick Time Act, also known as the Paid Sick Leave Law ("PSLL"), requires covered employees who annually perform more than 80 hours of work in New York City to be provided with paid sick time.[2] Contractors of the **City** or of other governmental entities may be required to provide sick time pursuant to the PSLL.

35.5.1(b) The PSLL became effective on April 1, 2014, and is codified at Title 20, Chapter 8, of the New York City Administrative Code. It is administered by the City's Department of Consumer Affairs ("DCA"); DCA's rules promulgated under the PSLL are codified at Chapter 7 of Title 6 of the Rules of the City of New York ("Rules").

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

35.5.1(c) The **Contractor** agrees to comply in all respects with the PSLL and the Rules, and as amended, if applicable, in the performance of this **Contract**. The **Contractor** further acknowledges that such compliance is a material term of this **Contract** and that failure to comply with the PSLL in performance of this **Contract** may result in its termination.

35.5.1(d) The **Contractor** must notify the **Agency Chief Contracting Officer** of the **Agency** with whom it is contracting in writing within ten (10) days of receipt of a complaint (whether oral or written) regarding the PSLL involving the performance of this **Contract**. Additionally, the **Contractor** must cooperate with DCA's education efforts and must comply with DCA's subpoenas and other document demands as set forth in the PSLL and Rules.

35.5.1(e) The PSLL is summarized below for the convenience of the **Contractor**. The **Contractor** is advised to review the PSLL and Rules in their entirety. On the website www.nyc.gov/PaidSickLeave there are links to the PSLL and the associated Rules as well as additional resources for employers, such as Frequently Asked Questions, timekeeping tools and model forms, and an event calendar of upcoming presentations and webinars at which the **Contractor** can get more information about how to comply with the PSLL. The **Contractor** acknowledges that it is responsible for compliance with the PSLL notwithstanding any inconsistent language contained herein.

35.5.2 Pursuant to the PSLL and the Rules: Applicability, Accrual, and Use.

35.5.2(a) An employee who works within the City of New York for more than eighty hours in any consecutive 12-month period designated by the employer as its "calendar year" pursuant to the PSLL ("Year") must be provided sick time. Employers must provide a minimum of one hour of sick time for every 30 hours worked by an employee and compensation for such sick time must be provided at the greater of the employee's regular hourly rate or the minimum wage. Employers are not required to provide more than 40 hours of sick time to an employee in any Year.

35.5.2(b) An employee has the right to determine how much sick time he or she will use, provided that employers may set a reasonable minimum increment for the use of sick time not to exceed four hours per **Day**. In addition, an employee may carry over up to 40 hours of unused sick time to the following Year, provided that no employer is required to allow the use of more than forty hours of sick time in a Year or carry over unused paid sick time if the employee is paid for such unused sick time and the employer provides the employee with at least the legally required amount of paid sick time for such employee for the immediately subsequent Year on the first **Day** of such Year.

35.5.2(c) An employee entitled to sick time pursuant to the PSLL may use sick time for any of the following:

i. such employee's mental illness, physical illness, injury, or health condition or the care of such illness, injury, or condition or such employee's need for medical diagnosis or preventive medical care;
ii. such employee's care of a family member (an employee's child, spouse, domestic partner, parent, sibling, grandchild or grandparent, or the child or parent of an employee's spouse or domestic partner) who has a mental

illness, physical illness, injury or health condition or who has a need for medical diagnosis or preventive medical care;

iii. closure of such employee's place of business by order of a public official due to a public health emergency; or

iv. such employee's need to care for a child whose school or childcare provider has been closed due to a public health emergency.

35.5.2(d) An employer must not require an employee, as a condition of taking sick time, to search for a replacement. However, an employer may require an employee to provide: reasonable notice of the need to use sick time; reasonable documentation that the use of sick time was needed for a reason above if for an absence of more than three consecutive work days; and/or written confirmation that an employee used sick time pursuant to the PSLL. However, an employer may not require documentation specifying the nature of a medical condition or otherwise require disclosure of the details of a medical condition as a condition of providing sick time and health information obtained solely due to an employee's use of sick time pursuant to the PSLL must be treated by the employer as confidential.

35.5.2(e) If an employer chooses to impose any permissible discretionary requirement as a condition of using sick time, it must provide to all employees a written policy containing those requirements, using a delivery method that reasonably ensures that employees receive the policy. If such employer has not provided its written policy, it may not deny sick time to an employee because of non-compliance with such a policy.

35.5.2(f) Sick time to which an employee is entitled must be paid no later than the payday for the next regular payroll period beginning after the sick time was used.

35.5.3 Exemptions and Exceptions. Notwithstanding the above, the PSLL does not apply to any of the following:

35.5.3(a) an independent contractor who does not meet the definition of employee under section 190(2) of the New York State Labor Law;

35.5.3(b) an employee covered by a valid collective bargaining agreement in effect on April 1, 2014, until the termination of such agreement;

35.5.3(c) an employee in the construction or grocery industry covered by a valid collective bargaining agreement if the provisions of the PSLL are expressly waived in such collective bargaining agreement;

35.5.3(d) an employee covered by another valid collective bargaining agreement if such provisions are expressly waived in such agreement and such agreement provides a benefit comparable to that provided by the PSLL for such employee;

35.5.3(e) an audiologist, occupational therapist, physical therapist, or speech language pathologist who is licensed by the New York State Department of Education and who calls in for work assignments at will, determines his or her own schedule, has the ability to reject or accept any assignment referred to him or her, and is paid an average hourly wage that is at least four times the federal minimum wage;

35.5.3(f) an employee in a work study program under Section 2753 of Chapter 42 of the United States Code;

35.5.3(g) an employee whose work is compensated by a qualified scholarship program as that term is defined in the Internal Revenue Code, Section 117 of Chapter 20 of the United States Code; or

35.5.3(h) a participant in a Work Experience Program (WEP) under section 336-c of the New York State Social Services Law.

35.5.4 Retaliation Prohibited. An employer may not threaten or engage in retaliation against an employee for exercising or attempting in good faith to exercise any right provided by the PSLL. In addition, an employer may not interfere with any investigation, proceeding, or hearing pursuant to the PSLL.

35.5.5 Notice of Rights.

35.5.5(a) An employer must provide its employees with written notice of their rights pursuant to the PSLL. Such notice must be in English and the primary language spoken by an employee, provided that DCA has made available a translation into such language. Downloadable notices are available on DCA's website at http://www.nyc.gov/html/dca/html/law/PaidSickLeave.shtml.

35.5.5(b) Any person or entity that willfully violates these notice requirements is subject to a civil penalty in an amount not to exceed fifty dollars for each employee who was not given appropriate notice.

35.5.6 Records. An employer must retain records documenting its compliance with the PSLL for a period of at least three years, and must allow DCA to access such records in furtherance of an investigation related to an alleged violation of the PSLL.

35.5.7 Enforcement and Penalties.

35.5.7(a) Upon receiving a complaint alleging a violation of the PSLL, DCA has the right to investigate such complaint and attempt to resolve it through mediation. Within 30 **Days** of written notification of a complaint by DCA, or sooner in certain circumstances, the employer must provide DCA with a written response and such other information as DCA may request. If DCA believes that a violation of the PSLL has occurred, it has the right to issue a notice of violation to the employer.

35.5.7(b) DCA has the power to grant an employee or former employee all appropriate relief as set forth in New York City Administrative Code § 20-924(d). Such relief may include, among other remedies, treble damages for the wages that should have been paid, damages for unlawful retaliation, and damages and reinstatement for unlawful discharge. In addition, DCA may impose on an employer found to have violated the PSLL civil penalties not to exceed $500 for a first violation, $750 for a second violation within two years of the first violation, and $1,000 for each succeeding violation within two years of the previous violation.

35.5.8 More Generous Polices and Other Legal Requirements. Nothing in the PSLL is intended to discourage, prohibit, diminish, or impair the adoption or retention of a more generous sick time policy, or the obligation of an employer to comply with any contract,

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

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

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

35.6.2 Job Posting Requirements.

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

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

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

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

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

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

35.6.3 Breach and Liquidated Damages. If the **Contractor** fails to comply with the terms of the **ContrSact** and this Article 35.6 (l) by not enrolling its business with HireNYC; (2) by not informing HireNYC, as required, of open positions; or (3) by failing to interview a qualified candidate, the **Agency** may assess liquidated damages in the amount of two-thousand five hundred dollars ($2,500) per breach. For all other events of noncompliance with the terms of this Article 35.6, the **Agency** may assess liquidated damages in the amount of five hundred dollars ($500) per breach. Furthermore, in the event the **Contractor** breaches the requirements of this Article 35.6 during the term of the **Contract**, the **City** may hold the **Contractor** in default of this **Contract**.

35.6.4 Audit Compliance. In addition to the auditing requirements set forth in other parts of the **Contract**, the **Contractor** shall permit SBS and the **City** to inspect any and all records concerning or relating to job openings or the hiring of individuals for work arising from the **Contract** and located in New York City. The **Contractor** shall permit an inspection within seven (7) business days of the request.

35.6.5 Other Reporting Requirements. The **Contractor** shall report to the **City**, on a monthly basis, all information reasonably requested by the **City** that is necessary for the **City** to comply with any reporting requirements imposed by **Law**, including any requirement that the **City** maintain a publicly accessible database. In addition, the **Contractor** agrees to comply with all reporting requirements imposed by **Law**, or as otherwise requested by the **City**.

35.6.6 Federal Hiring Requirements. If this **Contract** is federally funded (as indicated elsewhere in this Contract), the **Contractor** shall comply with all federal hiring requirements as may be set forth in this **Contract**, including, as applicable: (a) Section 3 of the HUD Act of 1968, which requires, to the greatest extent feasible, economic opportunities for 30 percent of new hires be given to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing and Executive Order 11246, which prohibits discrimination in employment due to race, color, religion, sex or national origin, and requires the implementation of goals for minority and female participation for work involving any construction trade.

ARTICLE 36. NO DISCRIMINATION

36.1 The **Contractor** specifically agrees, as required by Labor Law Section 220-e, as amended, that:

36.1.1 In the hiring of employees for the performance of **Work** under this **Contract** or any subcontract hereunder, neither the **Contractor**, **Subcontractor**, nor any person acting on behalf of such **Contractor** or **Subcontractor**, shall by reason of race, creed, color or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the **Work** to which the employment relates;

36.1.2 Neither the **Contractor**, **Subcontractor**, nor any person on its behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of **Work** under this **Contract** on account of race, creed, color or national origin;

36.1.3 There may be deducted from the amount payable to the **Contractor** by the **City** under this **Contract** a penalty of fifty ($50.00) dollars for each person for each **Day** during which such person was discriminated against or intimidated in violation of the provisions of this **Contract**; and

36.1.4 This **Contract** may be cancelled or terminated by the **City** and all moneys due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this Article 36.

36.1.5 This Article 36 covers all construction, alteration and repair of any public building or public work occurring in the State of New York and the manufacture, sale, and distribution of materials, equipment, and supplies to the extent that such operations are performed within the State of New York pursuant to this **Contract**.

36.2 The **Contractor** specifically agrees, as required by Section 6-108 of the Administrative Code, as amended, that:

36.2.1 It shall be unlawful for any person engaged in the construction, alteration or repair of buildings or engaged in the construction or repair of streets or highways pursuant to a **Contract** with the **City** or engaged in the manufacture, sale or distribution of materials, equipment or supplies pursuant to a **Contract** with the **City** to refuse to employ or to refuse to continue in any employment any person on account of the race, color or creed of such person.

36.2.2 It shall be unlawful for any person or any servant, agent or employee of any person, described in Article 36.1.2, to ask, indicate or transmit, orally or in writing, directly or indirectly, the race, color or creed or religious affiliation of any person employed or seeking employment from such person, firm or corporation.

36.2.3 Breach of the foregoing provisions shall be deemed a violation of a material provision of this **Contract**.

36.2.4 Any person, or the employee, manager or owner of or officer of such firm or corporation who shall violate any of the provisions of this Article 36.2 shall, upon

conviction thereof, be punished by a fine of not more than one hundred ($100.00) dollars or by imprisonment for not more than thirty (30) **Days**, or both.

36.3 This **Contract** is subject to the requirements of Executive Order No. 50 (1980) ("E.O. 50"), as revised, and the rules and regulations promulgated thereunder. No contract will be awarded unless and until these requirements have been complied with in their entirety. By signing this **Contract**, the **Contractor** agrees that it:

36.3.1 Will not engage in any unlawful discrimination against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability, marital status or sexual orientation with respect to all employment decisions including, but not limited to, recruitment, hiring, upgrading, demotion, downgrading, transfer, training, rates of pay or other forms of compensation, layoff, termination, and all other terms and conditions of employment; and

36.3.2 Will not engage in any unlawful discrimination in the selection of **Subcontractors** on the basis of the owner's race, color, creed, national origin, sex, age, disability, marital status or sexual orientation; and

36.3.3 Will state in all solicitations or advertisements for employees placed by or on behalf of the **Contractor** that all qualified applicants will receive consideration for employment without unlawful discrimination based on race, creed, color, national origin, sex, age, citizens status, disability, marital status, sexual orientation, or that it is an equal employment opportunity employer; and

36.3.4 Will send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or memorandum of understanding, written notification of its equal employment opportunity commitments under E.O. 50 and the rules and regulations promulgated thereunder; and

36.3.5 Will furnish, before the award of the **Contract**, all information and reports, including an employment report, that are required by E.O. 50, the rules and regulations promulgated thereunder, and orders of the **City** Department of Business Services, Division of Labor Services (**DLS**) and will permit access to its books, records, and accounts by the **DLS** for the purposes of investigation to ascertain compliance with such rules, regulations, and orders.

36.4 The **Contractor** understands that in the event of its noncompliance with the nondiscrimination clauses of this **Contract** or with any of such rules, regulations, or orders, such noncompliance shall constitute a material breach of this **Contract** and noncompliance with E.O. 50 and the rules and regulations promulgated thereunder. After a hearing held pursuant to the rules of the **DLS**, the Director of the **DLS** may direct the **Commissioner** to impose any or all of the following sanctions:

36.4.1 Disapproval of the **Contractor**; and/or

36.4.2 Suspension or termination of the **Contract**; and/or

36.4.3 Declaring the **Contractor** in default; and/or

36.4.4 In lieu of any of the foregoing sanctions, the Director of the **DLS** may impose an employment program.

In addition to any actions taken under this **Contract**, failure to comply with E.O. 50 and the rules and regulations promulgated thereunder, in one or more instances, may result in a **City Agency** declaring the **Contractor** to be non-responsible in future procurements. The **Contractor** further agrees that it will refrain from entering into any **Contract** or **Contract** modification subject to E.O. 50 and the rules and regulations promulgated thereunder with a **Subcontractor** who is not in compliance with the requirements of E.O. 50 and the rules and regulations promulgated thereunder.

36.5 The **Contractor** specifically agrees, as required by Section 6-123 of the Administrative Code, that:

36.5.1 The **Contractor** will not engage in any unlawful discriminatory practice in violation of Title 8 of the Administrative Code; and

36.5.2 Any failure to comply with this Article 36.5 may subject the **Contractor** to the remedies set forth in Section 6-123 of the Administrative Code, including, where appropriate, sanctions such as withholding of payment, imposition of an employment program, finding the **Contractor** to be in default, cancellation of the **Contract**, or any other sanction or remedy provided by **Law** or **Contract**.

ARTICLE 37. LABOR LAW REQUIREMENTS

37.1 The **Contractor** shall strictly comply with all applicable provisions of the Labor Law, as amended. Such compliance is a material term of this **Contract**.

37.2 The **Contractor** specifically agrees, as required by Labor Law Sections 220 and 220-d, as amended, that:

37.2.1 Hours of **Work**: No laborer, worker, or mechanic in the employ of the **Contractor**, **Subcontractor** or other person doing or contracting to do the whole or a part of the **Work** contemplated by this **Contract** shall be permitted or required to work more than eight (8) hours in any one (1) **Day**, or more than five (5) **Days** in any one (1) week, except as provided in the Labor Law and in cases of extraordinary emergency including fire, flood, or danger to life or property, or in the case of national emergency when so proclaimed by the President of the United States of America.

37.2.2 In situations in which there are not sufficient laborers, workers, and mechanics who may be employed to carry on expeditiously the **Work** contemplated by this **Contract** as a result of such restrictions upon the number of hours and **Days** of labor, and the immediate commencement or prosecution or completion without undue delay of the **Work** is necessary for the preservation of the **Site** and/or for the protection of the life and limb of the persons using the same, such laborers, workers, and mechanics shall be permitted or required to work more than eight (8) hours in any one (1) **Day**; or five (5) **Days** in any one (1) week; provided, however, that upon application of any **Contractor**, the **Commissioner** shall have first certified to the Commissioner of Labor of the State of New York (hereinafter "Commissioner of Labor") that such public **Work** is of an important nature and that a delay in carrying it to completion would result in serious disadvantage to the public; and provided, further, that such Commissioner of Labor shall have determined that such an emergency does in fact exist as provided in Labor Law Section 220.2.

37.2.3 Failure of the **Commissioner** to make such a certification to the Commissioner of Labor shall not entitle the **Contractor** to damages for delay or for any cause whatsoever.

37.2.4 Prevailing Rate of Wages: The wages to be paid for a legal day's **Work** to laborers, workers, or mechanics employed upon the **Work** contemplated by this **Contract** or upon any materials to be used thereon shall not be less than the "prevailing rate of wage" as defined in Labor Law Section 220, and as fixed by the **Comptroller** in the attached Schedule of Wage Rates and in updated schedules thereof. The prevailing wage rates and supplemental benefits to be paid are those in effect at the time the **Work** is being performed.

37.2.5 Requests for interpretation or correction in the Information for Bidders includes all requests for clarification of the classification of trades to be employed in the performance of the **Work** under this **Contract**. In the event that a trade not listed in the **Contract** is in fact employed during the performance of this **Contract**, the **Contractor** shall be required to obtain from the **Agency** the prevailing wage rates and supplementary benefits for the trades used and to complete the performance of this **Contract** at the price at which the **Contract** was awarded.

37.2.6 Minimum Wages: Except for employees whose wage is required to be fixed pursuant to Labor Law Section 220, all persons employed by the **Contractor** and any **Subcontractor** in the manufacture or furnishing of the supplies, materials, or equipment, or the furnishing of work, labor, or services, used in the performance of this **Contract**, shall be paid, without subsequent deduction or rebate unless expressly authorized by **Law**, not less than the sum mandated by **Law**.

37.3 Working Conditions: No part of the **Work**, labor or services shall be performed or rendered by the **Contractor** in any plants, factories, buildings or surroundings or under working conditions which are unsanitary or hazardous or dangerous to the health and safety of employees engaged in the performance of this **Contract**. Compliance with the safety, sanitary, and factory inspection **Laws** of the state in which the **Work** is to be performed shall be prima facie evidence of compliance with this Article 37.3.

37.4 Prevailing Wage Enforcement: The **Contractor** agrees to pay for all costs incurred by the **City** in enforcing prevailing wage requirements, including the cost of any investigation conducted by or on behalf of the **Agency** or the **Comptroller,** where the **City** discovers a failure to comply with any of the requirements of this Article 37 by the **Contractor** or its **Subcontractor(s)**. The **Contractor** also agrees that, should it fail or refuse to pay for any such investigation, the **Agency** is hereby authorized to deduct from a **Contractor's** account an amount equal to the cost of such investigation.

37.4.1 The Labor Law Section 220 and Section 220-d, as amended, provide that this **Contract** shall be forfeited and no sum paid for any **Work** done hereunder on a second conviction for willfully paying less than:

37.4.1(a) The stipulated prevailing wage scale as provided in Labor Law section 220, as amended, or

37.4.1(b) The stipulated minimum hourly wage scale as provided in Labor Law section 220-d, as amended.

37.4.2 For any breach or violation of either working conditions (Article 37.3) or minimum wages (Article 37.2.6) provisions, the party responsible therefor shall be liable to the **City** for liquidated damages, which may be withheld from any amounts due on any contracts with the **City** of such party responsible, or may be recovered in actions brought by the **City**

Corporation Counsel in the name of the **City**, in addition to damages for any other breach of this **Contract**, for a sum equal to the amount of any underpayment of wages due to any employee engaged in the performance of this **Contract**. In addition, the **Commissioner** shall have the right to cancel contracts and enter into other contracts for the completion of the original contract, with or without public letting, and the original **Contractor** shall be liable for any additional cost. All sums withheld or recovered as deductions, rebates, refunds, or underpayment of wages hereunder, shall be held in a special deposit account and shall be paid without interest, on order of the **Comptroller**, directly to the employees who have been paid less than minimum rates of pay as set forth herein and on whose account such sums were withheld or recovered, provided that no claims by employees for such payments shall be entertained unless made within two (2) years from the date of actual notice to the **Contractor** of the withholding or recovery of such sums by the **City**.

37.4.3 A determination by the **Comptroller** that a **Contractor** and/or its **Subcontractor** willfully violated Labor Law Section 220 will be forwarded to the **City's** five District Attorneys for review.

37.4.4 The **Contractor's** or **Subcontractor's** noncompliance with this Article 37.4 and Labor Law Section 220 may result in an unsatisfactory performance evaluation and the **Comptroller** may also find and determine that the **Contractor** or **Subcontractor** willfully violated the New York Labor **Law**.

37.4.4(a) An unsatisfactory performance evaluation for noncompliance with this Article 37.4 may result in a determination that the **Contractor** is a non-responsible bidder on subsequent procurements with the **City** and thus a rejection of a future award of a contract with the **City**, as well as any other sanctions provided for by **Law**.

37.4.4(b) Labor Law Section 220-b, as amended, provides that when two (2) final determinations have been rendered against a **Contractor** or **Subcontractor** within any consecutive six (6) year period determining that such **Contractor** or **Subcontractor** has willfully failed to pay the prevailing rate of wages or to provide supplements in accordance with the Labor Law and this Article 37.4, whether such failures were concurrent or consecutive and whether or not such final determinations concerning separate public works projects are rendered simultaneously, such **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public works contract with the **City** for a period of five (5) years from the second final determination. If the final determination involves the falsification of payroll records or the kickback of wages or supplements, the **Contractor** or **Subcontractor** shall be ineligible to submit a bid on or be awarded any public works contract with the **City** for a period of five (5) years from the first final determination.

37.4.4(c) Labor Law Section 220, as amended, provides that the **Contractor** or **Subcontractor** found to have violated this Article 37.4 may be directed to make payment of wages or supplements including interest found to be due, and the **Contractor** or **Subcontractor** may be directed to make payment of a further sum as a civil penalty in an amount not exceeding twenty-five (25%) percent of the total amount found to be due.

37.5 The **Contractor** and its **Subcontractors** shall within ten (10) **Days** after mailing of a Notice of Award or written order, post in prominent and conspicuous places in each and every plant, factory, building, and structure where employees of the **Contractor** and its **Subcontractors** engaged in the

performance of this **Contract** are employed, notices furnished by the **City**, in relation to prevailing wages and supplements, minimum wages, and other stipulations contained in Sections 220 and 220-h of the Labor Law, and the **Contractor** and its **Subcontractors** shall continue to keep such notices posted in such prominent and conspicuous places until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services required to be furnished or rendered under this **Contract**.

37.6 The **Contractor** shall strictly comply with all of the provisions of Articles 37.6.1 through 37.6.5, and provide for all workers, laborers or mechanics in its employ, the following:

37.6.1 Notices Posted At **Site**: Post, in a location designated by the **City**, schedules of prevailing wages and supplements for this **Project**, a copy of all re-determinations of such schedules for the **Project**, the Workers' Compensation **Law** Section 51 notice, all other notices required by **Law** to be posted at the **Site**, the **City** notice that this **Project** is a public works project on which each worker is entitled to receive the prevailing wages and supplements for the occupation at which he or she is working, and all other notices which the **City** directs the **Contractor** to post. The **Contractor** shall provide a surface for such notices which is satisfactory to the **City**. The **Contractor** shall maintain and keep current such notices in a legible manner and shall replace any notice or schedule which is damaged, defaced, illegible or removed for any reason. The **Contractor** shall post such notices before commencing any **Work** on the **Site** and shall maintain such notices until all **Work** on the **Site** is complete; and

37.6.2 Daily **Site** Sign-in Sheets: Maintain daily **Site** sign-in sheets, and require that **Subcontractors** maintain daily **Site** sign-in sheets for its employees, which include blank spaces for an employee's name to be both printed and signed, job title, date started and Social Security number, the time the employee began work and the time the employee left work, until **Final Acceptance** of the supplies, materials, equipment, or **Work**, labor, or services to be furnished or rendered under this **Contract** unless exception is granted by the **Comptroller** upon application by the **Agency**. In the alternative, subject to the approval of the **CCPO**, the **Contractor** and **Subcontractor** may maintain an electronic or biometric sign-in system, which provides the information required by this Article 37.6.2; and

37.6.3 Individual Employee Information Notices: Distribute a notice to each worker, laborer or mechanic employed under this **Contract**, in a form provided by the **Agency**, that this **Project** is a public works project on which each worker, laborer or mechanic is entitled to receive the prevailing rate of wages and supplements for the occupation at which he or she is working. If the total cost of the **Work** under this **Contract** is at least two hundred fifty thousand ($250,000) dollars, such notice shall also include a statement that each worker, laborer or mechanic must be certified prior to performing any **Work** as having successfully completed a course in construction safety and health approved by the United States Department of Labor's Occupational Safety and Health Administration that is at least ten (10) hours in duration. Such notice shall be distributed to each worker before he or she starts performing any **Work** of this **Contract** and with the first paycheck after July first of each year. "Worker, laborer or mechanic" includes employees of the **Contractor** and all **Subcontractors** and all employees of suppliers entering the **Site**. At the time of distribution, the **Contractor** shall have each worker, laborer or mechanic sign a statement, in a form provided by the **Agency**, certifying that the worker has received the notice required by this Article 37.6.3, which signed statement shall be maintained with the payroll records required by this **Contract**; and

37.6.3(a) The **Contractor** and each **Subcontractor** shall notify each worker, laborer or mechanic employed under this **Contract** in writing of the prevailing rate of

wages for their particular job classification. Such notification shall be given to every worker, laborer, and mechanic on their first pay stub and with every pay stub thereafter; and

37.6.4 **Site** Laminated Identification Badges: The **Contractor** shall provide laminated identification badges which include a photograph of the worker's, laborer's or mechanic's face and indicate the worker's, laborer's or mechanic's name, trade, employer's name, and employment starting date (month/day/year). Further, the **Contractor** shall require as a condition of employment on the **Site**, that each and every worker, laborer or mechanic wear the laminated identification badge at all times and that it may be seen by any representative of the **City**. The **Commissioner** may grant a written waiver from the requirement that the laminated identification badge include a photograph if the **Contractor** demonstrates that the identity of an individual wearing a laminated identification badge can be easily verified by another method; and

37.6.5 Language Other Than English Used On **Site**: Provide the **ACCO** notice when three (3) or more employees (worker and/or laborer and/or mechanic) on the **Site**, at any time, speak a language other than English. The **ACCO** will then provide the **Contractor** the notices described in Article 37.6.1 in that language or languages as may be required. The **Contractor** is responsible for all distributions under this Article 37; and

37.6.6 Provision of Records: The **Contractor** and **Subcontractor(s)** shall produce within five (5) **Days** on the **Site** of the **Work** and upon a written order of the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, or the **Comptroller,** such records as are required to be kept by this Article 37.6; and

37.6.7 The **Contractor** and **Subcontractor(s)** shall pay employees by check or direct deposit. If this **Contract** is for an amount greater than one million ($1,000,000) dollars, checks issued by the **Contractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**). For any subcontract for an amount greater than seven hundred fifty thousand ($750,000) dollars, checks issued by a **Subcontractor** to covered employees shall be generated by a payroll service or automated payroll system (an in-house system may be used if approved by the **Agency**); and

37.6.8 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 37.6.1 through 37.6.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

37.7 The **Contractor** and its **Subcontractors** shall keep such employment and payroll records as are required by Section 220 of the Labor Law. The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of this Article 37.7 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract.**

37.8 At the time the **Contractor** makes application for each partial payment and for final payment, the **Contractor** shall submit to the **Commissioner** a written payroll certification, in the form provided by this **Contract**, of compliance with the prevailing wage, minimum wage, and other provisions and stipulations required by Labor Law Section 220 and of compliance with the training requirements of Labor Law Section 220-h set forth in Article 35.2. This certification of compliance shall be a condition precedent to payment and no payment shall be made to the **Contractor** unless and until each such certification shall have been submitted to and received by the **Commissioner**.

37.9 This **Contract** is executed by the **Contractor** with the express warranty and representation that the **Contractor** is not disqualified under the provisions of Section 220 of the Labor Law from the award of the **Contract**.

37.10 Any breach or violation of any of the foregoing shall be deemed a breach or violation of a material provision of this **Contract**, and grounds for cancellation thereof by the **City**.

ARTICLE 38. PAYROLL REPORTS

38.1 The **Contractor** and its **Subcontractor(s)** shall maintain on the **Site** during the performance of the **Work** the original payrolls or transcripts thereof which the **Contractor** and its **Subcontractor(s)** are required to maintain and shall submit such original payrolls or transcripts, subscribed and affirmed by it as true, within thirty (30) **Days** after issuance of its first payroll, and every thirty (30) **Days** thereafter, pursuant to Labor Law Section 220(3-a)(a)(iii). The **Contractor** and **Subcontractor(s)** shall submit such original payrolls or transcripts along with each and every payment requisition. If payment requisitions are not submitted at least once a month, the **Contractor** and its **Subcontractor(s)** shall submit original payrolls and transcripts both along with its payment requisitions and independently of its payment requisitions.

38.2 The **Contractor** shall maintain payrolls or transcripts thereof for six (6) years from the date of completion of the **Work** on this **Contract**. If such payrolls and transcripts are maintained outside of New York City after the completion of the **Work** and their production is required pursuant to this Article 38, the **Contractor** shall produce such records in New York City upon request by the City.

38.3 The **Contractor** and **Subcontractor(s)** shall comply with any written order, direction, or request made by the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law Investigator(s)**, or the **Comptroller**, to provide to the requesting party any of the following information and/or records within five (5) **Days** of such written order, direction, or request:

38.3.1 Such original payrolls or transcripts thereof subscribed and affirmed by it as true and the statements signed by each worker pursuant to this Chapter VIII; and/or

38.3.2 Attendance sheets for each **Day** on which any employee of the **Contractor** and/or any of the **Subcontractor(s)** performed **Work** on the **Site**, which attendance sheet shall be in a form acceptable to the **Agency** and shall provide information acceptable to the **Agency** to identify each such employee; and/or

38.3.3 Any other information to satisfy the **Engineer**, the **Commissioner**, the **ACCO**, the **Agency EAO**, the **Agency Labor Law Investigator(s)** or the **Comptroller**, that this Chapter VIII and the Labor Law, as to the hours of employment and prevailing rates of wages and/or supplemental benefits, are being observed.

38.4 The failure of the **Contractor** or **Subcontractor(s)** to comply with the provisions of Articles 38.1 and/or 38.2 may result in the **Commissioner** declaring the **Contractor** in default and/or the withholding of payments otherwise due under the **Contract**.

ARTICLE 39. DUST HAZARDS

39.1 Should a harmful dust hazard be created in performing the **Work** of this **Contract**, for the elimination of which appliances or methods have been approved by the Board of Standards and Appeals

of the City of New York, such appliances and methods shall be installed, maintained, and effectively operated during the continuance of such harmful dust hazard. Failure to comply with this provision after notice shall make this **Contract** voidable at the sole discretion of the **City**.

CHAPTER IX: PARTIAL AND FINAL PAYMENTS

ARTICLE 40. CONTRACT PRICE

40.1 The **City** shall pay, and the **Contractor** agrees to accept, in full consideration for the **Contractor's** performance of the **Work** subject to the terms and conditions hereof, the lump sum price or unit prices for which this **Contract** was awarded, plus the amount required to be paid for any **Extra Work** ordered by the **Commissioner** under Article 25, less credit for any **Work** omitted pursuant to Article 29.

ARTICLE 41. BID BREAKDOWN ON LUMP SUM

41.1 Within fifteen (15) **Days** after the commencement date specified in the **Notice to Proceed** or **Order to Work**, unless otherwise directed by the **Resident Engineer**, the **Contractor** shall submit to the **Resident Engineer** a breakdown of its bid price, or of lump sums bid for items of the **Contract**, showing the various operations to be performed under the **Contract**, as directed in the progress schedule required under Article 9, and the value of each of such operations, the total of such items to equal the lump sum price bid. Said breakdown must be approved in writing by the **Resident Engineer**.

41.2 No partial payment will be approved until the **Contractor** submits a bid breakdown that is acceptable to the **Resident Engineer**.

41.3 The **Contractor** shall also submit such other information relating to the bid breakdown as directed by the **Resident Engineer**. Thereafter, the breakdown may be used only for checking the **Contractor's** applications for partial payments hereunder, but shall not be binding upon the **City**, the **Commissioner**, or the **Engineer** for any purpose whatsoever.

ARTICLE 42. PARTIAL PAYMENTS

42.1 From time to time as the **Work** progresses satisfactorily, but not more often than once each calendar month (except where the **Commissioner** approves in writing the submission of invoices on a more frequent basis and for invoices relating to **Work** performed pursuant to a change order), the **Contractor** may submit to the **Engineer** a requisition for a partial payment in the prescribed form, which shall contain an estimate of the quantity and the fair value of the **Work** done during the payment period.

42.2 Partial payments may be made for materials, fixtures, and equipment in advance of their actual incorporation in the **Work**, as the **Commissioner** may approve, and upon the terms and conditions set forth in the General Conditions.

42.3 The **Contractor** shall also submit to the **Commissioner** in connection with every application for partial payment a verified statement in the form prescribed by the **Comptroller** setting forth the information required under Labor Law Section 220-a.

42.4 Within thirty (30) **Days** after receipt of a satisfactory payment application, and within sixty (60) **Days** after receipt of a satisfactory payment application in relation to **Work** performed pursuant to a change order, the **Engineer** will prepare and certify, and the **Commissioner** will approve, a voucher for a partial payment in the amount of such approved estimate, less any and all deductions authorized to be made by the **Commissioner** under the terms of this **Contract** or by **Law**.

ARTICLE 43. PROMPT PAYMENT

43.1 The Prompt Payment provisions of the **PPB** Rules in effect at the time of the bid will be applicable to payments made under this **Contract**. The provisions require the payment to the **Contractor** of interest on payments made after the required payment date, except as set forth in the **PPB** Rules.

43.2 The **Contractor** shall submit a proper invoice to receive payment, except where the **Contract** provides that the **Contractor** will be paid at predetermined intervals without having to submit an invoice for each scheduled payment.

43.3 Determination of interest due will be made in accordance with the **PPB** Rules.

43.4 If the **Contractor** is paid interest, the proportionate share(s) of that interest shall be forwarded by the **Contractor** to its **Subcontractor(s)**.

43.5 The **Contractor** shall pay each **Subcontractor** or **Materialman** not later than seven (7) **Days** after receipt of payment out of amounts paid to the **Contractor** by the **City** for **Work** performed by the **Subcontractor** or **Materialman** under this **Contract**.

> 43.5.1 If **Contractor** fails to make any payment to any **Subcontractor** or **Materialman** within seven (7) **Days** after receipt of payment by the **City** pursuant to this Article 43.5, then the **Contractor** shall pay interest on amounts due to such **Subcontractor** or **Materialman** at the rate of interest in effect on the date such payment is made by the **Contractor** computed in accordance with Section 756-b (1)(b) of the New York General Business Law. Accrual of interest shall commence on the **Day** immediately following the expiration of the seventh **Day** following receipt of payment by the **Contractor** from the **City** and shall end on the date on which payment is made.

43.6 The **Contractor** shall include in each of its subcontracts a provision requiring each **Subcontractor** to make payment to each of its **Subcontractors** or **Materialmen** for **Work** performed under this **Contract** in the same manner and within the same time period set forth above.

ARTICLE 44. SUBSTANTIAL COMPLETION PAYMENT

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

> 44.1.1 A final verified statement of any pending Article 27 disputes in accordance with the **PPB** Rules and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the

Contractor claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay.

44.1.1(a) With respect to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City** Corporation Counsel shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 44.1.1(a) is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor** upon acceptance of the **Substantial Completion** payment pursuant to this Article 44, will have waived any such claims.

44.1.2 A **Final Approved Punch List**.

44.1.3 Where required, a request for an extension of time to achieve **Substantial Completion** or final extension of time.

44.2 The **Commissioner** shall issue a voucher calling for payment of any part or all of the balance due for **Work** performed under the **Contract**, including monies retained under Article 21, less any and all deductions authorized to be made by the **Commissioner**, under this **Contract** or by **Law**, and less twice the amount the **Commissioner** considers necessary to ensure the completion of the balance of the **Work** by the **Contractor**. Such a payment shall be considered a partial and not a final payment. No **Substantial Completion** payment shall be made under this Article 44 where the **Contractor** failed to complete the **Work** within the time fixed for such completion in the Schedule A of the General Conditions, or within the time to which completion may have been extended, until an extension or extensions of time for the completion of **Work** have been acted upon pursuant to Article 13.

44.3 No further partial payments shall be made to the **Contractor** after **Substantial Completion**, except the **Substantial Completion** payment and payment pursuant to any **Contractor's** requisition that were properly filed with the **Commissioner** prior to the date of **Substantial Completion**; however, the **Commissioner** may grant a waiver for further partial payments after the date of **Substantial Completion** to permit payments for change order **Work** and/or release of retainage and deposits pursuant to Articles 21 and 24. Such waiver shall be in writing.

44.4 The **Contractor** acknowledges that nothing contained in this Article 44 is intended to or shall in any way diminish the force and effect of Article 13.

ARTICLE 45. FINAL PAYMENT

45.1 After completion and **Final Acceptance** of the **Work**, the **Contractor** shall submit all required certificates and documents, together with a requisition for the balance claimed to be due under the **Contract**, less the amount authorized to be retained for maintenance under Article 24. Such submission shall be within 90 days of the date of the **Commissioner's** written determination of **Final Acceptance**, or within such additional time as may be granted by the **Commissioner** in writing. If the **Contractor** fails to submit all required certificates and documents within the time allowed, no payment of the balance claimed shall be made to the **Contractor** and the **Contractor** shall be deemed to have forfeited its right to payment of any balance claimed. A verified statement similar to that required in connection with applications for partial payments shall also be submitted to the **Commissioner**.

45.2 Amended Verified Statement of Claims: The **Contractor** shall also submit with the final requisition any amendments to the final verified statement of any pending dispute resolution procedures in accordance with the **PPB** Rules and this **Contract** and any and all alleged claims against the **City**, in any way connected with or arising out of this **Contract** (including those as to which details may have been furnished pursuant to Articles 11, 27, 28, and 30) that have occurred subsequent to **Substantial Completion**, setting forth with respect to each such claim the total amount thereof, the various items of labor and materials included therein, and the alleged value of each such item; and if the alleged claim be one for delay, the alleged cause of each such delay, the period or periods of time, giving the dates when the **Contractor** claims the performance of the **Work** or a particular part thereof was delayed, and an itemized statement and breakdown of the amount claimed for each such delay. With reference to each such claim, the **Commissioner**, the **Comptroller** and, in the event of litigation, the **City** Corporation Counsel shall have the same right to inspect, and to make extracts or copies of, the **Contractor's** books, vouchers, records, etc., as is referred to in Articles 11, 27, 28, and 30. Nothing contained in this Article 45.2, is intended to or shall relieve the **Contractor** from the obligation of complying strictly with Articles 11, 27, 28, and 30. The **Contractor** is warned that unless such claims are completely set forth as herein required, the **Contractor**, upon acceptance of the Final Payment pursuant to Article 46, will have waived any such claims.

45.3 Preparation of Final Voucher: Upon determining the balance due hereunder other than on account of claims, the **Engineer** will prepare and certify, for the Commissioner's approval, a voucher for final payment in that amount less any and all deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**. In the case of a lump sum **Contract**, the **Commissioner** shall certify the voucher for final payment within thirty (30) **Days** from the date of completion and acceptance of the **Work**, provided all requests for extensions of time have been acted upon.

45.3.1 All prior certificates and vouchers upon which partial payments were made, being merely estimates made to enable the **Contractor** to prosecute the **Work** more advantageously, shall be subject to correction in the final voucher, and the certification of the **Engineer** thereon and the approval of the **Commissioner** thereof, shall be conditions precedent to the right of the **Contractor** to receive any money hereunder. Such final voucher shall be binding and conclusive upon the **Contractor**.

45.3.2 Payment pursuant to such final voucher, less any deductions authorized to be made by the **Commissioner** under this **Contract** or by **Law**, shall constitute the final payment, and shall be made by the **Comptroller** within thirty (30) **Days** after the filing of such voucher in his/her office.

45.4 The **Contractor** acknowledges that nothing contained in this Article 45 is intended to or shall in any way diminish the force and effect of Article 13.

ARTICLE 46. ACCEPTANCE OF FINAL PAYMENT

46.1 The acceptance by the **Contractor**, or by anyone claiming by or through it, of the final payment, whether such payment be made pursuant to any judgment of any court, or otherwise, shall constitute and operate as a release of the **City** from any and all claims of and liability to the **Contractor** for anything heretofore done or furnished for the **Contractor** relating to or arising out of this **Contract** and the **Work** done hereunder, and for any prior act, neglect or default on the part of the **City** or any of its officials, agents or employees, excepting only a claim against the **City** for the amounts deducted or retained in accordance with the terms and provisions of this **Contract** or by **Law**, and excepting any claims, not otherwise waived, or any pending dispute resolution procedures which are contained in the

verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45.

46.2 The **Contractor** is warned that the execution by it of a release, in connection with the acceptance of the final payment, containing language purporting to reserve claims other than those herein specifically excepted from the operation of this Article 46, or those for amounts deducted by the **Commissioner** from the final requisition or from the final payment as certified by the **Engineer** and approved by the **Commissioner**, shall not be effective to reserve such claims, anything stated to the **Contractor** orally or in writing by any official, agent or employee of the **City** to the contrary notwithstanding.

46.3 Should the **Contractor** refuse to accept the final payment as tendered by the **Comptroller**, it shall constitute a waiver of any right to interest thereon.

46.4 The **Contractor**, however, shall not be barred by this Article 46 from commencing an action for breach of **Contract** to the extent permitted by **Law** and by the terms of the **Contract** for any claims that are contained in the verified statement filed with the **Contractor's** substantial and final requisitions pursuant to Articles 44 and 45 or that arose after submission of the final payment requisition, provided that a detailed and verified statement of claim is served upon the contracting **Agency** and **Comptroller** not later than forty (40) **Days** after the making of such final payment by electronic funds transfer (EFT) or the mailing of such final payment. The statement shall specify the items upon which the claim will be based and any such claim shall be limited to such items.

ARTICLE 47. APPROVAL BY PUBLIC DESIGN COMMISSION

47.1 All works of art, including paintings, mural decorations, stained glass, statues, bas-reliefs, and other sculptures, monuments, fountains, arches, and other structures of a permanent character intended for ornament or commemoration, and every design of the same to be used in the performance of this **Contract**, and the design of all bridges, approaches, buildings, gates, fences, lamps, or structures to be erected, pursuant to the terms of this **Contract**, shall be submitted to the Art Commission, d/b/a the Public Design Commission of the City of New York, and shall be approved by the Public Design Commission prior to the erection or placing in position of the same. The final payment shall not become due or payable under this **Contract** unless and until the Public Design Commission shall certify that the design for the **Work** herein contracted for has been approved by the said Public Design Commission, and that the same has been executed in substantial accordance with the design so approved, pursuant to the provisions of Chapter 37, Section 854 of the **City** Charter, as amended.

CHAPTER X: CONTRACTOR'S DEFAULT

ARTICLE 48. COMMISSIONER'S RIGHT TO DECLARE CONTRACTOR IN DEFAULT

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 If the **Commissioner** exercises his/her right to complete or cause to complete any or all unsatisfactory or uncompleted punch list **Work** that remains after the completion date specified in the **Final Approved Punch List** pursuant to Article 54, any such action shall be commenced within six (6) months from the date the **Commissioner** notifies the **Contractor** in writing that he/she has exercised such right. Any claims for monies deducted, retained or withheld under the provisions of this **Contract** shall be asserted within six (6) months after the date when such monies otherwise become due and payable hereunder; and

56.2.3 If the **Commissioner** exercises his/her right to terminate the **Contract** pursuant to Article 64, any such action shall be commenced within six (6) months of the date the **Commissioner** exercises said right.

ARTICLE 57. INFRINGEMENT

57.1 The **Contractor** shall be solely responsible for and shall defend, indemnify, and hold the **City** harmless from any and all claims (even if the allegations of the lawsuit are without merit) and judgments for damages and from costs and expenses to which the **City** may be subject to or which it may suffer or incur allegedly arising out of or in connection with any infringement by the **Contractor** of any copyright, trade secrets, trademark or patent rights or any other property or personal right of any third party by the **Contractor** and/or its **Subcontractors** in the performance or completion of the **Work**. Insofar as the facts or **Law** relating to any claim would preclude the **City** from being completely indemnified by the **Contractor**, the **City** shall be partially indemnified by the **Contractor** to the fullest extent permitted by **Law**.

ARTICLE 58. NO CLAIM AGAINST OFFICIALS, AGENTS OR EMPLOYEES

58.1 No claim whatsoever shall be made by the **Contractor** against any official, agent or employee of the **City** for, or on account of, anything done or omitted to be done in connection with this **Contract**.

ARTICLE 59. SERVICE OF NOTICES

59.1 The **Contractor** hereby designates the business address, fax number, and email address specified in its bid, as the place where all notices, directions or other communications to the **Contractor** may be delivered, or to which they may be mailed. Any notice, direction, or communication from either party to the other shall be in writing and shall be deemed to have been given when (i) delivered personally; (ii) sent by certified mail, return receipt requested; (iii) delivered by overnight or same day courier service in a properly addressed envelope with confirmation; or (iv) sent by fax or email and, unless receipt of the fax or e-mail is acknowledged by the recipient by fax or e-mail, deposited in a post office box regularly maintained by the United States Postal Service in a properly addressed, postage 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 asses, identify, and actively recruit employees from under-represented religious groups with potential for further advancement; and

69.3.1(i) appoint a senior management staff member to oversee affirmative action efforts and develop a timetable to ensure their full implementation.

69.4 The **Contractor** agrees that the covenants and representations in Article 69.2 are material conditions to this **Contract**. In the event the **Agency** receives information that the **Contractor** who made the stipulation required by this Article 69 is in violation thereof, the **Agency** shall review such information and give the **Contractor** an opportunity to respond. If the **Agency** finds that a violation has occurred, the **Agency** shall have the right to declare the **Contractor** in default in default and/or terminate this **Contract** for cause and procure supplies, services or **Work** from another source in the manner the **Agency** deems proper. In the event of such termination, the **Contractor** shall pay to the **Agency**, or the **Agency** in its sole discretion may withhold from any amounts otherwise payable to the **Contractor**, the difference between the **Contract** price for the uncompleted portion of this **Contract** and the cost to the **Agency** of completing performance of this **Contract** either itself or by engaging another **Contractor** or **Contractors**. In the case of a requirement **Contract**, the **Contractor** shall be liable for such difference in price for the entire amount of supplies required by the **Agency** for the uncompleted term of **Contractor's Contract**. In the case of a construction **Contract**, the **Agency** shall also have the right to hold the **Contractor** in partial or total default in accordance with the default provisions of this **Contract**, and/or may seek debarment or suspension of the **Contractor**. The rights and remedies of the **Agency** hereunder shall be in addition to, and not in lieu of, any rights and remedies the **Agency** has pursuant to this **Contract** or by operation of **Law**.

ARTICLE 70. ELECTRONIC FILING/NYC DEVELOPMENT HUB

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

ARTICLE 71. PROHIBITION OF TROPICAL HARDWOODS

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

ARTICLE 72. CONFLICTS OF INTEREST

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

ARTICLE 73. MERGER CLAUSE

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

ARTICLE 74. STATEMENT OF WORK

74.1 The **Contractor** shall furnish all labor and materials and perform all **Work** in strict accordance with the **Specifications** and **Addenda** thereto, numbered as shown in Schedule A.

ARTICLE 75. COMPENSATION TO BE PAID TO CONTRACTOR

75.1 The **City** will pay and the **Contractor** will accept in full consideration for the performance of the **Contract**, subject to additions and deductions as provided herein, the total sum shown in Schedule A, this said sum being the amount at which the **Contract** was awarded to the **Contractor** at a public letting thereof, based upon the **Contractor's** bid for the **Contract**.

ARTICLE 76. ELECTRONIC FUNDS TRANSFER

76.1 In accordance with Section 6-107.1 of the Administrative Code, the **Contractor** agrees to accept payments under this **Contract** from the **City** by electronic funds transfer (EFT). An EFT is any

transfer of funds, other than a transaction originated by check, draft or similar paper instrument, which is initiated through an electronic terminal, telephonic instrument or computer or magnetic tape so as to order, instruct or authorize a financial institution to debit or credit an account. Prior to the first payment made under this **Contract**, the **Contractor** shall designate one financial institution or other authorized payment agent and shall complete the attached "EFT Vendor Payment Enrollment Form" in order to provide the Commissioner of the **City** Department of Finance with information necessary for the **Contractor** to receive electronic funds transfer payments through a designated financial institution or authorized payment agent. The crediting of the amount of a payment to the appropriate account on the books of a financial institution or other authorized payment agent designated by the **Contractor** shall constitute full satisfaction by the **City** for the amount of the payment under this **Contract**. The account information supplied by the **Contractor** to facilitate the electronic funds transfer shall remain confidential to the fullest extent provided by **Law**.

76.2 The **Commissioner** may waive the application of the requirements of this Article 76 to payments on contracts entered into pursuant to Section 315 of the **City** Charter. In addition, the Commissioner of the Department of Finance and the Comptroller may jointly issue standards pursuant to which the **Agency** may waive the requirements of this Article 76 for payments in the following circumstances: (i) for individuals or classes of individuals for whom compliance imposes a hardship; (ii) for classifications or types of checks; or (iii) in other circumstances as may be necessary in the interest of the **City**.

ARTICLE 77. RECORDS RETENTION

77.1 The **Contractor** agrees to retain all books, records, and other documents relevant to this **Contract** for six years after the final payment or termination of this **Contract**, whichever is later. **City**, state, and federal auditors and any other persons duly authorized by the **City** shall have full access to and the right to examine any such books, records, and other documents during the retention period.

ARTICLE 78. EXAMINATION AND VIEWING OF SITE, CONSIDERATION OF OTHER SOURCES OF INFORMATION AND CHANGED SITE CONDITIONS

78.1 Pre-Bidding (Investigation) Viewing of Site – Bidders must carefully view and examine the **Site** of the proposed **Work**, as well as its adjacent area, and seek other usual sources of information, for they will be conclusively presumed to have full knowledge of any and all conditions and hazards on, about or above the **Site** relating to or affecting in any way the performance of the **Work** to be done under the **Contract** that were or should have been known by a reasonably prudent bidder. To arrange a date for visiting the **Site**, bidders are to contact the **Agency** contact person specified in the bid documents.

78.2 Should the **Contractor** encounter during the progress of the Work site conditions or environmental hazards at the **Site** materially differing from any shown on the **Contract Drawings** or indicated in the **Specifications** or such conditions or environmental hazards as could not reasonably have been anticipated by the **Contractor**, which conditions or hazards will materially affect the cost of the **Work** to be done under the **Contract**, the attention of the **Commissioner** must be called immediately to such conditions or hazards before they are disturbed. The **Commissioner** shall thereupon promptly investigate the conditions or hazards. If the **Commissioner** finds that they do so materially differ, and that they could not have been reasonably anticipated by the **Contractor**, the **Contract** may be modified with the **Commissioner**'s written approval.

PART E: GENERAL CONDITIONS

Schedule "A" (Bonding and Insurance Requirements, etc.)

Performance Bond Form, if applicable

Payment Bond Form, if applicable

SCHEDULE A

GENERAL CONDITIONS TO CONSTRUCTION CONTRACT (INCLUDING GENERAL CONDITIONS RELATING TO ARTICLE 22 -- INSURANCE)

PART I. REQUIRED INFORMATION

INFORMATION FOR BIDDERS BID BOND The **Contractor** shall obtain a bid bond in the amount indicated to the right.	10% of the total bid price
INFORMATION FOR BIDDERS PERFORMANCE AND PAYMENT BONDS The **Contractor** shall obtain performance and payment bonds in the amount indicated to the right.	100% of Total Price
CONTRACT ARTICLE 14. DATE FOR SUBSTANTIAL COMPLETION The **Contractor** shall substantially complete the **Work** in the number of calendar days indicated to the right.	**365** consecutive calendar days
CONTRACT ARTICLE 15. LIQUIDATED DAMAGES If the **Contractor** fails to substantially complete the **Work** within the time fixed for substantial completion plus authorized time extensions or if the **Contractor**, in the sole determination of the **Commissioner**, has abandoned the **Work**, the **Contractor** shall pay to the **City** the amount indicated to the right.	**$250.00/PER DAY** for each consecutive calendar day over substantial completion time
CONTRACT ARTICLE 17. SUB-CONTRACTOR The **Contractor** shall not make subcontracts totaling an amount more than the percentage of the total **Contract** price indicated to the right.	Not to exceed 49% of the **Contract** price

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CONTRACT ARTICLE 21. **RETAINAGE** The **Commissioner** shall deduct and retain until the substantial completion of the **Work** the percent value of the **Work** indicated to the right.	5% of the value of the **Work**
CONTRACT ARTICLE 22. **(Per Directions Below)**	
CONTRACT ARTICLE 24. **DEPOSIT GUARANTEE** As security for the faithful performance of its obligations, the **Contractor**, upon filing its requisition for payment on **Substantial Completion**, shall deposit with the **Commissioner** a sum equal to the percentage of the **Contract** price indicated to the right.	Deposit guarantee: 1%
CONTRACT ARTICLE 24. **PERIOD OF GUARANTEE** Periods of maintenance and guarantee other than the period set forth in Article 24.1 are indicated to the right.	
CONTRACT ARTICLE 74. **STATEMENT OF WORK** The **Contractor** shall furnish all labor and materials and perform all **Work** in strict accordance with the **Contract Drawings**, **Specifications,** and all **Addenda** thereto, numbered **as shown in the column to the right.**	Please refer to Article 74 in the Standard Construction Contract 2017.
CONTRACT ARTICLE 75. **COMPENSATION TO BE PAID TO CONTRACTOR** 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 herein, the total sum **shown in the column to the right,** this said sum being the amount at which the **Contract** was awarded to the **Contractor** at a public letting thereof,	Amount for which the **Contract** was awarded: $ _____ [Agency: If the Bid Price, or any

based upon the **Contractor's** bid for the **Contract.**	portion thereof, is based on unit prices, insert the words “Not to Exceed” before the amount.]

(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
■ Commercial General Liability Art. 22.1.1	The minimum limits shall be $2,000,000.per occurrence and $4,000,000 per project aggregate applicable to this Contract unless the Work requires a permit from the Department of Buildings and greater limits of Commercial General Liability Insurance are required pursuant to 1 RCNY section 101-08. Additional Insureds: 1. City of New York, including its officials and employees, with coverage at least as broad as ISO Forms CG 20 10 and CG 20 37, and 2. All person(s) or organization(s), if any, that Article 22.1.1(b) of the **Contract** requires to be named as Additional Insured(s), with coverage at least as broad as ISO Form CG 20 26. The Additional Insured endorsement shall either specify the entity's name, if known, or the entity's title (e.g., Project Manager). 3. [*Agency: If appropriate, insert names of other entities to be covered as Additional*

	Insureds.]
■ Workers' Compensation Art. 22.1.2 ■ Disability Benefits Insurance Art. 22.1.2 ■ Employers' Liability Art. 22.1.2 ☐ Jones Act Art. 22.1.3 ☐ U.S. Longshoremen's and Harbor Workers Compensation Act Art. 22.1.3	Workers' Compensation, Employers' Liability, and Disability Benefits Insurance: Statutory per New York State law without regard to jurisdiction. **Note**: The following forms are acceptable: (1) New York State Workers' Compensation Board Form No. C-105.2, (2) State Insurance Fund Form No. U-26.3, (3) New York State Workers' Compensation Board Form No. DB-120.1 and (3) Request for WC/DB Exemption Form No. CE-200. The City will not accept an ACORD form as proof of Workers' Compensation or Disability Insurance. Jones Act and U.S. Longshoremen's and Harbor Workers' Compensation Act: Statutory per U.S. law.
■ Builders Risk Art. 22.1.4	100 % of total value of **Work** **Contractor** the Named Insured; the **City** both an Additional Insured and one of the loss payees as its interests may appear. If the **Work** does not involve construction of a new building or gut renovation work, the **Contractor** may provide an installation floater in lieu of Builders Risk insurance. Note: Builders Risk Insurance may terminate upon **Substantial Completion** of the **Work** in its entirety.
■ Commercial Auto Liability Art. 22.1.5	$1,000,000.00 per accident combined single limit If vehicles are used for transporting hazardous materials, the **Contractor** shall provide pollution liability broadened coverage for covered vehicles (endorsement CA 99 48) as

	as well as proof of MCS 90
■ Contractors Pollution Liability Art. 22.1.6	$1,000,000.00 per occurrence $2,000.000.00 aggregate Additional Insureds: City of New York, including its officials and employees.
☐ Marine Protection and Indemnity Art. 22.1.7(a)	$_____ per occurrence $_____ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
☐ Hull and Machinery Insurance Art. 22.1.7(b)	$_____ per occurrence $_____ aggregate Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____
☐ Marine Pollution Liability Art. 22.1.7(c)	$_____ each occurrence Additional Insureds: 1. City of New York, including its officials and employees, and 2. _____ 3. _____

	1. City of New York, including its officials and employees, and 2. _____ 3. _____

[OTHER] Art. 22.1.8 □ _____	*[If other type(s) of insurance need to be required under the **Contract**, the Contracting Agency should (a) check the box and fill in the type of insurance in left-hand column, and (b) in this right-hand column, specify appropriate limit(s) and appropriate Named Insured and Additional Insured(s). Note that if Railroad Protective Liability Insurance is required, the appropriate Named Insured is the owner of the railroad and there are no additional insureds.]*
[OTHER] Art. 22.1.8 □ _____	*[See directly above.]*

SCHEDULE A

CERTIFICATES OF INSURANCE

Instructions to New York City Agencies, Departments, and Offices

All certificates of insurance (except certificates of insurance solely evidencing Workers' Compensation Insurance, Employer's Liability Insurance, and/or Disability Benefits Insurance) must be accompanied by one of the following:

(1) the Certification by Insurance Broker or Agent on the following page setting forth the required information and signatures;

-- OR --

(2) copies of all policies as certified by an authorized representative of the issuing insurance carrier that are referenced in such certificate of insurance. If any policy is not available at the time of submission, certified binders may be submitted until such time as the policy is available, at which time a certified copy of the policy shall be submitted.

SCHEDULE A

CITY OF NEW YORK
CERTIFICATION BY INSURANCE BROKER OR AGENT

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

_____
[Name of broker or agent (typewritten)]

_____
[Address of broker or agent (typewritten)]

_____
[Email address of broker or agent (typewritten)]

_____
[Phone number/Fax number of broker or agent (typewritten)]

_____
*[Signature of authorized official, broker, or agen*t]

_____
[Name and title of authorized official, broker, or agent (typewritten)]

State of …….)
) ss.:
County of …….)

Sworn to before me this _____ day of _____ 20___

_____
NOTARY PUBLIC FOR THE STATE OF _____

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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**.

[**Note to Contracting Agency**: Fill in Risk Manager, ACCO or other person responsible for insurance]

_____

_____

_____

_____

PIN: 072201918CPD
EPIN: 07220B0001

1.1 PERFORMANCE BOND

KNOW ALL PEOPLE BY THESE PRESENTS:

That we,_____

_____

_____

hereinafter referred to as the "Principal,"

and,_____

_____

_____

hereinafter referred to as the "Surety" ("Sureties") are held and firmly bound to THE CITY OF NEW YORK, hereinafter referred to as the "City" or to its successors and assigns in the penal sum of_____

_____

_____

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

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

_____

_____

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

NOW, THEREFORE, the conditions of this obligation are such that if the Principal, his or its representatives or assigns, shall well and faithfully perform the said Contract and all modifications, amendments, additions and alterations thereto that may hereafter be made, according to its terms and its true intent and meaning, including repair and or replacement of defective work

and guarantees of maintenance for the periods stated in the Contract, and shall fully indemnify and save harmless the City from all cost and damage which it may suffer by reason of the Principal's default of the Contract, and shall fully reimburse and repay the City for all outlay and expense which the City may incur in making good any such default and shall protect the said City of New York against, and pay any and all amounts, damages, cost and judgments which may or shall be recovered against said City or its officers or agents or which the said City of New York may be called upon to pay any person or corporation by reason of any damages arising or growing out of the Principal's default of the Contract, then this obligation shall be null and void, otherwise to remain in full force and effect.

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

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

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

_____ day of _____ 20___

(Seal)

_____ (L.S.)
Principal

By _____.
_____.

(Seal) Surety

By _____.
_____.

(Seal) Surety

By _____.
_____.

(Seal) Surety

By _____.
_____.

(Seal)

Bond Premium Rate _____.

Bond Premium Cost _____.

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

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

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

ACKNOWLEDGMENT OF PRINCIPAL IF A CORPORATION

State of _____County of _____ ss:

On this_____day of _____ 20 _____before me personally came_____,
to me known, who, being by me duly sworn did depose and say that he/she resides at_____
_____; that he/she is the _____of the corporation described in and which executed the foregoing instrument; and that he signed his name to the foregoing instrument by order of the directors of said corporation as the duly authorized and binding act thereof.

_____
Notary Public or Commissioner of Deeds.

ACKNOWLEDGMENT OF PRINCIPAL IF A PARTNERSHIP

State of _____County of _____ ss:

On this_____day of _____ 20 _____before me personally came_____
to me known, who, being by me duly sworn did depose and say that he/she resides at_____
_____; that he/she is _____
partner of _____a limited/general partnership existing under the laws of the State of _____, the partnership described in and which executed the foregoing instrument; and that he/she signed his/her name to the foregoing instrument as the duly authorized and binding act of said partnership.

_____
Notary Public or Commissioner of Deeds.

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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.

Affix Acknowledgments and justification of Sureties

PIN: 072201918CPD
EPIN: 07220B0001

2.1 PAYMENT BOND FORM

WE _____

_____

_____hereinafter referred to as the "Principal," and _____

_____

_____

_____

_____

_____

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

_____

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

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

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

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

a) Wages and compensation for labor performed and services rendered by all persons engaged in the prosecution of the work under said Contract, and any amendment or extension thereof or addition thereto, whether such persons be agents, servants or employees of the Principal or of any such Subcontractor,

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

b) Materials and supplies (*where incorporated in the permanent structure or not*), as well as 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 and the Surety shall fulfill its obligations under this Payment Bond.

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

a) The Principal and Surety (Sureties) agree that this bond shall be for the benefit of any materialman or laborer having a just claim, as well as the City itself.

b) All persons who have performed labor, rendered services or furnished materials and supplies, as aforesaid, shall have a direct right of action against the Principal and its or their successors and assigns, and the Surety (Sureties) herein, or against either or both or any of them and their successors and assigns. Such persons may sue in their own name, and may prosecute the suit to judgment and execution without the necessity of joining with any other person as party plaintiff.

c) The Principal and Surety (Sureties) agree that neither of them will hold the City liable for any judgment for costs or 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 Workers' Compensation Law.

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

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

And the Surety (Sureties) for values received, for itself and its successors and assigns hereby stipulate(s) and agree(s) 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 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.

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 hereto affixed and these presents to be signed by their proper officers this ____ day of _____, 200__.

_____ (LS)
Principal

(Seal) **By:** _____

_____
Surety

(Seal) **By:** _____

_____
Surety

(Seal) **By:** _____

_____
Surety

PIN: 072201918CPD
EPIN: 07220B0001

ACKNOWLEDGMENT OF CONTRACTOR—IF A CORPORATION

State of _____ County of _____ ss:

On this ____ day of _____, 200__ before me personally appeared _____ _____ to me known, who being by me duly sworn, did depose and say that he/she resides at _____,
that he/she is the _____ of _____ _____,
the corporation described in and which executed the foregoing instrument; that he/she knows the seal of said corporation; that one of the seals affixed to said instrument is such corporate seal; that it was so affixed by order of the directors of said corporation, and that he/she signed his/her name thereto by like order.

_____
Notary Public or Commissioner of Deeds

ACKNOWLEDGMENT OF CONTRACTOR—IF A PARTNERSHIP

State of _____ County of _____ ss:

On this ___ day of _____, 200__ before me personally appeared _____ _____ to me known and known to me to be a member of the firm of _____,
the firm described in and who executed the foregoing instrument and he/she acknowledged to me that he/she executed the same as and for the act and deed of said firm.

_____
Notary Public or Commissioner of Deeds

PIN: 072201918CPD
EPIN: 07220B0001

PART F: ATTACHMENTS

Attachment A Project Labor Agreement (PLA)
Attachment B Participation by Minority-Owned and Women-Owned Business Enterprises in City Procurement (M/WBE)
Attachment C Construction Employment Report
Attachment D Subcontractor Notices and Utilization Plan
Attachment E Security Requirements for all Work Performed on Rikers Island and Borough-Based Facilities
Attachment F Security Clearance Request and Authorization Form
Attachment G Prevailing Wage Schedule
Attachment H Prison Rape Elimination Act (PREA)
Attachment I Apprenticeship Notice to Bidders
Attachment J PASSPort
Attachment K MS4 Permit Compliance Notice for Contractor and Certifications
Attachment L Conflict of Interest Disclosure and Compliance

NOTICE TO BIDDERS

Please be advised the Project Labor Agreement (PLA) attached and incorporated in this Invitation for Bids has been extended to apply to contracts let prior to July 31, 2020, including this contract. Other than extending the expiration date, all other terms of the PLA continue to apply in full force and effect.

PROJECT LABOR AGREEMENT

COVERING SPECIFIED

RENOVATION & REHABILITATION
OF CITY OWNED BUILDINGS AND STRUCTURES

2015 - 2018

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PROJECT LABOR AGREEMENT COVERING SPECIFIED RENOVATION & REHABILITATION OF NEW YORK CITY OWNED FACILITIES & STRUCTURES

ARTICLE 1 - PREAMBLE

WHEREAS, the City of New York desires to provide for the cost efficient, safe, quality, and timely completion of certain rehabilitation and renovation work ("Program Work," as defined in Article 3) in a manner designed to afford the lowest costs to the Agencies covered by this Agreement, and the Public it represents, and the advancement of permissible statutory objectives;

WHEREAS, this Project Labor Agreement will foster the achievement of these goals, inter alia, by:

(1) providing a mechanism for responding to the unique construction needs associated with this Program Work and achieving the most cost effective means of construction, including direct labor cost savings, by the Building and Construction Trades Council of Greater New York and Vicinity and the signatory Local Unions and their members waiving various shift and other hourly premiums and other work and pay practices which would otherwise apply to Program Work;

(2) expediting the construction process and otherwise minimizing the disruption to the covered Agencies' ongoing operations at the facilities that are the subject of the Agreement;

(3) avoiding the costly delays of potential strikes, slowdowns, walkouts, picketing and other disruptions arising from work disputes, reducing jobsite friction on common situs worksites, and promoting labor harmony and peace for the duration of the Program Work;

(4) standardizing the terms and conditions governing the employment of labor on Program Work;

(5) permitting wide flexibility in work scheduling and shift hours and times to allow maximum work to be done during off hours yet at affordable pay rates;

(6) permitting adjustments to work rules and staffing requirements from those which otherwise might obtain;

(7) providing comprehensive and standardized mechanisms for the settlement of work disputes, including those relating to jurisdiction;

(8) ensuring a reliable source of skilled and experienced labor; and

(9) securing applicable New York State Labor Law exemptions.

WHEREAS, the Building and Construction Trades Council of Greater New York and Vicinity, its participating affiliated Local Unions and their members, desire to assist the City in meeting these operational needs and objectives as well as to provide for stability, security and work opportunities which are afforded by this Project Labor Agreement; and

WHEREAS, the Parties desire to maximize Program Work safety conditions for both workers and the community in the project area.

NOW, THEREFORE, the Parties enter into this Agreement:

SECTION 1. PARTIES TO THE AGREEMENT

This is a Project Labor Agreement ("Agreement") entered into by the City of New York, on behalf of itself and the Agencies covered herein, including in their capacity as construction manager of covered projects and/or on behalf of any third party construction manager which may be utilized, and the Building and Construction Trades Council of Greater New York and Vicinity ("Council") (on behalf of itself) and the signatory affiliated Local Union's ("Unions" or "Local Unions"). The Council and each signatory Local Union hereby warrants and represents that it has been duly authorized to enter into this Agreement.

ARTICLE 2 - GENERAL CONDITIONS

SECTION 1. DEFINITIONS

Throughout this Agreement, the various Union parties including the Building and Construction Trades Council of Greater New York and Vicinity and its participating affiliated Local Unions, are referred to singularly and collectively as "Union(s)" or "Local Unions"; the term "Contractor(s)" shall include any Construction Manager, General Contractor and all other contractors, and subcontractors of all tiers engaged in Program Work within the scope of this Agreement as defined in Article 3; "Agency" means the following New York City agencies: the Department for the Aging (DFTA), Administration for Children's Services (ACS), Department of Citywide Administrative Services (DCAS), Department of Correction (DOC), Department of Design and Construction (DDC), Fire Department (FDNY), Department of Homeless Services (DHS), Human Resources Administration (HRA), Department of Health and Mental Hygiene (DOHMH), Department of Parks and Recreation (DPR), Police Department (NYPD); Department of Sanitation (DSNY); the New York City Agency that awards a particular contract subject to this Agreement may be referred to hereafter as the "Agency"; when an Agency acts as Construction Manager, unless otherwise provided, it has the rights and obligations of a "Construction Manager" in addition to the rights and obligations of an Agency; the Building and Construction Trades Council of Greater New York and Vicinity is referred to as the ["BCTC" or "Council"]; and the work covered by this Agreement (as defined in Article 3) is referred to as "Program Work."

SECTION 2. CONDITIONS FOR AGREEMENT TO BECOME EFFECTIVE

This Agreement shall not become effective unless each of the following conditions are met: the Agreement is executed by (1) the Council, on behalf of itself, (2) the participating affiliated Local Unions; and (3) the mayor of the City of New York or his designee.

SECTION 3. ENTITIES BOUND & ADMINISTRATION OF AGREEMENT

This Agreement shall be binding on all participating Unions and their affiliates, the Construction Manager (in its capacity as such) and all Contractors of all tiers performing Program Work, as defined in Article 3. The Contractors shall include in any subcontract that they let for performance during the term of this Agreement a requirement that their subcontractors, of all tiers, become signatory and bound by this Agreement with respect to that subcontracted work falling within the scope of Article 3 and all Contractors (including subcontractors) performing Program Work shall be required to sign a "Letter of Assent" in the form annexed hereto as Exhibit "A". This Agreement shall be administered by the applicable Agency or a Construction Manager or such other designee as may be named by the Agency or Construction Manager, on behalf of all Contractors.

SECTION 4. SUPREMACY CLAUSE

This Agreement, together with the local Collective Bargaining Agreements appended hereto as Schedule A, represents the complete understanding of all signatories and supersedes any national agreement, local agreement or other collective bargaining agreement of any type which would otherwise apply to this Program Work, in whole or in part, except that Program Work which falls within the jurisdiction of the Operating

Engineers Locals 14 and 15 will be performed under the terms and conditions set out in the Schedule A agreements of Operating Engineers Locals 14 and 15. The Collective Bargaining Agreements of the affiliated local unions that cover the particular type of construction work to be performed by the contractor, and as set forth in the Schedule A list of Agreements, shall be deemed the Schedule A Collective Bargaining Agreements ("Schedule A CBA") under this Agreement. Where association and independent Collective Bargaining Agreements for a particular type of construction work are both set forth in Schedule A, association members shall treat the applicable association agreement as the Schedule A CBA and independent contractors shall treat the applicable independent agreement as the Schedule A CBA. Subject to the foregoing, where a subject covered by the provisions of this Agreement is also covered by a Schedule A Collective Bargaining Agreement, the provisions of this Agreement shall prevail. It is further understood that no Contractor shall be required to sign any other agreement as a condition of performing Program Work. No practice, understanding or agreement between a Contractor and a Local Union which is not set forth in this Agreement shall be binding on this Program Work unless endorsed in writing by the Construction Manager or such other designee as may be designated by the Agency.

SECTION 5. LIABILITY

The liability of any Contractor and the liability of any Union under this Agreement shall be several and not joint. The Construction Manager and any Contractor shall not be liable for any violations of this Agreement by any other Contractor; and the

Council and Local Unions shall not be liable for any violations of this Agreement by any other Union.

SECTION 6. THE AGENCY

The Agency (or Construction Manager where applicable) shall require in its bid specifications for all Program Work within the scope of Article 3 that all successful bidders, and their subcontractors of all tiers, become bound by, and signatory to, this Agreement. The Agency (or Construction Manager) shall not be liable for any violation of this Agreement by any Contractor. It is understood that nothing in this Agreement shall be construed as limiting the sole discretion of the Agency or Construction Manager in determining which Contractors shall be awarded contracts for Program Work. It is further understood that the Agency or Construction Manager has sole discretion at any time to terminate, delay or suspend the Program Work, in whole or part, on any Program.

SECTION 7. AVAILABILITY AND APPLICABILITY TO ALL SUCCESSFUL BIDDERS

The Unions agree that this Agreement will be made available to, and will fully apply to, any successful bidder for (or subcontractor of) Program Work who becomes signatory thereto, without regard to whether that successful bidder (or subcontractor) performs work at other sites on either a union or non-union basis and without regard to whether employees of such successful bidder (or subcontractor) are, or are not, members of any unions. This Agreement shall not apply to the work of any Contractor which is performed at any location other than the site of Program Work.

SECTION 8. SUBCONTRACTING

Contractors will subcontract Program Work only to a person, firm or corporation who is or agrees to become party to this Agreement.

ARTICLE 3-SCOPE OF THE AGREEMENT

SECTION 1. WORK COVERED

Program Work shall be limited to designated rehabilitation and renovation construction contracts bid and let by an Agency (or its Construction Manager where applicable) after the effective date of this Agreement with respect to rehabilitation and renovation work performed for an Agency on City-owned property under contracts let prior to December 31, 2018. Subject to the foregoing, and the exclusions below, such Program Work shall mean any and all contracts that predominantly involve the renovation, repair, alteration, rehabilitation or expansion of an existing City-owned building or structure within the five boroughs of New York City. Examples of Program Work include, but are not limited to, the renovation, repair, alteration and rehabilitation of an existing temporary or permanent structure, or an expansion of above ground structures located in the City on a City-owned building. This Program Work shall also include JOCS contracts, demolition work, site work, asbestos and lead abatement, painting services, carpentry services, and carpet removal and installation, to the extent incidental to such building rehabilitation of City-owned buildings or structures.

It is understood that, except where the City specifically applies this Project Labor Agreement to such work in its bid documents, Program Work does not include, and this Project Labor Agreement shall not apply to, any other work, including:

1. Contracts let and work performed in connection with projects carried over, recycled from, or performed under bids or rebids relating to work that were bid prior to the effective date of this Agreement or after December 31, 2018;

2. Contracts procured on an emergency basis;

3. Contracts that do not exceed $250,000;

4. Contracts for work on streets and bridges and for the closing or environmental remediation of landfills;

5. Contracts with not-for-profit corporations where the City is not awarding or performing the work performed for that entity;

6. Contracts with governmental entities where the City is not awarding or performing the work performed for that entity;

7. Contracts with electric utilities, gas utilities, telephone companies, and railroads, except that it is understood and agreed that these entities may only install their work to a demarcation point, e.g. a telephone closet or utility vault, the location of which is determined prior to construction and employees of such entities shall not be used to replace employees performing Program Work pursuant to this agreement;

8. Contracts for installation of information technology that are not otherwise Program Work;

9. Task Orders or Work Orders issued under JOCS or Requirements Contracts that do not exceed $10,000, and JOCS or Requirements Contracts where the monetary value of such contracts predominantly involves such Task Orders or Work

Orders; and

10. Contracts that do not exceed $1 Million that are awarded pursuant to prequalified lists (PQLs) established by City agencies where entry on to the PQL is restricted to MWBEs, or a combination of MWBEs together with joint ventures which include at least one MWBE, or contractors who agree to subcontract at least 50% of the contract to MWBEs.

SECTION 2. TIME LIMITATIONS

In addition to falling within the scope of Article 3, Section 1, to be covered by this Agreement Program Work must be (1) advertised and let for bid after the effective date of this Agreement, and (2) let for bid prior to December 31, 2018, the expiration date of this Agreement. It is understood that this Agreement, together with all of its provisions, shall remain in effect for all such Program Work until completion, even if not completed by the expiration date of the Agreement. If Program Work otherwise falling within the scope of Article 3, Section 1 is not let for bid by the expiration date of this Agreement, this Agreement may be extended to that work by mutual agreement of the parties.

SECTION 3. EXCLUDED EMPLOYEES

The following persons are not subject to the provisions of this Agreement, even though performing Program Work:

A. Superintendents, supervisors (excluding general and forepersons specifically covered by a craft's Schedule A), engineers, professional engineers and/or licensed architects engaged in inspection and testing, quality control/assurance personnel, timekeepers, mail carriers, clerks, office workers, messengers, guards, technicians,

non-manual employees, and all professional, engineering, administrative and management persons;

B. Employees of the Agency, New York City, or any other municipal or State agency, authority or entity, or employees of any other public employer, even though working on the Program site while covered Program Work is underway;

C. Employees and entities engaged in off-site manufacture, modifications, repair, maintenance, assembly, painting, handling or fabrication of project components, materials, equipment or machinery or involved in deliveries to and from the Program site, except to the extent they are lawfully included in the bargaining unit of a Schedule A agreement;

D. Employees of the Construction Manager (except that in the event the Agency engages a Contractor to serve as Construction Manager, then those employees of the Construction Manager performing manual, on site construction labor will be covered by this Agreement);

E. Employees engaged in on-site equipment warranty work unless employees are already working on the site and are certified to perform warranty work;

F. Employees engaged in geophysical testing other than boring for core samples;

G. Employees engaged in laboratory, specialty testing, or inspections, pursuant to a professional services agreement between the Agency, or any of the Agency's

other professional consultants, and such laboratory, testing, inspection or surveying firm; and

H. Employees engaged in on-site maintenance of installed equipment or systems which maintenance is awarded as part of a contract that includes Program Work but which maintenance occurs after installation of such equipment or system and is not directly related to construction services.

SECTION 4. NON-APPLICATION TO CERTAIN ENTITIES

This Agreement shall not apply to those parents, affiliates, subsidiaries, or other joint or sole ventures of any Contractor which do not perform Program Work. It is agreed that this Agreement does not have the effect of creating any joint employment, single employer or alter ego status among the Agency (including in its capacity as Construction Manager) or any Contractor. The Agreement shall further not apply to any New York City or other municipal or State agency, authority, or entity other than a listed Agency and nothing contained herein shall be construed to prohibit or restrict the Agency or its employees, or any State, New York City or other municipal or State authority, agency or entity and its employees, from performing on or off-site work related to Program Work.

As the contracts involving Program Work are completed and accepted, the Agreement shall not have further force or effect on such items or areas except where inspections, additions, repairs, modifications, check-out and/or warranty work are assigned in writing (copy to Local Union involved) by the Agency (or Construction Manager) for performance under the terms of this Agreement.

ARTICLE 4- UNION RECOGNITION AND EMPLOYMENT

SECTION 1. PRE-HIRE RECOGNITION

The Contractors recognize the signatory Unions as the sole and exclusive bargaining representatives of all employees who are performing on-site Program Work, with respect to that work.

SECTION 2. UNION REFERRAL

A. The Contractors agree to employ and hire craft employees for Program Work covered by this Agreement through the job referral systems and hiring halls established in the Local Unions' area collective bargaining agreements. Notwithstanding this, Contractors shall have sole right to determine the competency of all referrals; to determine the number of employees required; to select employees for layoff (subject to Article *5,* Section 3); and the sole right to reject any applicant referred by a Local Union, subject to the show-up payments. In the event that a Local Union is unable to fill any request for qualified employees within a 48 hour period after such requisition is made by a Contractor (Saturdays, Sundays and holidays excepted), a Contractor may employ qualified applicants from any other available source. In the event that the Local Union does not have a job referral system, the Contractor shall give the Local Union first preference to refer applicants, subject to the other provisions of this Article. The Contractor shall notify the Local Union of craft employees hired for Program Work within its jurisdiction from any source other than referral by the Union.

B. A Contractor may request by name, and the Local will honor, referral of persons who have applied to the Local for Program Work and who meet the following qualifications:

(1) possess any license required by New York State law for the Program Work to be performed;

(2) have worked a total of at least 1000 hours in the Construction field during the prior 3 years; and

(3) were on the Contractor's active payroll for at least 60 out of the 180 calendar days prior to the contract award.

No more than twelve per centum (12%) of the employees covered by this Agreement, per Contractor by craft, shall be hired through the special provisions above. Under this provision, name referrals begin with the eighth employee needed and continue on that same basis.

C. Notwithstanding Section 2(B), above, certified MWBE contractors for which participation goals are set forth in New York City Administrative Code §6-129, that are not signatory to any Schedule A CBAs, with contracts valued at or under five hundred thousand ($500,000), may request by name, and the Local will honor, referral of the second (2^{nd}), fourth (4^{th}), sixth (6^{th}), and eighth (8^{th}) employee, who have applied to the Local for Program Work and who meet the following qualifications:

(1) possess any license required by New York State law for the Program Work to be performed;

(2) have worked a total of at least 1000 hours in the Construction field during the prior 3 years; and

(3) were on the Contractor's active payroll for at least 60 out of the 180 work days prior to the contract award.

For such contracts valued at above $500,000 but less than $1 million, the Local will honor referrals by name of the second (2nd), fifth (5th), and eighth (8th) employee subject to the foregoing requirements. In both cases, name referrals will thereafter be in accordance with Section 2(B), above.

D. Where a certified MWBE Contractor voluntarily enters into a Collective Bargaining Agreement ("CBA") with a BCTC Union, the employees of such Contractor at the time the CBA is executed shall be allowed to join the Union for the applicable trade subject to satisfying the Union's basic standards of proficiency for admission.

SECTION 3. NON-DISCRIMINATION IN REFERRALS

The Council represents that each Local Union hiring hall and referral system will be operated in a non-discriminatory manner and in full compliance with all applicable federal, state and local laws and regulations which require equal employment opportunities. Referrals shall not be affected in any way by the rules, regulations, bylaws, constitutional provisions or any other aspects or obligations of union membership, policies or requirements and shall be subject to such other conditions as are established in this Article. No employment applicant shall be discriminated against by any referral system or hiring hall because of the applicant's union membership, or lack thereof.

SECTION 4: MINORITY, FEMALE, LOCAL AND SECTION 3 REFERRALS

In the event a Local Union either fails, or is unable to refer qualified minority or female applicants in percentages equaling the workforce participation goals adopted by the City and set forth in the Agency's (or, if applicable, Construction Manager's) bid

specifications, within 48 hours of the request for same, the Contractor may employ qualified minority or female applicants from any other available source.

In the event that the City or a City agency determines to adopt local workforce participation goals to be set forth in an Agency's (or, if applicable Construction Manager's) bid specifications, the City and BCTC will work together to seek agreement on appropriate goals to be set forth in applicable bid documents and to be subject to the provisions of this section.

For any Program Work that may become subject to requirements under Section 3 of the Housing and Urban Development Act of 1968, as amended by the Housing and Community Development Act of 1992, and any rules, including new or revised rules, that may be published thereunder, the Local Unions will acknowledge the Section 3 obligations of the Construction Manager or Contractor, as applicable, and agree to negotiate a method to implement this Article in a manner that would allow the Construction Manager or Contractor to meet its Section 3 obligations to the greatest extent feasible, and to post any required notices in the manner required by Section 3. The parties also acknowledge that the Construction Manager and Contractor may also fulfill its Section 3 requirements on Program Work by promoting opportunities for excluded employees, as defined by Article 3, Section 3 of this Agreement, on Program Work and, to the extent permitted by Section 3, by promoting opportunities for craft and other employees on non-Program Work.

SECTION 5. CROSS AND QUALIFIED REFERRALS

The Local Unions shall not knowingly refer to a Contractor an employee then employed by another Contractor working under this Agreement. The Local Unions

will exert their utmost efforts to recruit sufficient numbers of skilled and qualified crafts employees to fulfill the requirements of the Contractor.

SECTION 6. UNION DUES

All employees covered by this Agreement shall be subject to the union security provisions contained in the applicable Schedule A local agreements, as amended from time to time, but only for the period of time during which they are performing on-site Program Work and only to the extent of tendering payment of the applicable union dues and assessments uniformly required for union membership in the Local Unions which represent the craft in which the employee is performing Program Work. No employee shall be discriminated against at any Program Work site because of the employee's union membership or lack thereof. In the case of unaffiliated employees, the dues payment will be received by the Local Unions as an agency shop fee.

SECTION 7. CRAFT FOREPERSONS AND GENERAL FOREPERSONS

The selection of craft forepersons and/or general forepersons and the number of forepersons required shall be solely the responsibility of the Contractor except where otherwise provided by specific provisions of an applicable Schedule A, and provided that all craft forepersons shall be experienced and qualified journeypersons in their trade as determined by the appropriate Local Union. All forepersons shall take orders exclusively from the designated Contractor representatives. Craft forepersons shall be designated as working forepersons at the request of the Contractor, except when an existing local Collective Bargaining Agreement prohibits a foreperson from working when the craft persons he is leading exceed a specified number.

SECTION 8. ON CALL REPAIR REFERRALS

A. When an Agency awards a contract that requires the Contractor to have employees available on short notice to make time sensitive repairs with such contract requiring the Contractor to respond within as little as two hours from the time the Contractor is contacted by the Agency ("On Call, Repair Contract"), the Contractor will, within ten (10) days of being awarded an On Call, Repair Contract subject to this Agreement, notify the appropriate affiliated Union that it has been awarded such a contract and immediately enter into good faith negotiations with such relevant affiliated Union to establish a procedure to receive time sensitive referrals from such affiliated Union(s).

B. In the event the Contractor and the relevant affiliated Union(s) are unable to negotiate a specific, mutually agreeable procedure for on call repair referral procedure within twenty (20) days of commencement of negotiations or prior to commencement of performance of the contract, whichever is earlier, the Contractor and the relevant affiliated Unions will follow the following procedure:

1. Upon notification by a Contractor that it has been awarded an On Call Repair Contract pursuant to paragraph A above, each relevant affiliate Union shall provide the Contractor with the name and twenty four (24) hour contact information of an On Call, Repair Contract contact person for urgent on call repair referrals.

2. The relevant affiliated Unions shall prepare a list of individuals eligible and prepared for referral on an immediate basis to respond to the on call repair contractor. Such list shall be provided to and in the possession of the designated on call repair contact person for the affiliated Union and available for immediate reference.

3. Individuals on such list must be able to comply with the Contractor's response time pursuant to contract requirements.

4. The Union's On Call, Repair Contract contact person shall respond to a contractor's request for referrals within a reasonable time of the request so that compliance with the contract shall be possible.

C. In the event that the Contractor makes a request for an on call referral that is compliant with this procedure and a Union is not able to respond to the request, that Union will be deemed to have waived the forty-eight (48) hour referral rule contained in Section 2 above and the Contractor may employ qualified applicants from any other available source that can meet contract requirements for that time sensitive on call repair work only; provided, however, that any work related to the repair work that is not of a time sensitive nature under the contract shall comply with Section 2. If a Union fails to timely refer a worker and the Contractor employs other workers, the Contractor will e-mail the agency within 72 hours and the agency will forward that e-mail to the designated Labor Management Committee contacts.

ARTICLE 5- UNION REPRESENTATION

SECTION 1. LOCAL UNION REPRESENTATIVE

Each Local Union representing on-site employees shall be entitled to designate in writing (copy to Contractor involved and Construction Manager) one representative, and/or the Business Manager, who shall be afforded access to the Program Work site during such time as bargaining unit work is occurring and subject to otherwise applicable policies pertaining to visitors to the site.

SECTION 2. STEWARDS

A. Each Affiliated Union shall have the sole discretion to designate any journey person as a Steward and an alternate Steward. The Union shall notify the Owner and/or Construction Manager as well as the Contractor of the identity of the designated Steward (and alternate) prior to the assumption of such duties. Stewards shall not exercise supervisory functions and will receive the regular rate of pay for their craft classifications. All Stewards shall be working Stewards.

B. In addition to their work as an employee, the Steward shall have the right to receive complaints or grievances and to discuss and assist in their adjustment with the Contractor's appropriate supervisor. Each Steward shall be concerned with the employees of the Steward's trade and, if applicable, subcontractors of their Contractor, but not with the employees of any other trade Contractor. No Contractor shall discriminate against the Steward in the proper performance of Union duties.

C. The Stewards shall not have the right to determine when overtime shall be worked, or who shall work overtime except pursuant to a Schedule A provision providing procedures for the equitable distribution of overtime.

SECTION 3. LAYOFF OF A STEWARD

Contractors agree to notify the appropriate Union 24 hours prior to the layoff of a Steward, except in cases of discipline or discharge for just cause. If a Steward is protected against layoff by a Schedule A provision, such provision shall be recognized to the extent the Steward possesses the necessary qualifications to perform the work required.

In any case in which a Steward is discharged or disciplined for just cause, the Local Union involved shall be notified immediately by the Contractor.

ARTICLE 6- MANAGEMENT'S RIGHTS

SECTION 1. RESERVATION OF RIGHTS

Except as expressly limited by a specific provision of this Agreement, Contractors retain full and exclusive authority for the management of their operations including, but not limited to, the right to: direct the work force, including determination as to the number of employees to be hired and the qualifications therefore; the promotion, transfer, layoff of its employees; require compliance with the directives of the Agency including standard restrictions related to security and access to the site that are equally applicable to Agency employees, guests, or vendors; or the discipline or discharge for just cause of its employees; assign and schedule work; promulgate reasonable Program Work rules that are not inconsistent with this Agreement or rules common in the industry and are reasonably related to the nature of work; and, the requirement, timing and number of employees to be utilized for overtime work. No rules, customs, or practices which limit or restrict productivity or efficiency of the individual, as determined by the Contractor, Agency and/or Construction Manager and/or joint working efforts with other employees shall be permitted or observed.

SECTION 2. MATERIALS, METHODS & EQUIPMENT

There shall be no limitation or restriction upon the Contractor's choice of materials, techniques, methods, technology or design, or, regardless of source or location, upon the use and installation of equipment, machinery, package units, pre-cast,

pre-fabricated, pre-finished, or pre-assembled materials or products, tools, or other labor-saving devices. Contractors may, without restriction, install or use materials, supplies or equipment regardless of their source; provided, however, that where there is a Schedule "A" that includes a lawful union standards and practices clauses, then such clause as set forth in Schedule A Agreements will be complied with, unless there is a lawful Agency specification (or specification issued by a Construction Manager which would be lawful if issued by the Agency directly) that would specifically limit or restrict the Contractor's choice of materials, techniques, methods, technology or design, or, regardless of source or location, upon the use and installation of equipment, machinery, package units, pre-cast, pre-fabricated, pre-finished, or pre-assembled materials or products, tools, or other labor-saving devices, and which would prevent compliance with such Schedule A clause. The on-site installation or application of such items shall be performed by the craft having jurisdiction over such work; provided, however, it is recognized that other personnel having special qualifications may participate, in a supervisory capacity, in the installation, check-off or testing of specialized or unusual equipment or facilities as designated by the Contractor. There shall be no restrictions as to work which is performed off-site for Program Work.

ARTICLE 7- WORK STOPPAGES AND LOCKOUTS

SECTION 1. NO STRIKES-NO LOCK OUT

There shall be no strikes, sympathy strikes, picketing, work stoppages, slowdowns, hand billing, demonstrations or other disruptive activity at the Program Work site for any reason by any Union or employee against any Contractor or employer. There

shall be no other Union, or concerted or employee activity which disrupts or interferes with the operation of the Program Work or the objectives of the Agency at any Program Work site. In addition, failure of any Union or employee to cross any picket line established by any Union, signatory or non-signatory to this Agreement, or the picket or demonstration line of any other organization, at or in proximity to a Program Work site where the failure to cross disrupts or interferes with the operation of Program Work is a violation of this Article. Should any employees breach this provision, the Unions will use their best efforts to try to immediately end that breach and return all employees to work. There shall be no lockout at a Program Work site by any signatory Contractor, Agency or Construction Manager.

SECTION 2. DISCHARGE FOR VIOLATION

A Contractor may discharge any employee violating Section 1, above, and any such employee will not be eligible thereafter for referral under this Agreement for a period of 100 days.

SECTION 3. NOTIFICATION

If a Contractor contends that any Union has violated this Article, it will notify the Local Union involved advising of such fact, with copies of the notification to the Council. The Local Union shall instruct and order, the Council shall request, and each shall otherwise use their best efforts to cause, the employees (and where necessary the Council shall use its best efforts to cause the Local Union), to immediately cease and desist from any violation of this Article. If the Council complies with these obligations it shall not be liable for the unauthorized acts of a Local Union or its members. Similarly, a Local Union

and its members will not be liable for any unauthorized acts of the Council. Failure of a Contractor or the Construction Manager to give any notification set forth in this Article shall not excuse any violation of Section 1 of this Article.

SECTION 4. EXPEDITED ARBITRATION

Any Contractor or Union alleging a violation of Section 1 of this Article may utilize the expedited procedure set forth below (in lieu of, or in addition to, any actions at law or equity) that may be brought.

A. A party invoking this procedure shall notify J.J. Pierson or Richard Adelman; who shall alternate (beginning with Arbitrator J.J. Pierson) as Arbitrator under this expedited arbitration procedure. If the Arbitrator next on the list is not available to hear the matter within 24 hours of notice, the next Arbitrator on the list shall be called. Copies of such notification will be simultaneously sent to the alleged violator and Council.

B. The Arbitrator shall thereupon, after notice as to time and place to the Contractor, the Local Union involved, the Council and the Construction Manager, hold a hearing within 48 hours of receipt of the notice invoking the procedure if it is contended that the violation still exists. The hearing will not, however, be scheduled for less than 24 hours after the notice required by Section 3, above.

C. All notices pursuant to this Article may be provided by telephone, telegraph, hand delivery, or fax, confirmed by overnight delivery, to the Arbitrator, Contractor, Construction Manager and Local Union involved. The hearing may be held on any day including Saturdays or Sundays. The hearing shall be completed in one session, which shall not exceed 8 hours duration (no more than 4 hours being allowed to either side

to present their case, and conduct their cross examination) unless otherwise agreed. A failure of any Union or Contractor to attend the hearing shall not delay the hearing of evidence by those present or the issuance of an award by the Arbitrator.

D. The sole issue at the hearing shall be whether a violation of Section 1, above, occurred. If a violation is found to have occurred, the Arbitrator shall issue a Cease and Desist Award restraining such violation and serve copies on the Contractor and Union involved. The Arbitrator shall have no authority to consider any matter in justification, explanation or mitigation of such violation or to award damages (any damages issue is reserved solely for court proceedings, if any.) The Award shall be issued in writing within 3 hours after the close of the hearing, and may be issued without an Opinion. If any involved party desires an Opinion, one shall be issued within 15 calendar days, but its issuance shall not delay compliance with, or enforcement of, the Award.

E. The Agency and Construction Manager (or such other designee of the Agency) may participate in full in all proceedings under this Article.

F. An Award issued under this procedure may be enforced by any court of competent jurisdiction upon the filing of this Agreement together with the Award. Notice of the filing of such enforcement proceedings shall be given to the Union or Contractor involved, and the Construction Manager.

G. Any rights created by statute or law governing arbitration proceedings which are inconsistent with the procedure set forth in this Article, or which interfere with compliance thereto, are hereby waived by the Contractors and Unions to whom they accrue.

H. The fees and expenses of the Arbitrator shall be equally divided between the involved Contractor and Union.

SECTION 5. ARBITRATION OF DISCHARGES FOR VIOLATION

Procedures contained in Article 9 shall not be applicable to any alleged violation of this Article, with the single exception that an employee discharged for violation of Section 1, above, may have recourse to the procedures of Article 9 to determine only if the employee did, in fact, violate the provisions of Section 1 of this Article; but not for the purpose of modifying the discipline imposed where a violation is found to have occurred.

ARTICLE 8 - LABOR MANAGEMENT COMMITTEE

SECTION 1. SUBJECTS

The Program Labor Management Committee will meet on a regular basis to: 1) promote harmonious relations among the Contractors and Unions; 2) enhance safety awareness, cost effectiveness and productivity of construction operations; 3) protect the public interests; 4) discuss matters relating to staffing and scheduling with safety and productivity as considerations; and 5) review efforts to meet applicable participation goals for MWBEs and workforce participation goals for minority and female employees.

SECTION 2. COMPOSITION

The Committee shall be jointly chaired by a designee of the Agency and the President of the Council. It may include representatives of the Local Unions and Contractors involved in the issues being discussed. The parties may mutually designate an

MWBE representative to participate in appropriate Committee discussions. The Committee may conduct business through mutually agreed upon sub-committees.

ARTICLE 9- GRIEVANCE & ARBITRATION PROCEDURE

SECTION 1. PROCEDURE FOR RESOLUTION OF GRIEVANCES

Any question, dispute or claim arising out of, or involving the interpretation or application of this Agreement (other than jurisdictional disputes or alleged violations of Article 7, Section 1) shall be considered a grievance and shall be resolved pursuant to the exclusive procedure of the steps described below, provided, in all cases, that the question, dispute or claim arose during the term of this Agreement. Grievances shall include the City contract number and the Program Work address; such information is posted at the Program Work Site if already commenced, and is available in the City Record and Notice to Proceed for projects not already commenced.

Grievances as to whether a scope of work is included or excluded from this Agreement shall be submitted to the Labor Management Committee (LMC) in the first instance rather than Step 1 below. To be timely, such notice must be given no later than ten days prior to a bid opening if the grievance is challenging a determination by an Agency that the contract is not subject to this Agreement. For other grievances as to contractor scope of work issues, notice of such challenges shall be submitted to the LMC within 7 calendar days after the act, occurrence or event giving rise to the grievance. If the scope of work grievance is not resolved within 21 days of its submission to the LMC, then the grievance may proceed directly to Step 3 below.

Step 1:

(a) When any employee covered by this Agreement feels aggrieved by a claimed violation of this Agreement, the employee shall, through the Local Union business representative or job steward give notice of the claimed violation to the work site representative of the involved Contractor and the Construction Manager. To be timely, such notice of the grievance must be given within 7 calendar days after the act, occurrence or event giving rise to the grievance. The business representative of the Local Union or the job steward and the work site representative of the involved Contractor shall meet and endeavor to adjust the matter within *7* calendar days after timely notice has been given. If they fail to resolve the matter within the prescribed period, the grieving party, may, within 7 calendar days thereafter, pursue Step 2 of the grievance procedure by serving the involved Contractor with written copies of the grievance setting forth a description of the claimed violation, the date on which the grievance occurred, and the provisions of the Agreement alleged to have been violated. Grievances and disputes settled at Step 1 are non-precedential except as to the specific Local Union, employee and Contractor directly involved unless the settlement is accepted in writing by the Construction Manager (or designee) as creating a precedent.

(b) Should any signatory to this Agreement have a dispute (excepting jurisdictional disputes or alleged violations of Article 7, Section 1) with any other signatory to this Agreement and, if after conferring, a settlement is not reached within 7 calendar days, the dispute shall be reduced to writing and proceed to Step 2 in the same manner as outlined in subparagraph (a) for the adjustment of employee grievances.

Step 2:

A Step 2 grievance shall be filed with the Agency, the BCTC, the Contractor, and, if the grievance is against a subcontractor, the subcontractor. The Business Manager or designee of the involved Local Union, together with representatives of the involved Contractor, Council, the Construction Manager (or designee), and, if the grievance is against a subcontractor, the subcontractor, shall meet in Step 2 within 7 calendar days of service of the written grievance to arrive at a satisfactory settlement. The BCTC shall schedule the Step 2 meeting.

Step 3:

(a) If the grievance shall have been submitted but not resolved in Step 2, any of the participating Step 2 entities may, within 21 calendar days after the initial Step 2 meeting, submit the grievance in writing (copies to other participants, including the Construction Manager or designee) to the BCTC. In the event the matter is not resolved at Step 2, either J.J. Pierson or Richard Adelman, who shall act, alternately (beginning with Arbitrator J.J. Pierson), as the Arbitrator under this procedure, shall be designated at the Step 2 hearing and the BCTC will notify the arbitrator of his designation. After such notification by the BCTC, the local demanding arbitration shall within a reasonable time request the arbitrator to schedule the matter for an arbitration hearing date. The Labor Arbitration Rules of the American Arbitration Association shall govern the conduct of the arbitration hearing, at which all Step 2 participants shall be parties. The decision of the Arbitrator shall be final and binding on the involved Contractor, Local Union and employees and the fees and expenses of such arbitrations shall be borne equally by the involved Contractor and Local Union.

(b) Failure of the grieving party to adhere to the time limits set forth in this Article shall render the grievance null and void. These time limits may be extended only by written consent of the Construction Manager (or designee), involved Contractor and involved Local Union at the particular step where the extension is agreed upon. The Arbitrator shall have authority to make decisions only on the issues presented to him and shall not have the authority to change, add to, delete or modify any provision of this Agreement.

SECTION 2. LIMITATION AS TO RETROACTIVITY

No arbitration decision or award, with the exception of those related to compliance with requirements to pay prevailing wages and supplements in accordance with federal or State law, may provide retroactivity of any kind exceeding 60 calendar days prior to the date of service of the written grievance on the Construction Manager and the involved Contractor or Local Union.

SECTION 3. PARTICIPATION BY AGENCY AND/OR CONSTRUCTION MANAGER

The Agency and Construction Manager (or such other designee of the Agency) shall be notified by the involved Contractor of all actions at Steps 2 and 3 and, at its election, may participate in full in all proceedings at these Steps, including Step 3 arbitration.

ARTICLE 10 - JURISDICTIONAL DISPUTES

SECTION 1. NO DISRUPTIONS

There will be no strikes, sympathy strikes, work stoppages, slowdowns, picketing or other disruptive activity of any kind arising out of any jurisdictional dispute. Pending the resolution of the dispute, the work shall continue uninterrupted and as assigned by the Contractor. No jurisdictional dispute shall excuse a violation of Article 7.

SECTION 2. ASSIGNMENT

All Program Work assignments shall be made by the Contractor to unions affiliated with the BCTC consistent with the New York Plan for the Settlement of Jurisdictional Disputes ("New York Plan") and its Greenbook decisions, if any. Where there are no applicable Greenbook decisions, assignments shall be made in accordance with the provisions of the New York Plan and local industry practice.

SECTION 3. NO INTERFERENCE WITH WORK

There shall be no interference or interruption of any kind with the Program Work while any jurisdictional dispute is being resolved. The work shall proceed as assigned by the Contractor until finally resolved under the applicable procedure of this Article. The award shall be confirmed in writing to the involved parties. There shall be no strike, work stoppage or interruption in protest of any such award.

ARTICLE 11 - WAGES AND BENEFITS

SECTION 1. CLASSIFICATION AND BASE HOURLY RATE

All employees covered by this Agreement shall be classified in accordance with the work performed and paid the hourly wage rates applicable for those classifications as required by the applicable prevailing wage laws.

SECTION 2. EMPLOYEE BENEFITS

A. The Contractors agree to pay on a timely basis contributions on behalf of all employees covered by this Agreement to those established jointly trusteed employee benefit funds designated in the applicable Collective Bargaining Agreements in Schedule A (in the appropriate Schedule A amounts), provided that such benefits are required to be paid on public works under any applicable prevailing wage law. Bona fide jointly trusteed fringe benefit plans established or negotiated through collective bargaining during the life of this Agreement may be added if similarly required under applicable prevailing wage law. Contractors, not otherwise contractually bound to do so, shall not be required to contribute to benefits, trusts or plans of any kind which are not required by the prevailing wage law provided, however, that this provision does not relieve Contractors signatory to local collective bargaining agreement with any affiliated union from complying with the fringe benefit requirements for all funds contained in the CBA.

B. 1. Notwithstanding Section 2 (A) above, and subject to 2 (B)(2) below, Contractors who designate employees pursuant to Article 4, Section 2 (B) and (C) ("core" employees) that are not signatory to a Schedule A Agreement and who maintain bona fide private benefit plans that satisfy the requirements of Section 220 of the Labor Law, may

satisfy the above benefit obligation with respect to those employees by providing those employees with coverage under their private benefit plans (to the extent consistent with Section 220). The total benefit payments to be made on behalf of each such employee must be equal to the total Section 220 supplement amount and any shortfall must be paid by cash supplement to the employee.

2. A contractor that will satisfy its Section 220 obligations in accordance with subsection 2(B)(1) above shall make available to the Agency at the time of contract award a complete set of plan documents for each non-Schedule A benefit plan into which contributions will be made and/or coverage provided pursuant to the provisions of Section 2(B)(l) above. The Contractor shall also provide certification from a certified public accountant as to the annualized hourly value of such benefits consistent with the requirements of Section 220.

3. The City shall verify that the alternate benefit plan(s), together with any cash supplement to the employee, is compliant with Section 220 prior to awarding the Contractor a contract covered by this Agreement. In the event the Contractor's alternate benefit plan(s), together with any cash supplement to the employee, is determined to be compliant with Section 220 and will be utilized by the Contractor on behalf of Article 4, Section 2(B) and (C) core employees, the Local Unions have no duty to enforce the Contractor's obligations on the alternate benefit plan(s) as they are not party to the alternate plan(s) or privy to the terms and conditions of the plan obligations. In the event the City determines the alternate benefit plan(s), together with any cash supplement to the employee, is not compliant with Section 220, the Contractor may, upon executing a Letter

of Assent, satisfy its obligations for all employees, including core employees, by contributing to the Schedule A benefit plans in accordance with the terms of the Schedule A Agreements.

C. The Contractors agree to be bound by the written terms of the legally established jointly trusteed Trust Agreements specifying the detailed basis on which payments are to be paid into, and benefits paid out of, such Trust Funds but only with regard to Program Work done under this Agreement and only for those employees to whom this Agreement requires such benefit payments.

D. 1. To the extent consistent with New York City's Procurement Policy Board Rules with respect to prompt payment, as published at www.nyc.gov/ppb, §4-06(e), and in consideration of the unions' waiver of their rights to withhold labor from a contractor or subcontractor delinquent in the payment of fringe benefits contributions ("Delinquent Contractor"); the Agency agrees that where any such union and/or fringe benefit fund shall notify the Agency, the General Contractor, and the Delinquent Contractor in writing with back-up documentation that the Delinquent Contractor has failed to make fringe benefit contributions to it as provided herein and the Delinquent Contractor shall fail, within ten (10) calendar days after receipt of such notice, to furnish either proof of such payment or notice that the amount claimed by the union and/or fringe benefit fund is in dispute, the Agency shall withhold from amounts then or thereafter becoming due and payable to the General Contractor an amount equal to that portion of such payment due to the General Contractor that relates solely to the work performed by

the Delinquent Contractor which the union or fringe benefit fund claims to be due it, and shall remit the amount when and so withheld to the fringe benefit fund and deduct such payment from the amounts then otherwise due and payable to the General Contractor, which payment shall, as between the General Contractor and the Agency, be deemed a payment by the Agency to the General Contractor; provided however, that in any month, such withholding shall not exceed the amount contained in the General Contractor's monthly invoice for work performed by the Delinquent Contractor. The union or its employee benefit funds shall include in its notification of delinquent payment of fringe benefits only such amount it asserts the Delinquent Contractor failed to pay on the specific project against which the claim is made and the union or its employee benefit funds may not include in such notification any amount such Delinquent Contractor may have failed to pay on any other City or non-City project.

2. In addition, where a union or employee benefit fund gives notice to the City that a Contractor is Delinquent as defined in subsection 2(D)(1) above and the City determines that the notice includes appropriate back-up documentation that the Contractor is delinquent, the City will promptly, but not later than twenty (20) days after receipt of the notice, provide a copy of said notice to City Agencies. In the event the City determines there is insufficient back-up documentation, it will notify the appropriate union and/or fringe benefit fund promptly, but not later than twenty (20) days after receipt of the Delinquency Notice, and shall include notice of what additional documentation is requested. Any determination by the City that there is insufficient back-up must be reasonable. This provision is intended to enhance compliance with the prevailing wage

law and the PLA with respect to the payment of fringe benefits, and is not intended as a substitute for the resolution of a disputed claim pursuant to any applicable law or agreement.

The City and the relevant Agency(s) will thereafter require the Delinquent Contractor to provide cancelled checks or other equivalent proof of payment of benefit contributions that have come due, to be submitted with certified payroll reports for all Program Work covered by this Agreement on which the Delinquent Contractor is engaged, for at least a one-year period or such earlier period if the Contractor is ultimately determined not be a Delinquent Contractor. Such proof of payment when required is a condition of payment of the Delinquent Contractor's invoices by any entity, including, but not limited to, the City, the relevant Agency(s), Construction Manager, General Contractor, the prime or higher level subcontractor, as is appropriate under the Delinquent Contractor's engagement. The union and the funds shall upon request receive copies of the certified payrolls, cancelled checks, or other proof of payment from the City and/or the relevant Agency(s).

E. In the event the General Contractor or Delinquent Contractor shall notify the Agency as above provided that the claim of the union or fringe benefit fund is in dispute, the Agency shall withhold from amounts then or thereafter becoming due and payable to the General Contractor an amount equal to that portion of such payment due to the General Contractor that relates solely to the work performed by the Delinquent Contractor that the union and/or fringe benefit fund claims to be due it, pending resolution of the dispute pursuant to the union's Schedule A agreement, and the amount shall be paid to the party or parties ultimately determined to be entitled thereto, or held until the

Delinquent Contractor and union or employee benefit fund shall otherwise agree as to the disposition thereof; provided however, that such withholding shall not exceed the amount contained in the General Contractor's monthly invoice for work performed by the Delinquent Contractor. In the event the Agency shall be required to withhold amounts from a General Contractor for the benefit of more than one fringe benefit fund, the amounts so withheld in the manner and amount prescribed above shall be applied to or for such fund in the order in which the written notices of nonpayment have been received by the Agency, and if more than one such notice was received on the same day, proportionately based upon the amount of the union and/or fringe benefit fund claims received on such day. Nothing herein contained shall prevent the Agency from commencing an interpleader action to determine entitlement to a disputed payment in accordance with section one thousand six of the civil practice law and rules or any successor provision thereto.

F. Payment to a fringe benefit fund under this provision shall not relieve the General Contractor or Delinquent Contractor from responsibility for the work covered by the payment. Except as otherwise provided, nothing contained herein shall create any obligation on the part of the Agency to pay any union or fringe benefit fund, nor shall anything provided herein serve to create any relationship in contract or otherwise, implied or expressed, between the union/fund and/or fringe benefit and the Agency.

ARTICLE 12- HOURS OF WORK, PREMIUM PAYMENTS,

SHIFTS AND HOLIDAYS

SECTION 1. WORK WEEK AND WORK DAY

A. The standard work week shall consist of 40 hours of work at straight time rates, Monday through Friday, 8 hours per day, plus ½ hour unpaid lunch period. The standard work week may be reduced to 35 or 37 ½ hours of work at straight time rates, Monday to Friday, 7 or 7 ½ hours per day, plus ½ hour unpaid lunch period in those limited circumstances where the City states in the bid documents that the Contractor will not be given access to the site to accommodate an 8 hour day. The 8 hour, 7 ½ hour or 7 hour work day must be established at the commencement of the project and may not be altered by the Contractor.

B. In accordance with Program needs, there shall be flexible start times with advance notice from Contractor to the Union. The Day Shift shall commence between the hours of 6:00 a.m. and 9:00 a.m. and shall end between the hours of 2:30 p.m. and 5:30 p.m., for an 8 hour day, and up to 7:30 p.m. for a 10 hour day. The Evening Shift shall commence between the hours of 3:00 p.m. and 6:00 p.m., unless different times are necessitated by the Agency's phasing plans on specific projects. The Night Shift shall commence between the hours of 11:00 p.m. and 2:00 a.m., unless different times are necessitated by the Agency's phasing plans on specific projects. Subject to the foregoing, starting and quitting times shall occur at the Program Work site designated by the Contractor.

C. Scheduling – Except as provided above, Monday through Friday is the standard work week; 8 hours of work plus ½ hour unpaid lunch. Notwithstanding any other provision of this Agreement, a contractor may schedule a four day work week, 10 hours per day at straight time rates, plus a ½ hour unpaid lunch, at the commencement of the job.

D. Notice - Contractors shall provide not less than *5* days prior notice to the Local Union involved as to the work week and work hour schedules to be worked or such lesser notice as may be mutually agreed upon.

SECTION 2. OVERTIME

Overtime shall be paid for any work (i) over an employee's regularly scheduled work day, i.e., work over eight (8) hours in a day where 5/8s is scheduled, work over ten (10) hours in a day where 4/10s is scheduled, or work over seven (7) or seven and one half (7 ½) hours where such hours are scheduled pursuant to Article 12, section 1(A) and (ii) over forty (40) hours in a week, or over thirty five (35) or thirty seven and one-half (37 ½) where such hours are scheduled pursuant to Article 12, section 1(A). Overtime shall be paid at time and one half (1½) Monday through Saturday. All overtime work performed on Sunday and Holidays will be paid pursuant to the applicable Schedule A. There shall be no stacking or pyramiding of overtime pay under any circumstances. There will be no restriction upon the Contractor's scheduling of overtime or the nondiscriminatory designation of employees who shall be worked, including the use of employees, other than those who have worked the regular or scheduled work week, at straight time rates. The Contractor shall have the right to schedule work so as to minimize

overtime or schedule overtime as to some, but not all, of the crafts and whether or not of a continuous nature.

SECTION 3. SHIFTS

A. Flexible Schedules - Scheduling of shift work, including Saturday and Sunday work, shall be within the discretion of the Contractor in order to meet Program Work schedules and existing Program Work conditions including the minimization of interference with the mission of the Agency. It is not necessary to work a day shift in order to schedule a second or third shift, or a second shift in order to schedule a third shift, or to schedule all of the crafts when only certain crafts or employees are needed. Shifts must have prior approval of the Agency or Construction Manager, and must be scheduled with not less than five work days notice to the Local Union or such lesser notice as may be mutually agreed upon.

B. Second and/or Third Shifts/Saturday and/or Sunday Work - - The second shift shall start between 3 p.m. and 6 p.m. and the third shift shall start between 11 p.m. and 2 a.m., subject to different times necessitated by the Agency phasing plans on specific projects. There shall be no reduction in shift hour work. With respect to second and third shift work there shall be a 5% shift premium. No other premium or other payments for such work shall be required unless such work is in excess of the employee's regularly scheduled work week, i.e., 40 hours in the week or thirty five (35) or thirty seven and one half (37 ½) pursuant to Article 12, section 1(A). All employees within a classification performing Program Work will be paid at the same wage rate regardless of the shift or work scheduled work, subject only to the foregoing provisions.

C. Flexible Starting Times - Shift starting times will be adjusted by the Contractor as necessary to fulfill Program Work requirements subject to the notice requirements of paragraph A.

SECTION 4. HOLIDAYS

A. Schedule - There shall be nine (9) recognized holidays on the Project:

New Year's Day

Martin Luther King Day	President's Day
Memorial Day	Veteran's Day
Labor Day	Thanksgiving Day
Independence Day	Christmas Day

All said holidays shall be observed on the calendar date except those holidays which occur on Saturday shall be observed on the previous Friday and those that occur on Sunday shall be observed on the following Monday.

B. Payment - Regular holiday pay, if any, for work performed on such a recognized holiday shall be in accordance with the applicable Schedule A.

C. Exclusivity - No holidays other than those listed in Section 4(A) above shall be recognized or observed.

SECTION 5. SATURDAY MAKE-UP DAYS

When severe weather, power failure, fire or natural disaster or other similar circumstances beyond the control of the Contractor prevent work from being performed on

a regularly scheduled weekday, the Contractor may schedule a Saturday make-up day and such time shall be scheduled and paid as if performed on a weekday. Any other Saturday work shall be paid at time and one-half (1½) . The Contractor shall notify the Local Union on the missed day or as soon thereafter as practicable if such a make-up day is to be worked.

SECTION 6. REPORTING PAY

A. Employees who report to the work location pursuant to their regular schedule and who are not provided with work shall be paid two hours reporting pay at straight time rates. An employee whose work is terminated early by a Contractor due to severe weather, power failure, fire or natural disaster of for similar circumstances beyond the Contractor's control, shall receive pay only for such time as is actually worked. In other instances in which an employee's work is terminated early (unless provided otherwise elsewhere in this Agreement), the employee shall be paid for his full shift. Contractors shall not be permitted to call, text or email or voicemail employees in advance of their regularly scheduled shift starting time to avoid reporting pay. Notwithstanding the above, in the event that the National Weather Service issues a weather advisory for the area in which the work location is situated, and the entire project is shut down as a result of the Weather Advisory, the contractor shall be permitted to speak to employees no less than four (4) hours in advance of their shift starting time, unless the Local Union consents to a shorter notice in writing, to advise them not to report to work due to the National Weather Service advisory, and employees who are so notified shall not receive two (2) hours reporting pay if they report to the work location. The contractor shall make every effort to

notify each employee directly and confirm that notification has been received. Voice, text, and email messages left for employees without confirmation of delivery and receipt by employee do not constitute sufficient notice under this provision.

B. When an employee, who has completed their scheduled shift and left the Program Work site, is "called out" to perform special work of a casual, incidental or irregular nature, the employee shall receive overtime pay at the rate of time and one-half of the employee's straight time rate for hours actually worked.

C. When an employee leaves the job or work location of their own volition or is discharged for cause or is not working as a result of the Contractor's invocation of Section 7 below, they shall be paid only for the actual time worked.

D. Except as specifically set forth in this Article there shall be no premiums, bonuses, hazardous duty, high time or other special premium payments or reduction in shift hours of any kind.

E. There shall be no pay for time not actually worked except as specifically set forth in this Article and except where an applicable Schedule A requires a full weeks' pay for forepersons.

SECTION 7. PAYMENT OF WAGES

A. Termination- Employees who are laid off or discharged for cause shall be paid in full for that which is due them at the time of termination. The Contractor shall also provide the employee with a written statement setting forth the date of lay off or discharge.

SECTION 8. EMERGENCY WORK SUSPENSION

A Contractor may, if considered necessary for the protection of life and/or safety of employees or others, suspend all or a portion of Program Work. In such instances, employees will be paid for actual time worked, except that when a Contractor requests that employees remain at the job site available for work, employees will be paid for that time at their hourly rate of pay.

SECTION 9. INJURY/DISABILITY

An employee who, after commencing work, suffers a work-related injury or disability while performing work duties, shall receive no less than a full day's pay in accordance with the employee's regularly scheduled work day under Article 12, section (1)(A). Further, the employee shall be rehired at such time as able to return to duties provided there is still Program Work available for which the employee is qualified and able to perform.

SECTION 10. TIME KEEPING

A Contractor may utilize brassing or other systems to check employees in and out. Each employee must check in and out. The Contractor will provide adequate facilities for checking in and out in an expeditious manner.

SECTION 11. MEAL PERIOD

A Contractor shall schedule an unpaid period of not more than 1/2 hour duration at the work location between the 3rd and 5th hour of the scheduled shift. A Contractor may, for efficiency of operation, establish a schedule which coordinates the meal periods of two or more crafts or which provides for staggered lunch periods within a

craft or trade. If an employee is required to work through the meal period, the employee shall be compensated in a manner established in the applicable Schedule A.

SECTION 12. BREAK PERIODS

There will be no rest periods, organized coffee breaks or other non-working time established during working hours. Individual coffee containers will be permitted at the employee's work location. Where 4/10s are being worked there shall be a morning and an afternoon coffee break.

ARTICLE 13 - APPRENTICES

SECTION 1. RATIOS

Recognizing the need to maintain continuing supportive programs designed to develop adequate numbers of competent workers in the construction industry and to provide craft entry opportunities for minorities, women and economically disadvantaged non-minority males, Contractors will employ apprentices in their respective crafts to perform such work as is within their capabilities and which is customarily performed by the craft in which they are indentured. Contractors may utilize apprentices and such other appropriate classifications in the maximum ratio permitted by the New York State Department of Labor or the maximum allowed per trade. Apprentices and such other classifications as are appropriate shall be employed in a manner consistent with the provisions of the appropriate Schedule A. The parties encourage, as an appropriate source of apprentice recruitment consistent with the rules and operations of the affiliated unions' apprentice-programs, the use of the Edward J. Malloy Initiative for Construction Skills, Non-Traditional Employment for Women and Helmets to Hardhats.

ARTICLE 14-SAFETY PROTECTION OF PERSON AND PROPERTY

SECTION 1. SAFETY REQUIREMENTS

Each Contractor will ensure that applicable OSHA and safety requirements are at all times maintained on the Program Work site and the employees and Unions agree to cooperate fully with these efforts to the extent consistent with their rights and obligations under the law. Employees will cooperate with employer safety policies and will perform their work at all times in a safe manner and protect themselves and the property of the Contractor and Agency from injury or harm, to the extent consistent with their rights and obligations under the law. Failure to do so will be grounds for discipline, including discharge.

SECTION 2. CONTRACTOR RULES

Employees covered by this Agreement shall at all times be bound by the reasonable safety, security, and visitor rules as established by the Contractors and the Construction Manager for this Program Work. Such rules will be published and posted in conspicuous places throughout the Program Work sites. Any site security and access policies established by the Construction Manager or General Contractor intended for specific application to the construction workforce for Program Work and that are not established pursuant to an Agency directive shall be implemented only after notice to the BCTC and its affiliates and an opportunity for negotiation and resolution by the Labor Management Committee.

SECTION 3. INSPECTIONS

The Contractors and Construction Manager retain the right to inspect incoming shipments of equipment, apparatus, machinery and construction materials of every kind.

ARTICLE 15 - TEMPORARY SERVICES

Temporary services, i.e. all temporary heat, climate control, water, power and light, shall only be required upon the determination of the Agency or Construction Manager, and when used shall be staffed and assigned to the appropriate trade(s) with jurisdiction. Temporary services shall be provided by the appropriate Contractors' existing employees during working hours in which a shift is scheduled for employees of this Contractor. The Agency or Construction Manager may determine the need for temporary services requirements during non-working hours, and when used shall be staffed and assigned to the appropriate trades(s). There shall be no stacking of trades on temporary services, provided this does not constitute a waiver of primary trade jurisdiction. In the event a temporary system component is claimed by multiple trades, the matter shall be resolved through the New York Plan for Jurisdictional Disputes.

ARTICLE 16 - NO DISCRIMINATION

SECTION 1. COOPERATIVE EFFORTS

The Contractors and Unions agree that they will not discriminate against any employee or applicant for employment because of creed, race, color, religion, sex, sexual orientation, national origin, marital status, citizenship status, disability, age or any other status provided by law, in any manner prohibited by law or regulation.

SECTION 2. LANGUAGE OF AGREEMENT

The use of the masculine or feminine gender in this Agreement shall be construed as including both genders.

ARTICLE 17- GENERAL TERMS

SECTION 1. PROJECT RULES

A. The Construction Manager and the Contractors shall establish such reasonable Program Work rules that are not inconsistent with this Agreement or rules common in the industry and are reasonably related to the nature of work. These rules will be explained at the pre-job conference and posted at the Program Work sites and may be amended thereafter as necessary. Notice of amendments will be provided to the appropriate Local Union. Failure of an employee to observe these rules and regulations shall be grounds for discipline, including discharge. The fact that no order was posted prohibiting a certain type of misconduct shall not be a defense to an employee disciplined or discharged for such misconduct when the action taken is for cause.

B. The parties adopt and incorporate the BCTC's Standards of Excellence as annexed hereto as Exhibit "B".

SECTION 2. TOOLS OF THE TRADE

The welding/cutting torch and chain fall are tools of the trade having jurisdiction over the work performed. Employees using these tools shall perform any of the work of the trade. There shall be no restrictions on the emergency use of any tools or equipment by any qualified employee or on the use of any tools or equipment for the performance of work within the employee's jurisdiction.

SECTION 3. SUPERVISION

Employees shall work under the supervision of the craft foreperson or general foreperson.

SECTION 4. TRAVEL ALLOWANCES

There shall be no payments for travel expenses, travel time, subsistence allowance or other such reimbursements or special pay except as expressly set forth in this Agreement.

SECTION 5. FULL WORK DAY

Employees shall be at their work area at the starting time established by the Contractor, provided they are provided access to the work area. The signatories reaffirm their policy of a fair day's work for a fair day's wage.

SECTION 6. COOPERATION AND WAIVER

The Construction Manager, Contractors and the Unions will cooperate in seeking any NYS Department of Labor, or any other government, approvals that may be needed for implementation of any terms of this Agreement. In addition, the Council, on their own behalf and on behalf of its participating affiliated Local Unions and their individual members, intend the provisions of this Agreement to control to the greatest extent permitted by law, notwithstanding contrary provisions of any applicable prevailing wage, or other, law and intend this Agreement to constitute a waiver of any such prevailing wage, or other, law to the greatest extent permissible only for work within the scope of this Agreement, including specifically, but not limited to those provisions relating to shift, night, and similar differentials and premiums. This Agreement does not, however,

constitute a waiver or modification of the prevailing wage schedules applicable to work not covered by this Agreement.

ARTICLE 18. SAVINGS AND SEPARABILITY

SECTION 1. THIS AGREEMENT

In the event that the application of any provision of this Agreement is enjoined, on either an interlocutory or permanent basis, or is otherwise determined to be in violation of law, or if such application may cause the loss of Program funding or any New York State Labor Law exemption for all or any part of the Program Work, the provision or provisions involved (and/or its application to particular Program Work, as necessary) shall be rendered, temporarily or permanently, null and void, but where practicable the remainder of the Agreement shall remain in full force and effect to the extent allowed by law (and to the extent no funding or exemption is lost), unless the part or parts so found to be in violation of law or to cause such loss are wholly inseparable from the remaining portions of the Agreement and/or are material to the purposes of the Agreement. In the event a court of competent jurisdiction finds any portion of the Agreement to trigger the foregoing, the parties will immediately enter into negotiations concerning the substance affected by such decision for the purpose of achieving conformity with the court determination and the intent of the parties hereto for contracts to be let in the future.

SECTION 2. THE BID SPECIFICATIONS

In the event that the Agency's (or Construction Manager's) bid specifications, or other action, requiring that a successful bidder (and subcontractor) become signatory to this Agreement is enjoined, on either an interlocutory or permanent

basis, or is otherwise determined to be in violation of law, or may cause the loss of Program funding or any New York State Labor Law exemption for all or any part of the Program Work, such requirement (and/or its application to particular Program Work, as necessary) shall be rendered, temporarily or permanently, null and void, but where practicable the Agreement shall remain in full force and effect to the extent allowed by law and to the extent no funding or exemption is lost). In such event, the Agreement shall remain in effect for contracts already bid and awarded or in construction only where the Agency and Contractor voluntarily accepts the Agreement. The parties will enter into negotiations as to modifications to the Agreement to reflect the court or other action taken and the intent of the parties for contracts to be let in the future.

SECTION 3. NON-LIABILITY

In the event of an occurrence referenced in Section 1 or Section 2 of this Article, neither the Agency, the Construction Manager, any Contractor, nor any Union shall be liable, directly or indirectly, for any action taken, or not taken, to comply with any court order or injunction, other determination, or in order to maintain funding or a New York State Labor Law exemption for Program Work. Bid specifications will be issued in conformance with court orders then in effect and no retroactive payments or other action will be required if the original court determination is ultimately reversed.

SECTION 4. NON-WAIVER

Nothing in this Article shall be construed as waiving the prohibitions of Article 7 as to signatory Contractors and signatory Unions.

ARTICLE 19 - FUTURE CHANGES IN SCHEDULE A AREA CONTRACTS

SECTION 1. CHANGES TO AREA CONTRACTS

A. Schedule A to this Agreement shall continue in full force and effect until the Contractor and/or Union parties to the Area Collective Bargaining Agreements that are the basis for the Schedule A notify the Agency and Construction Manager in writing of the changes agreed to in that Area Collective Bargaining which are applicable to work covered by this Agreement and their effective dates.

B. It is agreed that any provisions negotiated into Schedule A collective bargaining agreements will not apply to work under this Agreement if such provisions are less favorable to those uniformly required of contractors for construction work normally covered by those agreements; nor shall any provision be recognized or applied on Program Work if it may be construed to apply exclusively, or predominantly, to work covered by this Agreement.

C. Any disagreement between signatories to this Agreement over the incorporation into Schedule A of provisions agreed upon in the renegotiation of Area Collective Bargaining Agreements shall be resolved in accordance with the procedure set forth in Article 9 of this Agreement.

SECTION 2. LABOR DISPUTES DURING AREA CONTRACT NEGOTIATIONS

The Unions agree that there will be no strikes, work stoppages, sympathy actions, picketing, slowdowns or other disruptive activity or other violations of Article 7 affecting the Program Work by any Local Union involved in the renegotiation of Area

Local Collective Bargaining Agreements nor shall there be any lock-out on such Program Work affecting a Local Union during the course of such renegotiations.

ARTICLE 20 - WORKERS' COMPENSATION ADR

SECTION 1.

An ADR program may be negotiated and participation in the ADR Program will be optional by trade.

ARTICLE 21 - HELMETS TO HARDHATS

SECTION 1.

The Contractors and the Unions recognize a desire to facilitate the entry into the building and construction trades of veterans who are interested in careers in the building and construction industry. The Contractors and Unions agree to utilize the services of the New York City Helmets to Hardhats Program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.

SECTION 2.

The Unions and Contractors agree to coordinate with the Program to create and maintain an integrated database of veterans interested in working on this Project and of

apprenticeship and employment opportunities for this Project. To the extent permitted by law, the Unions will give credit to such veterans for bona fide, provable past experience.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed and effective as of the ___ day of_____, _____

FOR BUILDING AND CONSTRUCTION TRADES COUNCIL
OF GREATER NEW YORK AND VICINITY

BY: _____
Gary LaBarbera
President

FOR NEW YORK CITY

BY:
Anthony Shorris
First Deputy Mayor

APPROVED AS TO FORM:

_____
ACTING CORPORATION COUNSEL
NEW YORK CITY

LIST OF SIGNATORY UNIONS
Boiler Makers Local No. 5
Carpenters District Council
Cement Masons No. 780
Concrete Workers, District Council No. 16
Derrickmen and Riggers, Local Union No. 197
Drywall Tapers 1974, District Council 9
Electrical Workers Local No. 3
Glaziers Local Union No. 1087 District Council 9
Heat & Frost Insulators, Local Union No. 12A
Heat & Frost Insulators, Local Union No. 12
Iron Workers District Council
Iron Workers Local Union No. 40
Iron Workers Local No. 361
Laborers Local No. 78, Asbestos & Lead Abatement
Laborers Local 1010 Pavers and Road Builders District Council
Laborers 79 Construction and General Building Laborers
Laborers Local No. 731 Excavators
Mason Tenders District Council
Metal Lathers Local No. 46
Metal Polishers District Council 9
Ornamental Iron Workers Local No. 580
Painters District Council 9
Plumbers Local No. 1
Painters, Decorators & Wallcoverers District Council 9
Painters Structural Steel No. 806
Plasterers Local Union No. 262
Roofers & Waterproofers Local 8
Steamfitters Local Union No. 638
Sheet Metal Workers Local No. 28
Sheet Metal Workers Local No. 137
Teamsters Local Union No. 282
Teamsters Local Union 814
Teamsters Local No. 813 Private Sanitation
Tile, Marble & Terrazzo B.A.C. Local Union No. 7
Elevator Constructors Union Local No. 1

SCHEDULE "A"

Union	Current Agreement w/
Architectural and Ornamental Iron Workers Local Union 580, AFL-CIO	Allied Building Metal Industries, Inc.
Building, Concrete, Excavating & Common Laborers Local 731	Independent
Building, Concrete, Excavating & Common Laborers Local 731	Members of the General Contractors Association of New York, Inc.
District Council No. 9, I.U.P.A.T Glaziers Local 1087	Window and Plate Glass Dealers Association
Drywall Tapers and Pointers Local 1974, affiliated with International Union of Painters & Allied Trades and Drywall Taping Contractor's Association & Association of Wall-Ceiling & Carpentry Industries NY, Inc.	Independent
Enterprise Association of Steamfitters and Apprentices Local 638	Mechanical Contractors Association of NY, Inc.
Enterprise Association of Steamfitters and Apprentices Local 638	Independent
Highway Road and Street Laborers Local Union 1010 of the District Council of Pavers and Road Builders of the Laborers' International Union of North America AFL-CIO	Independent
Highway Road and Street Laborers Local Union 1010 of the District Council of Pavers and Road Builders of the Laborers' International Union of North America AFL-CIO	Member of the General Contractors Association of New York, Inc.
International Association of Heat and Frost Insulators and Allied Workers Local No. 12 of New York City	Independent
International Association of Heat and Frost Insulators and Allied Workers Local No. 12 of New York City	The Insulation Contractors Association of New York City, Inc.
International Association of Heat and Frost Insulators and Allied Workers Local No. 12A of New York City	Independent

International Association of Heat and Frost Insulators and Allied Workers Local No. 12A of New York City	Environmental Contractors Association, Inc.
International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers, AFL-CIO, Local Lodge No. 5	Boilermakers Association of Greater New York
Local Union No. 3 International Brotherhood of Electrical Workers, AFL-CIO	New York Electrical Contractors Association
International Brotherhood of Teamsters, Local 282, High Rise contract	Building Contractors Association & Independents
Local 46 Metallic Lathers Union and Reinforcing Iron Workers of NY and Vicinity of the International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers	Cement League
Local 46 Metallic Lathers Union and Reinforcing Iron Workers of NY and Vicinity of the International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers	Independent
Local 8 Roofers, Waterproofers & Allied Workers	Roofing and Waterproofing Contractors Association of New York and Vicinity
Local Union 1 of the United Association of Journeymen and Apprentices of the Pipe Fitting Industry of the United States and Canada	Association of Contracting Plumbers of the City of New York
Local Union Number 40 & 361 of Bridge, Structural Ornamental and Reinforcing Iron Workers AFL-CIO	Independent
Operative Plasterers' and Cement Masons' International Association Local No. 262	Independent
Painters and Allied Trades AFL-CIO, District Council No. 9 (Painting and Protective Coatings CBA)	Independent

Painters and Allied Trades AFL-CIO, District Council No. 9 (Painting and Protective Coatings CBA)	The Association of Master Painters & Decorators of NY, Inc. and The Association of Wall, Ceiling & Carpentry Industries of NY, Inc. and The Window and Plate Glass Dealers Association
Sheet Metal Workers' International Association, Local 28	Sheet Metal & Air Conditioning Contractors Association of New York City, Inc.
Sheet Metal Workers' International Association, Local 137	The Greater New York Sign Association
Structural Steel and Bridge Painters Local 806, DC 9 International Union of Painters and Allied Trades, AFL-CIO	New York Structural Steel Painting Contractors Association
Teamsters Local 813	Independent
Teamsters Local 813	IESI NY Corporation
Teamsters Local 814	Greater New York Movers and Warehousemen's Bargaining Group
The Cement Masons' Union, Local 780	Cement League
The District Council of Cement and Concrete Workers (comprised of Local 6A; Local 18A and Local 20)	Cement League
The District Council of Cement and Concrete Workers (comprised of Local 6A; Local 18A and Local 20)	Independent

The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Heavy Carpenters	GCA
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Dockbuilders Local No. 1556	Concrete Contractors of NY
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Dockbuilders Local 1556	Independent
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Millwright Local 740	Independent
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Timbermen Local 1556	Independent
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Timbermen Local 1556	GCA
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Heavy Carpenters	Independent
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Carpenters	Manufacturing Woodworkers Association of Greater New York Incorporated
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America	The Hoisting Trade Association of New York, Inc.
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America	The Test Boring Association

The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America	Building Contractors Association
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America	The Association of Wall-Ceiling & Carpentry Industries of New York, Incorporated
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners	The Cement League
The District Council of NYC and Vicinity of the United Brotherhood of Carpenters and Joiners of America	New York City Millwright Association
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners	Greater New York Floor Covering Association
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Carpenters	Association of Architectural Metal & Glass
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Carpenters	Concrete Contractors of NY
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Building Construction Carpenters	Independent
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Local 2287	Independent
The District Council of New York City and Vicinity of the United Brotherhood of Carpenters and Joiners of America for Shop Carpenters	Independent
The Tile Setters and Tile Finishers Union of New York and New Jersey, Local 7 of the International Bricklayers and Allied Craftworkers	The Greater New York and New Jersey Contractors Association

United Derrickmen & Riggers Association, Local 197 of NY, LI, Westchester & Vicinity	Contracting Stonesetters Association Inc.
United Derrickmen & Riggers Association L 197 of NY, LI, Westchester and Vicinity	Building Stone and Pre-cast Contractors Association
International Union of Operating Engineers Local 14-14B	Building Contractors Association
International Union of Operating Engineers Local 14-14B	Contractors Association of Greater NY
International Union of Operating Engineers Local 14-14B	GCA
International Union of Operating Engineers Local 14-14B	The Cement League
International Union of Operating Engineers Local 14-14B	Allied Building Metal Industries, Inc.
International Union of Operating Engineers Local 14-14B	Brick Association
International Union of Operating Engineers Local 14-14B	Independent
International Union of Operating Engineers Local 15	Allied Building Metal Industries, Inc.
International Union of Operating Engineers Local 15-15A	General Contractors Association
International Union of Operating Engineers Local 15D	General Contractors Association
International Union of Operating Engineers Local 15D	Structural Steel Erectors

International Union of Operating Engineers Local 15-15A	Building Contractors Association
International Union of Operating Engineers Local 15D	Building Contractors Association
International Union of Operating Engineers Local 15-15A	Contractors Association of Greater NY
International Union of Operating Engineers Local 15D	Contractors Association of Greater NY
International Union of Operating Engineers Local 15-15A	The Cement League
International Union of Operating Engineers Local 15D	The Cement League

ADDITIONAL PARTICIPATING UNIONS

Local No. 1 New York of the International Union of Bricklayers and Allied Craft Workers

ADDITIONAL PARTICIPATING UNION SCHEDULE A

Union	Current Agreement with:
Local No. 1 New York of the International Union of Bricklayers and Allied Craft Workers	Independent
Local No. 1 New York of the International Union of Bricklayers and Allied Craft Workers	Associated Brick Masons Contractors
Local No. 1 New York of the International Union of Bricklayers and Allied Craft Workers	Building Restoration Contractors Association
Local No. 1 New York of the International Union of Bricklayers and Allied Craft Workers	Building Contractors Association
The Stone Setters of Local No. 1 New York of the International Union of Bricklayers and Allied Craft Workers	Independent
The Plasterers of Local No. 1 New York of the International Union of Bricklayers and Allied Craft Workers	Independent

Project Labor Agreement - - Letter of Assent

Dear:

The undersigned party confirms that it agrees to be a party to and be bound by the New York Agency, Project Labor Agreement as such Agreement may, from time to time, be amended by the parties or interpreted pursuant to its terms. The terms of the Project Labor Agreement, its Schedules, Addenda and Exhibits are hereby incorporated by reference herein.

The undersigned, as a Contractor or Subcontractor (hereinafter Contractor) on the Project known as _____ and located at _____ (hereinafter PROJECT), for and in consideration of the award to it of a contract to perform work on said PROJECT, and in further consideration of the mutual promises made in the Project Labor Agreement, a copy of which was received and is acknowledged, hereby:

(1) Accepts and agrees to be bound by the terms and conditions of the Agreement, together with any and all schedules; amendments and supplements now existing or which are later made thereto:

(2) Agrees to be bound by the legally established collective bargaining agreements; local trust agreements for employee benefit funds; and trust documents for joint apprentice programs as well as apprentice program rules and procedures but only to the extent of Program Work and as required by the PLA.

(3) Authorizes the parties to such local trust agreements to appoint trustees and successor trustees to administer the trust funds and hereby ratifies and accepts the trustees so appointed as if made by the Contractor but only to the extent of Program Work as required by the PLA.

(4) Certifies that it has no commitments or agreements that would preclude its full and complete compliance with the terms and conditions of said Agreement. The Contractor agrees to employ labor that can work in harmony with all other labor on the Project and shall require labor harmony from every lower tier subcontractor it has engaged or may engage to work on the Project. Labor harmony disputes/issues shall be subject to the Labor Management Committee provisions.

(5) Agrees to secure from any Contractor(s) (as defined in said Agreement) which is or becomes a Subcontractor (of any tier), to it, a duly executed Agreement to be Bound in from identical to this document.

Provide description of the Work, identify craft jurisdiction(s) and all contract numbers below:

Dated: _____

_____
(Name of Contractor or subcontractor)

_____
(Name of CM; GC; Contractor or Higher Level Subcontractor)

_____
(Authorized Officer & Title)

_____
(Address)

_____
(Phone) (Fax)

Contractor's State License #_____

Sworn to before me this
____ day of _____,

_____
Notary Public

NEW YORK CITY BUILDING AND CONSTRUCTION TRADES COUNCIL STANDARDS OF EXCELLENCE

The purpose of this Standard of Excellence is to reinforce the pride of every construction worker and the commitment to be the most skilled, most productive and safest workforce available to construction employers and users in the City of New York. It is the commitment of every affiliated local union to use our training and skills to produce the highest quality work and to exercise safe and productive work practices.

The rank and file members represented by the affiliated local unions acknowledge and adopt the following standards:

- ***Provide a full days work for a full days pay;***
- ***Safely work towards the timely completion of the job;***
- ***Arrive to work on time and work until the contractual quitting time;***
- ***Adhere to contractual lunch and break times;***
- ***Promote a drug and alcohol free work site;***
- ***Work in accordance with all applicable safety rules and procedures;***
- ***Allow union representatives to handle job site disputes and grievances without resort to slowdowns, or unlawful job disruptions;***
- ***Respect management directives that are safe, reasonable and legitimate;***
- ***Respect the rights of co-workers;***
- ***Respect the property rights of the owner, management and contractors.***

The Unions affiliated with the New York City Building and Construction Trades Council will expect the signatory contractors to safely and efficiently manage their jobs and the unions see this as a corresponding obligation of the contractors under this Standard of Excellence. The affiliated unions will expect the following from its signatory contractors:

- ***Management adherence to the collective bargaining agreements;***
- ***Communication and cooperation with the trade foremen and stewards;***
- ***Efficient, safe and sanitary management of the job site;***
- ***Efficient job scheduling to mitigate and minimize unproductive time;***
- ***Efficient and adequate staffing by properly trained employees by trade;***
- ***Efficient delivery schedules and availability of equipment and tools to ensure efficient job progress;***
- ***Ensure proper blueprints, specifications and layout instructions and material are available in a timely manner***
- ***Promote job site dispute resolution and leadership skills to mitigate such disputes;***
- ***Treatment of all employees in a respectful and dignified manner acknowledging their contributions to a successful project.***

The affiliated unions and their signatory contractors shall ensure that both the rank and file members and the management staff shall be properly trained in the obligations undertaken in the Standard of Excellence.

BUILDSAFENYC

Codes of Conduct

BuildSafeNYC establishes that all BTEA member companies and BCTC member unions establish minimum safety standards on all building construction projects in NYC as follows:

1. The workforce shall adhere to the minimum personal protective equipment (PPE) usage to include:
   a. ANSI compliant Hard Hats (with ratchet suspension) at all times (supplied by employer)
   b. Construction-type Work Boots at all times
   c. Long Pants and shirts with at least short sleeves at all times (no shorts or tank tops)
   d. ANSI compliant Eye Protection in their possession and used as needed (supplied by employer)
   e. Adequate Hearing Protection in their possession and used as needed (supplied by employer)
   f. High-vis traffic vests at street level and when around heavy equipment (supplied by employer)
2. CM and Subcontractor management shall implement a fair and consistent disciplinary policy for all site personnel regarding the adherence to site safety rules and requirements. Likewise, a joint labor / management team will periodically assess project wide implementation of these Codes.
3. CM firms shall maintain minimum standards for workforce restroom, hygiene facilities and housekeeping, initially and throughout the duration of the project.
4. All personnel shall adhere to a strict policy against drug and alcohol possession and use on sites and during hours of work.
5. All personnel shall attend a site safety orientation prior to beginning work. Worker certifications of safety training for specific tasks such as fire watch, flagmen, and safety attendant must be verified.
6. No cell phones, portable media devices, radios or other devices that limit hearing and attention shall be used while working on sites.
7. Ground Fault Circuit Interrupters (GFCI) will be used on all power tools and extension cords.
8. Union trade representatives shall participate in a regularly scheduled site safety meeting on all projects regardless of size.
9. Extreme effort shall be made to isolate the public from all construction activity. Specifically, systems shall be put in place to control falling materials and pedestrian exposure. This should be a top priority for the entire project workforce.
10. Workers shall honor security access control systems to establish entry to sites by authorized personnel only, where applicable.
11. Fall protection management shall be a top project priority. Workers shall maintain and use necessary fall protection systems and procedures where appropriate. Engineering controls and work methods which eliminate, guard, or otherwise control fall hazards shall take priority over personal fall arrest system usage.
12. Where hazardous materials are present, projects shall implement efforts to communicate and control potential exposure to the workforce.

With Full Support and Endorsement of:

Louis J. Coletti, President & CEO
Building Trades Employers Association

BTEANYC The Voice of Construction
Building Trades Employers' Association

Edward J. Malloy, President
Building and Construction Trades Council

Construction Management Firms:

Bovis Lend Lease

Turner Construction

Skanska USA Buildings

Tishman

Plaza Construction

Gotham Construction

StructureTone

CAULDWELL WINGATE

HRH CONSTRUCTION

Trade Unions:

Carpenters Local No. 45

Bricklayers Local No. 5

Carpenters Local No. 2287

Carpenters Local No. 926

Carpenters Local No. 157

Carpenters Local No. 20

Cement & Concrete Workers Local No. 20

Carpenters Local No. 608

Cement Masons Local No. 780

Cement & Concrete Workers Local No. 6A

Cement & Concrete Workers Local No. 18

Operative Plasterers & Cement Masons Local No. 262

Electrical Local No. 3

Elevator Constructors Local No. 1

Engineers Local No. 94

Painters Local No. 1281

Heat & Frost Insulators Local No. 12A

I.U.O.E. Local No. 14-14B

I.U.O.E. Local No. 15, 15A, 15B, 15C, & 15D

Iron Workers Local No. 40

Iron Workers Local No. 361

International Wooden Local No. 880

Laborers Local No. 79

Metal Polishers Local No. 8A

Metallic Lathers Local No. 46

Millwright & Machinery Erectors Local No. 740

Painters District Council No. 9

Pavers & Road Builders D.C. No. 1

Plasterers Local No. 262

Plumbers Local No. 1

Rodmen Local No. 201

Roofers & Waterproofers Local No. 8

Sheet Metal Workers Local No. 137

Steamfitters Local No. 638

Teamsters Local No. 282

Teamsters Local No. 814

Tile Marble & Terrazzo, BAC Local No. 7

Tinsmiths Local No. 2

Window Cleaners Local No. 2

NYC DISTRICT COUNCIL OF CARPENTERS

CAULDWELL

2015 Project Labor Agreement

NOTICE: THIS CONTRACT IS SUBJECT TO A NEW PROJECT LABOR AGREEMENT EXECUTED IN 2015

This contract is subject to the attached Project Labor Agreement ("PLA") entered into between the City and the Building and Construction Trades Council of Greater New York ("BCTC") affiliated Local Unions. By submitting a bid, the Contractor agrees that if awarded the Contract the PLA is binding on the Contractor and all subcontractors of all tiers. The bidder to be awarded the contract will be required to execute the attached Letter of Assent prior to award. Contractor shall include in any subcontract a requirement that the subcontractor, and sub-subcontractors of all tiers, become signatory to and bound to the PLA with respect to the subcontracted work. Contractor will also be required to have all subcontractors of all tiers execute the attached Letter of Assent prior to such subcontractors performing any work on the Project. Bidders are advised that the City of New York and City agencies have entered into multiple PLAs. The terms of each PLA, while similar, are not identical. All bidders should carefully read the entire PLA that governs this Contract.

In addition, please note that there are significant revisions between the 2015 PLA attached to this bid and the prior Citywide Renovation PLA. The Contractor is urged to review the entire PLA. Significant changes include:

- **Micro Work Orders: For JOCS and Requirements contracts, Task Orders or Work Orders that do not exceed $10,000 are not subject to the PLA. See PLA Article 3, Section 1.**

- **On Call Contracts: Provisions have been added regarding the referral of workers for on call contracts where Contractors are required to respond on an expedited basis. See PLA Article 4, Section 8.**

- **Grievances: The grievance procedure governing disputes under the PLA has been clarified. See PLA Article 9, Section 1.**

- **Delinquent Contractors: Contractors and Subcontractors who do not make required payments to union funds on a timely basis are subject to requirements to submit cancelled checks or another form of proof of payment in addition to certified payroll reports when requesting payment. See PLA Article 11, Section 2.**

- **Payment to Union Funds for Non-Union Workers: Non-union Contractors with bona fide private benefit plans that satisfy the requirements of Labor Law 220 will not be required to pay into union benefit funds for "core" non-union employees (working pursuant to Article 4, Section 2 of the PLA) who are already covered under such bona fide private benefit plans. See PLA Article 11, Section 2.**

- **Veterans Day: Veterans Day has been added to the list of standard holidays. See Article 12, Section 4.**

- **Reporting Pay for Weather Events: The usual reporting pay requirement of two hours for employees who report to their work location pursuant to their regular schedule does not apply when the National Weather Service issues a Weather Advisory and the Contractor speaks to the employee at least four hours before their shift starting time. See Article 12, Section 6.**

To the extent that the terms of the PLA conflict with any other terms of the invitation for bids, including the Standard Construction Contract, the terms of the PLA shall govern. For example, the PLA section that authorizes the scheduling of a four-day week, ten hours per day on straight time at the commencement of the job, PLA Article 12, section 1, overrides the Standard Construction Contract's provision concerning a five-day work week with a maximum of eight hours in a day, Standard Construction Contract Article 37.2.1. Where, however, the invitation for bids, including the Standard Construction Contract, requires the approval of the City/Department, the PLA does not supersede or eliminate that requirement.

In addition to the various provisions regarding work rules, Contractors should take special note of the requirement that Contractors and Subcontractors make payments to designated employee benefit funds. See PLA Article 11, Section 2. The PLA also contains provisions for what occurs when a Contractor or a subcontractor fails to make required payments into the benefit funds, including potentially the direct payment by the City to the benefit fund of monies owed and corresponding withholding of payments to the Contractor. See PLA Article 11, Section 2. The City strongly advises Contractors to read these provisions carefully and to include appropriate provisions in subcontracts addressing these possibilities.

This Contract is subject to the apprenticeship requirements of Labor Law §222 and to apprenticeship requirements established by the Department pursuant to Labor Law §816-b. Please be advised that the involved trades have apprenticeship programs that meet the statutory requirements of Labor Law 222(e) and the requirements set by the Department pursuant to Labor Law §816-b, Contractors and subcontractors who agree to perform the Work pursuant to the PLA are participating in such apprenticeship programs within the meaning of Labor Law §222(e) and the Department's directive.

If this Contract is subject to the Minority-Owned and Women-Owned Business Enterprise ("M/WBE") program implemented pursuant to New York City Administrative Code §6-129, the specific requirements of M/WBE participation for this Contract are set forth in Schedule B entitled the "Subcontractor Utilization Plan," and are detailed in a separate Notice to Prospective Contractors included with this bid package. If such requirements are included with this Contract, the City strongly advises Contractors to read those provisions, as well as PLA Article 4, Section 2(C), carefully. A list of certified M/WBE firms may be obtained from the Department of Small Business Services (DSBS) website at www.nyc.gov/getcertified, by emailing DSBS at MWBE@sbs.nyc.gov, by calling the DSBS certification hotline at (212) 513-6311, or by visiting or writing DSBS at 110 William St., 7th floor, New York, New York, 10038.

The local collective bargaining agreements (CBAs) that are incorporated into the PLA as PLA Schedule A Agreements are available on computer disk from the Department's Contract Officer upon the request of any prospective bidder. Please note that the "PLA Schedule A" is distinct from the Department's Schedule A that is a part of this invitation for bids.

A contact list for the participating unions is set forth after the FAQs.

Below are answers to frequently asked questions (FAQs) about this PLA:

1. **Q.** Does a Contractor need to be signatory with the unions in the NYC Building and Construction Trades Council in order to bid on projects under the PLA?
   A. No, any contractor may bid by signing and agreeing to the terms of the PLA. The contractor need not be signatory with these unions by any other labor agreement or for any other project.

2. **Q.** Does a Contractor agreeing to the PLA and signing the Letter of Assent create a labor agreement with these unions outside of the project covered by the PLA?
   A. No, the PLA applies only to those projects that the Contractor agrees to perform under the PLA and makes no labor agreement beyond those projects.

3. **Q.** Do the provisions of the PLA apply equally to subcontractors as well as contractors and how does the PLA affect the subcontractors that a bidder may utilize on the project?
   A. Yes, the PLA applies to subcontractors and all subcontractors must agree to become party to the PLA. See PLA Art. 2, Sec. 8. Subject to the Department's approval of subcontractors pursuant to Article 17 of the Standard Construction Contract, a Contractor may use any subcontractor, union or non-union, as long as the subcontractor signs and agrees to the terms of the PLA.

4. **Q.** Are bidders required to submit Letters of Assent signed by proposed subcontractors with their bid in order to be found responsive?
   A. No, bidders do not have to submit signed Letters of Assent from their subcontractors with their bid. Subcontractors, however, will be required to sign the Letter of Assent prior to being approved by the Department.

5. **Q.** May a Contractor or subcontractor use any of its existing employees to perform this work?
   A. Generally labor will be referred to the Contractor from the respective signatory local unions. See PLA Article 4. However, Contractors and subcontractors may continue to use up to 12% of their existing, qualifying labor force for this work, in accordance with the terms of PLA Article 4, Section 2B. Certified M/WBEs for which participation goals are set pursuant to NYC Administrative Code §6-129 that are not signatory to any Schedule A CBAs may use their existing employees for the 2nd, 4th , 6th and 8th employee needed on the job if their contracts are valued at or under $500,000. For contracts valued at above $500,000 but under $1,000,000, such certified M/WBEs may use their own employees for the 2nd, 5th and 8th employees needed on the job in accordance with the provisions of PLA Article 4, Section 2C. If additional workers are needed by these M/WBEs, the additional workers will be referred to the Contractor from the signatory local unions subject to the Contractor's right to meet 12% of the additional needs with its existing, qualifying employees.

6. **Q.** Must the City set M/WBE participation goals for the particular project or contract in order for a certified M/WBE to utilize the provisions of PLA Article 4, Section 2C?
   A. No. PLA Article 4, Section 2(C) specifies what categories of M/WBEs are eligible to take advantage of this provision (i.e., those M/WBEs for which the City is

authorized to set participation goals under §6-129). For purposes of section 2(C), it is not necessary for the project to be subject to §6-129 or for the City to have actually set participation goals for the particular contract or project. The result is the same where a projects receives State funding and therefore is subject to the requirements of Article 15-A of the Executive Law.

7. **Q.** May a Contractor bring in union members from locals that are not signatory unions?
   A. Referrals will be from the respective signatory locals and/or locals listed in Schedule A of the PLA. Contractors may utilize 'traveler provisions' contained in the local collective bargaining agreements (local CBAs) where such provisions exist and/or in accordance with the provisions of PLA Article 4, Section 2.

8. **Q.** Does a non-union employee working under the PLA automatically become a union member?
   A. No, the non-union employee does not automatically become a union member by working on a project covered by the PLA. Non-union employees working under the PLA are subject to the union security provisions (i.e., union dues/agency shop fees) of the local CBAs while on the project. These employees will be enrolled in the appropriate benefit plans and earn credit toward various union benefit programs except in certain circumstances as set forth in the PLA. See PLA Article 4, Section 6 and Article 11.

9. **Q.** When will the agency shop dues payer affiliate workers become eligible for union benefits?
   A. Union benefit plans have their own plan documents that determine eligibility and workers will become eligible for certain benefits at different points in time. Contractors who will have agency shop dues payer affiliate workers should speak with the respective union(s) as to benefit eligibility thresholds.

10. **Q.** Are all Contractors and subcontractors working under the PLA, including non-union Contractors and Contractors signatory to collective bargaining agreements with locals other than those that are signatories to the PLA, required to make contributions to designated employee benefit funds?
    A. Except in certain circumstances, as described in the following paragraph, Contractors and subcontractors working under the PLA will be required to contribute on behalf of all employees covered by the PLA to established jointly trusteed employee benefit funds designated in the Schedule A CBAs and required to be paid on public works under any applicable prevailing wage law. See PLA Article 11, Section 2. The Agency may withhold from amounts due the Contractor any amounts required to be paid, but not actually paid into any such fund by the Contractor or a subcontractor. See PLA Article 11, Section 2 D.

    Non-union Contractors with bona fide private benefit plans that satisfy the requirements of Labor Law 220 will not be required to pay into union benefit funds for their employees working pursuant to Article 4, Section 2 (B) and (C) ("core" employees) who are already covered under their bona fide private benefit plans. Supplemental benefit funds in excess

of the annualized value of the private benefit plans will be paid to workers as additional wages in compliance with Labor Law 220. At the time of contract award, the Contractor shall make available to the contracting Agency a complete set of plan documents for each private benefit plan into which contributions will be made and/or coverage provided. The Contractor shall also provide certification from a certified public accountant as to the annualized hourly value of such benefits consistent with the requirements of Section 220. See PLA Article 11, Section 2.

11. **Q.** What happens if a Contractor or subcontractor fails to make a required payment to a designated employee benefit fund?
A. The PLA sets forth a process for unions to address a contractor or a subcontractor's failure to make required payments. The process includes potentially the direct payment by the City to the benefit fund of monies owed and the corresponding withholding of payments to the Contractor. See PLA Article 11, Section 2.

Upon notification by a union or fringe benefit fund that a Contractor is delinquent in its payment of benefits and a determination by the Agency that the union or fund has submitted appropriate documentation of such delinquency, the Agency will thereafter require the Contractor to submit cancelled checks or other equivalent proof of payment of benefit contributions with certified payroll reports for work covered by this PLA on which the Contractor is engaged.

The City strongly advises Contractors to read these provisions carefully and to include appropriate provisions in subcontracts addressing these possibilities.

12. **Q.** Does signing on to the PLA satisfy the Apprenticeship Requirements established for this bid?
A. Yes. By agreeing to perform the Work subject to the PLA, the bidder demonstrates compliance with the apprenticeship requirements imposed by this Invitation for Bids.

13. **Q.** Who decides on the number of workers needed?
A. Except as expressly limited by a specific provision of the PLA, a Contractor retains full and exclusive authority for the management of their operations, including the determination as to the number of employees to be hired and the qualifications therefore and the promotion, transfer, and layoff of its employees. See PLA Article 6, Section 1.

14. **Q.** May a contractor discharge a union referral for lack of productivity?
A. Again, except as expressly limited by a specific provision of the PLA, a Contractor retains full and exclusive authority for the management of their operations, including the right to discipline or discharge for just cause its employees. See PLA Article 6, Section 1.

15. **Q.** May a contractor assign a management person to site?

A. Yes. Managers are not subject to the provisions of the PLA, so there is no restriction on management and/or other non-trade personnel, as long as such personnel do not perform trade functions. See Article 3, Section 1.

16. **Q.** Does the PLA provide a standard work day across all the signatory trades?
A. Yes, all signatory trades will work an eight (8) hour day, Monday through Friday with a day shift at straight time as the standard work week. The PLA also permits a Contractor to schedule a four day (within Monday through Friday) work week, ten (10) hours per day at straight time if announced at the commencement of the project. See PLA Article 12, Section 1. This is an example where the terms of the PLA override provisions of the Standard Construction Contract (compare with section 37.2 of the Standard Construction Contract). The standard work week may be reduced to 35 or 37 ½ hours of work in those limited circumstances where the City states in the bid documents that the Contractor will not be given access to the site to accommodate an 8 hour day. The 8 hour, 7 ½ hour or 7 hour work day must be established at the commencement of the project and may not be altered by the Contractor.

17. **Q.** Does the PLA create a common holiday schedule for all the signatory trades?
A. Yes, the PLA recognizes nine (9) common holidays, including Veterans Day. See PLA Article 12, Section 4.

18. **Q.** Does the PLA provide for a standard policy for 'shift work' across all signatory trades?
A. Yes, second and third shifts may be worked with a standard 5% premium pay. In addition, a day shift does not have to be scheduled in order to work the second and third shifts at the 1.05 hourly pay rate. See PLA Article 12, Section 3.

19. **Q.** May the Contractor schedule overtime work, including work on a weekend?
A. Yes, the PLA permits the Contractor to schedule overtime work, including work on weekends. See PLA Article 12, Sections 2, 3, and 5. To the extent that the Agency's approval is required before a Contractor may schedule or be paid for overtime, that approval is still required notwithstanding the PLA language.

20. **Q.** Are overtime payments affected by the PLA?
A. Yes, all overtime pay incurred Monday through Saturday will be at time and one half (1 ½). There will be no stacking or pyramiding of overtime pay under any circumstances. See PLA Article 12, Section 2. Sunday and holiday overtime will be paid according to each trade's CBA.

21. **Q.** Are there special provisions for Saturday work when a day is 'lost' during the week due to weather, power failure or other emergency?
A. Yes, when this occurs the Contractor may schedule Saturday work at weekday rates. See PLA Article 12, Section 5.

22. **Q.** Does the PLA contain special provisions for the manning of Temporary Services?

A. Yes. Where temporary services are required by specific request of the Agency or construction manager, they shall be provided by the Contractor's existing employees during working hours in which a shift is scheduled for employees of the Contractor. The need for temporary services during non-working hours will be determined by the Agency or construction manager. There will be no stacking of trades on temporary services. See PLA Article 15.

23. **Q.** What do the workers get paid when work is terminated early in a day due to inclement weather or otherwise cut short of 8 hours?
A. The PLA provides that employees who report to work pursuant to regular schedule and not given work will be paid two hours of straight time. Work terminated early for severe weather or emergency conditions will be paid only for time actually worked. In other instances where work is terminated early, the worker will be paid for a full day. See PLA Article 12, Sections 6 and 8. The usual reporting pay requirement of two hours for employees who report to their work location pursuant to their regular schedule does not apply when the National Weather Service issues a Weather Advisory and the Contractor speaks to the employee at least four hours before their shift starting time. See PLA Article 12, Section 6.

24. **Q.** Should a local collective bargaining agreement of a signatory union expire during the project will a work stoppage occur on a project subject to the PLA?
A. No. All the signatory unions are bound by the 'no strike' agreement as to the PLA work. Work will continue under the PLA and the otherwise expired local CBA(s) until the new local CBA(s) are negotiated and in effect. See PLA Articles 7 and 19.

25. **Q.** May a Contractor working under the PLA be subject to a strike or other boycott activity by a signatory union at another site while the Contractor is a signatory to the PLA?
A. Yes. The PLA applies ONLY to work under the PLA and does not regulate labor relations at other sites even if those sites are in close proximity to PLA work.

26. **Q.** If a Contractor has worked under other PLAs in the New York City area, are the provisions in this PLA generally the same as the others?
A. While Project Labor Agreements often look similar to each other, and particular clauses are often used in multiple agreements, each PLA is a unique document and should be examined accordingly.

27. **Q.** What happens if a dispute occurs between the Contractor and an employee during the project?
A. The PLA contains a grievance and arbitration process to resolve disputes between the Contractor and the employees. See PLA Article 9.

28. **Q.** What happens if there is a dispute between locals as to which local gets to provide employees for a particular project or a particular aspect of a project?
A. The PLA provides for jurisdictional disputes to be resolved in accordance with the NY Plan. See PLA Article 10. A copy of the NY Plan is available upon request from the

Department. The PLA provides that work is not to be disrupted or interrupted pending the resolution of any jurisdictional dispute. The work proceeds as assigned by the Contractor until the dispute is resolved. See PLA Article 10, Section 3.

29. **Q.** Does the 2015 Renovation PLA contain special provisions for JOCS or task order based Contracts?

A. The PLA does not apply to Task Orders or Work Orders that do not exceed $10,000 issued under JOCS or Requirements Contracts otherwise subject to the PLA. See PLA Article 3, Section 1.

NYC Project Labor Agreements

CONTACT INFORMATION FOR LOCAL UNIONS (Updated May 2016)

BOILER MAKERS LOCAL NO. 5
24 Van Siclen Avenue
Floral Park, NY 11001
Phone: (516) 326-2500
Fax: (516) 326-3435
Business Manager: Steve Ludwigson

BLASTERS, DRILLRUNNERS & MINERS LOCAL NO. 29
43-12 Ditmars Blvd.
Astoria, NY, 11105
Phone: (718) 278-5800
Business Manager: Thomas Russo

BRICKLAYERS LOCAL NO. 1
4 Court Square #1
Long Island City, NY 11101
Phone: (718) 392-0525
Business Manager: Jeramiah Sullivan

CARPENTERS DISTRICT COUNCIL
395 Hudson Street, 9th Fl
New York, New York 10014
Phone: (212) 366-7500
Fax: (212) 675-3140
Business Manager: Joe Geiger
John Sheehy, D.C. Rep.

CEMENT MASONS NO. 780
150-50 14th Rd Suite 4
Whitestone, NY 11357
Phone: (718) 357-3750
Fax: (718) 357-2057
Business Manager: Gino Castingnoli

CONCRETE WORKERS
DISTRICT COUNCIL NO. 16
29-18 35th Avenue
Long Island City, NY 11106
Phone: (718) 392-5077
Fax: (718) 392-5087
Business Manager: Alex Castaldi

DERRICKMEN & RIGGERS LOCAL 197
35-53 24th Street
Long Island City, NY 11101
Phone: (718) 361-6534
Fax: (718) 361-6584
Business Manager: William Hayes
Billhayes197@yahoo.com

DRYWALL TAPERS 1974
265 West 14th Street
New York, NY 10011
Phone: (212) 242-8500
Fax: (212) 242-2356
Business Manager: Sal Marsala

ELECTRICAL LOCAL NO. 3
158-11 Harry Van Arsdale, Jr. Avenue
Flushing, NY 11365
Phone: (718) 591-4000
Fax: (718) 380-8998
Business Manager: Chris Erickson
Raymond Melville, Asst. Bus. Mgr.
Construction

ELEVATOR CONSTRUCTORS NO. 1
47-24 27th Avenue
Long Island City, NY 11101
Phone: (718) 767-7004
Fax: (718) 767-6730
Business Manager: Lenny Legotte
llegotte@localoneiuec.com

ENGINEERS LOCAL NO. 14
141-57 Northern Boulevard
Flushing, NY 11354
Phone: (718) 939-0600
Fax: (718) 939-3131
Business Manager: Edwin Christian

ENGINEERS NO. 15, 15A, 15B, 15C, 15D
44-40 11th Street
Long Island City, NY 11101
Phone: (212) 929-5327
Business Manager: Tom Callahan

ENGINEERS NO. 30
16-16 Whitestone Expressway
Whitestone, NY 11357
Phone: (718) 847-8484
Fax: (718) 850-0524
Business Manager: William Lynn

ENGINEERS No. 94
331-337 West 44th Street
New York, NY 10036
Phone: (212) 245-7040
Fax: (212) 245-7886
Business Manager: Kuba Brown
kubabrown@local94.com

GLAZIERS NO. 1087
45 West 14th Street
New York, NY 10011
Phone: (212) 924-5200
Fax: (212) 255-1151
Business Manager: Steve Birmingham

HEAT & FROST INSULATORS
AND ALLIED WORKERS
LOCAL UNION NO. 12
35-53 24th Street
Long Island City, NY 11101
Phone: (718) 784-3456
Fax: (718) 784-8357
Business Manager: Matty Aracich
matty@insulatorslocal12.com

HEAT & FROST INSULATORS
LOCAL UNION NO. 12A
1536 127th Street
College Point, NY 11356
Phone: (718) 886-7226
Business Manager: Jaime Soto

IRON WORKERS DISTRICT COUNCIL
22 West 46th Street
New York, NY 10036
Phone: (212) 302-1868
Business Manager: James Mahoney
jmahoney@iwintl.org

IRON WORKERS NO. 40 (Manhattan, The Bronx & Staten Island)
451 Park Avenue South
New York, NY 10016
Phone: (212) 889-1320
Fax: (212) 779-3267
Business Manager: Bob Walsh

IRON WORKERS NO. 361 (Brooklyn & Queens)
89-19 97th Avenue
Ozone Park, NY 11416
Phone: (718) 322-1016/17
Fax: (718) 322-1053
Business Manager: Matthew Chartrand

LABORERS LOCAL NO. 78
ASBESTOS & LEAD ABATEMENT
30 Cliff Street
New York, New York 10038
Phone: (212) 227-4803
Fax: (212) 406-1800
Business Manager: Edison Severino

LABORERS, CONSTRUCTION AND
GENERAL BUILDING NO. 79
520 8th Avenue
New York, NY 10018
Phone: (212) 465-7900
Fax: (212- 465-7903
Business Manager: Michael Prohaska

LABORERS NO. 731
34-11 35th Avenue
Astoria, NY 11106
(718) 706-0720
Business Manager: Joseph D'Amato

LATHERS METAL
LOCAL NO. 46
1322 Third Avenue
New York, NY 10021
Phone: (212) 737-0500
Fax: (212) 249-1226
Business Manager: Terrance Moore

MASON TENDERS DIST. COUNCIL
520 8th Avenue
New York, NY 10018
Phone: (212) 452-9400
Fax: (212) 452-9499
Business Manager: Robert Bonanza

METAL POLISHERS
LOCAL UNION NO. 8A-28A
36-18 33rd Street 2nd Fl.
Long Island City, NY 11106
Phone: (718) 361-1770
Fax: (718) 361-1934
Business Manager: Hector Lopez

MILLWRIGHT AND MACHINERY
ERECTORS LOCAL NO. 740
89-07 Atlantic Avenue
Woodhaven, NY 11412
Phone: (718) 849-3636
Fax: (718) 849-0070
Business Manager: Joseph Geiger

ORNAMENTAL IRON WORKERS
NO. 580
501 West 42nd Street
New York, NY 10036
Phone: (212) 594-1662
Fax: (212) 564-2748
Business Manager: Pete Myers

PAINTERS DISTRICT
COUNCIL NO. 9
45 West 14th Street
New York, NY 10011
Phone: (212) 255-2950
Fax: (212) 255-1151
Business Manager: Joseph Azzopardi

PAINTERS STRUCTURAL STEEL
NO. 806
40 West 27th Street
New York, New York 10001
Phone: (212) 447-1838/0149
Fax: (212) 545-8386
Business Manager: Angelo Serse

PAVERS & ROAD BUILDERS
DISTRICT COUNCIL NO. 1
136-25 37th Avenue, Suite 502
Flushing, NY 11354
Phone: (718) 886-3310
Business Manager: Keith Lozcalzo

PLASTERS LOCAL UNION NO. 262
2241 Conner Street
Bronx, NY 10466
Phone: (718) 547-5440
Fax: (718) 547-5435
Business Manager: Michael Hubler

PLUMBERS NO. 1
158-29 Cross Bay Boulevard
Howard Beach, NY 11414
Phone: (718) 738-7500
Fax: (718) 835-0896
Business Manager: John Murphy

PRIVATE SANITATION
LOCAL NO. 813
45-18 Court Square, Suite 600
Long Island City, NY 11101
Phone: (718) 937-7010 ext. 244
Fax: (718) 937-7003
Business Manager: Sean Campbell

ROOFERS & WATERPROOFERS NO. 8
12-11 43rd Avenue
Long Island City, NY 11101
Phone: (718) 361-1169
Fax (718) 361-8330
Business Manager: Nick Siciliano

SHEET METAL WORKERS
LOCAL NO. 28
MANHATTAN OFFICE
500 Greenwich Street
New York, NY 10013
Phone: (212) 941-7700
Fax: (212) 226-0304
Business Manager: Kevin Connors

SHEET METAL WORKERS
LOCAL 137
21-42 44th Drive
Long Island City, NY 11101
Phone: (718) 937-4514
Fax: (718) 937-4113
Business Manager: Dante Dano

STEAMFITTERS LOCAL UNION
NO. 638
32-32 48th Avenue
Long Island City, NY 11101
Phone: (718) 392-3420
Fax: (718) 784-7285
Business Manager: Bob Bartels

TEAMSTERS LOCAL UNION 282
2500 Marcus Avenue
Lake Success, NY 11042
Phone: (516) 488-2822
Fax: (516) 488-4895
Business Manager: Tom Gesauldi

TEAMSTERS LOCAL UNION 814
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Long Island City, NY 11101
Phone: (718) 609-6407
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Business Manager: Jason Ide

TILE, MARBLE & TERRAZO B.A.C.
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ATTACHMENT B

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

- **NOTICE TO PROSPECTIVE CONTRACTORS**
- **SCHEDULE B**

NOTICE TO ALL PROSPECTIVE CONTRACTORS

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

ARTICLE I. M/WBE PROGRAM

Section 6-129 of the Administrative Code of the City of New York ("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.

References to MBEs or WBEs shall also include such businesses certified pursuant to the executive law where credit is required by section 311 of the New York City Charter or other provision of law.

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 1 to this Contract (see Page 1, Line 1 Total Participation Goals) or will be set forth on Schedule B, Part 1 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 DSBS 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 2 (see Pages1-2) 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; (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; as well as the name, addresses, and telephone numbers of the M/WBE subcontractors if required by the solicitation; and (d) the prospective contractor's required certification and affirmations. 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 2 (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 non-responsive.

(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 2 (see Pages 1-2) 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; (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; as well as the name, addresses, and telephone numbers of the M/WBE subcontractors if required by the solicitation; and (d) the prospective contractor's required certification and affirmations. 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 2). A SCHEDULE B SUBMITTED BY THE BIDDER/PROPOSER WHICH DOES NOT INCLUDE THE VENDOR CERTIFICATION AND REQUIRED AFFIRMATIONS WILL BE DEEMED TO BE NON-RESPONSIVE, UNLESS A FULL WAIVER OF THE PARTICIPATION GOALS IS GRANTED (SCHEDULE B, PART 3). 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 multi-year 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 city-certified MBE and WBE firms may be obtained from the DSBS website at www.nyc.gov/buycertified, by emailing DSBS at buyer@sbs.nyc.gov, by calling (212) 513-6451, or by visiting or writing DSBS at One Liberty Plaza ., New York, New York, 10006, 11th floor. Eligible firms that have not yet been certified may contact DSBS in order to seek certification by visiting www.nyc.gov/getcertified, emailing MWBE@sbs.nyc.gov, or calling the DSBS certification helpline at (212) 513-6311. A firm that is certified as both an MBE and a WBE may be counted either toward the goal for MBEs or the goal for WBEs, but not both. No credit shall be given for participation by a graduate MBE or graduate WBE, as defined in Section 6-129(c)(20).

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

information of each subcontractor that is an MBE or WBE, the work performed by, and the dates and amounts paid to each.

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

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

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

(b) To apply for a full or partial waiver of the **Participation Goals**, a bidder, proposer, or contractor, as applicable, must complete Part 3 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 Contact Person listed in Schedule B, Part 1**. **Full or partial waiver requests that are received later than seven (7) calendar days prior to the date and time the bids, proposals, or Task Orders are due may be rejected as untimely**. Bidders, proposers, or contractors, as applicable, who have submitted timely 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 the Contractor was required to identify in its bid or proposal the MBEs and/or WBEs they intended to use in connection with the performance of the Contract or Task Order, substitutions to the identified firms may only be made with the approval of the Agency, which shall only be given when the Contractor has proposed to use a firm that would satisfy the **Participation Goals** to the same extent as the firm previously identified, unless the Agency determines that the Contractor has established, with appropriate documentary and other evidence, that it made reasonable, good faith efforts. In making such determination, the Agency shall require evidence of the efforts listed in Section 11(a) above, as applicable, along with any other relevant factors.

13. 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.

14. 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.

15. 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 a **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 a **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.

Mayor's Office of Contract Services

SCHEDULE B – M/WBE Utilization Plan

Part 1: M/WBE Participation Goals

Contract Overview (To be completed by contracting agency)

APT E-Pin# 07220B0001 FMS Project ID#

Project Title North Infirmary Command (NIC) Main Building Roof Replacement Agency PIN#

Contracting Agency Bid/Proposal Response Date

Agency Address City East Elmhurst State NY ZIP 11370

Contact Person LacyAnn Dunkley Title M/WBE Compliance Officer

Telephone 718-546-0766 Email lacyann.dunkley@doc.nyc.gov

Project Description (attach additional pages if necessary)

To provide construction for the Roof Replacement at the North Infirmary Command (NIC) Main Building located at Rikers Island

Bidder or proposer ☒ is required OR ☐ is not required to specifically identify the contact information of all M/WBE firms they intend to use as a subcontractor on this contract, including the M/WBE vendor name, address and telephone number in the space provided below in Part 2 Section 4.

M/WBE Participation Goals for Services

Enter the percentage amount for each category or for an unspecified Goal.

Prime Contract Industry: construction

Category and Breakdown:

Unspecified 15.00 %

Black American %

Hispanic American %

Asian American %

Women %

Total Participation Goals 15.00 %

Line 1

Part 2: M/WBE Participation Plan

(To be completed by the bidder/proposer unless granted a full waiver, which must be submitted with the bid/proposal in lieu of this form)

Section 1: Prime Contractor Contact Information

Tax ID# FMS Vendor ID#

Business Name Contact Person

Business Address City State ZIP

Telephone Email

Section 3: Contractor M/WBE Utilization Plan

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 in the panels in Section 2, 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 in the panels in Section 2, 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 in the panels in Section 2, as applicable.

Section 2: M/WBE Utilization Goal Calculation

Prime Contractor Adopting Agency Participation Goals

For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Agency M/WBE Participation Goals.

Total Bid/Proposal Value $

multiplied by x

Total Participation Goals %

(Line 1 above)

Calculated M/WBE Participation Amount $

Line 2

OR

Prime Contractor With Partial Waiver Approval Adopting Revised Participation Goals

For Prime Contractors (including Qualified Joint Ventures and M/WBE firms) adopting Revised M/WBE Participation Goals.

Total Bid/Proposal Value $

multiplied by x

Total Revised Participation Goals %

Calculated M/WBE Participation Amount $

Line 3

Tax ID#_____ APT E-Pin#_____

Section 4: 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 a brief description of the type(s) and dollar value of subcontracts for all services you plan to subcontract if awarded this contract, along with the anticipated start and end dates for such subcontracts. For each item, indicate whether the work is designated for participation by an M/WBE. Where the contracting agency's solicitation has indicated a requirement that the bidder or proposer specifically identify the contact information of all M/WBEs they intend to use on this contract, vendors must also include the M/WBE vendor name, address and telephone number in the space provided below. Use additional sheets if necessary.

	Description of Work	Start Date (MM/YY)	End Date (MM/YY)	Planned $ Amount	Designated for M/WBE Y	Designated for M/WBE N	M/WBE Vendor Name	M/WBE Address	M/WBE Telephone
1.		/	/	$	☐	☐			( ) -
2.		/	/	$	☐	☐			( ) -
3.		/	/	$	☐	☐			( ) -
4.		/	/	$	☐	☐			( ) -
5.		/	/	$	☐	☐			( ) -
6.		/	/	$	☐	☐			( ) -
7.		/	/	$	☐	☐			( ) -
8.		/	/	$	☐	☐			( ) -
9.		/	/	$	☐	☐			( ) -
10.		/	/	$	☐	☐			( ) -

Section 5: 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_____

NYC Mayor's Office of Contract Services

SCHEDULE B – Part 3

Request for Waiver of M/WBE Participation Requirement

Contract Overview

Tax ID#_____ FMS Vendor ID#_____

Business Name_____ Contact Name_____

Email_____ Telephone_____

Contracting Agency_____

APT E-Pin#_____ Bid/Proposal Due Date_____

M/WBE Participation Goals for Services

Defined by AGENCY in bid/ solicitation documents
Percent of the total contract value to be subcontracted to M/WBE vendors for services and/or credited to an M/WBE Qualified Joint Venture.

Unspecified _____ %

Black American _____ %

Hispanic American _____ %

Asian American _____ %

Women _____ %

Total Participation Goals _____ %

Proposed by VENDOR seeking waiver
Percent of the total contract value anticipated in good faith by the bidder/ proposer to be subcontracted to M/WBE businesses for services. Or if M/WBE Qualified Joint Venture, percent of total contract value anticipated to be credited to M/WBE vendor(s).

Unspecified _____ %

Black American _____ %

Hispanic American _____ %

Asian American _____ %

Women _____ %

Total Participation Goals _____ %

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. Identify your subcontracting plan in the vendor certification section below.

☐ Vendor has other legitimate business reasons for proposing the M/WBE Participation Goal requested here. Explain under separate cover.

Vendor Contract History

Using the attached Excel template, list all contracts (for City and Non-City work) performed within the last 3 years and provide the requested information for each contract.

From the list of all contracts, provide reference information below for the 5 most relevant contracts in size, scale and scope (performed for New York City or any other entity) to the bid or proposal for which you are submitting this waiver request. Provide the requested information for each subcontract awarded during the life of the listed reference contract.

Please make sure to highlight the 5 reference contracts provided below among the comprehensive list of all your contract awards within the attached Excel template.

Reference 1

Agency/Organization_____ Contract #_____

Reference Contact_____ Telephone_____ Email_____

Contract Start Date _____ Contract End Date_____ Total Contract Value $_____

Prime Contract description

Did the vendor perform as a Prime Contractor or as a Subcontractor? ☐ Prime Contractor ☐ Subcontractor

Was the Prime Contract subject to any Goals? ☐ City M/WBE Goals ☐ State Goals ☐ Federal Goals ☐ No Applicable Goals

Did the Prime Contractor meet Goal requirements? ☐ Yes ☐ No ☐ N/A

If the Prime Contractor did not meet Goal requirements or contract is still ongoing, please explain

If you performed as the Prime Contractor, please provide a description and value of all work subcontracted to other vendors.

_____ $_____

_____ $_____

_____ $_____

_____ $_____

_____ $_____

_____ $_____

_____ $_____

_____ $_____

Percentage of total contract value subcontracted to other vendors _____ %

If you performed as the Subcontractor, please provide a description and value of work areas you self-performed.

_____ $_____

Reference 2

Agency/Organization _____ Contract # _____

Reference Contact _____ Telephone _____ Email _____

Contract Start Date _____ Contract End Date _____ Total Contract Value $ _____

Prime Contract description

Did the vendor perform as a Prime Contractor or as a Subcontractor? ☐ Prime Contractor ☐ Subcontractor

Was the Prime Contract subject to any Goals? ☐ City M/WBE Goals ☐ State Goals ☐ Federal Goals ☐ No Applicable Goals

Did the Prime Contractor meet Goal requirements? ☐ Yes ☐ No ☐ N/A

If the Prime Contractor did not meet Goal requirements or contract is still ongoing, please explain

If you performed as the Prime Contractor, please provide a description and value of all work subcontracted to other vendors.

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

Percentage of total contract value subcontracted to other vendors _____ %

If you performed as the Subcontractor, please provide a description and value of work areas you self-performed.

_____ $ _____

Reference 3

Agency/Organization _____ Contract # _____

Reference Contact _____ Telephone _____ Email _____

Contract Start Date _____ Contract End Date _____ Total Contract Value $ _____

Prime Contract description

Did the vendor perform as a Prime Contractor or as a Subcontractor? ☐ Prime Contractor ☐ Subcontractor

Was the Prime Contract subject to any Goals? ☐ City M/WBE Goals ☐ State Goals ☐ Federal Goals ☐ No Applicable Goals

Did the Prime Contractor meet Goal requirements? ☐ Yes ☐ No ☐ N/A

If the Prime Contractor did not meet Goal requirements or contract is still ongoing, please explain

If you performed as the Prime Contractor, please provide a description and value of all work subcontracted to other vendors.

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

Percentage of total contract value subcontracted to other vendors _____ %

If you performed as the Subcontractor, please provide a description and value of work areas you self-performed.

_____ $ _____

Reference 4

Agency/Organization _____ Contract # _____

Reference Contact _____ Telephone _____ Email _____

Contract Start Date _____ Contract End Date _____ Total Contract Value $ _____

Prime Contract description

Did the vendor perform as a Prime Contractor or as a Subcontractor? ☐ Prime Contractor ☐ Subcontractor

Was the Prime Contract subject to any Goals? ☐ City M/WBE Goals ☐ State Goals ☐ Federal Goals ☐ No Applicable Goals

Did the Prime Contractor meet Goal requirements? ☐ Yes ☐ No ☐ N/A

If the Prime Contractor did not meet Goal requirements or contract is still ongoing, please explain

If you performed as the Prime Contractor, please provide a description and value of all work subcontracted to other vendors.

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

Percentage of total contract value subcontracted to other vendors _____ %

If you performed as the Subcontractor, please provide a description and value of work areas you self-performed.

_____ $ _____

Reference 5

Agency/Organization _____ Contract # _____

Reference Contact _____ Telephone _____ Email _____

Contract Start Date _____ Contract End Date _____ Total Contract Value $ _____

Prime Contract description

Did the vendor perform as a Prime Contractor or as a Subcontractor? ☐ Prime Contractor ☐ Subcontractor

Was the Prime Contract subject to any Goals? ☐ City M/WBE Goals ☐ State Goals ☐ Federal Goals ☐ No Applicable Goals

Did the Prime Contractor meet Goal requirements? ☐ Yes ☐ No ☐ N/A

If the Prime Contractor did not meet Goal requirements or contract is still ongoing, please explain

If you performed as the Prime Contractor, please provide a description and value of all work subcontracted to other vendors.

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

_____ $ _____

Percentage of total contract value subcontracted to other vendors _____ %

If you performed as the Subcontractor, please provide a description and value of work areas you self-performed.

_____ $ _____

Vendor Certification

Identify/list all the work areas you intend on subcontracting on the current anticipated contract for which you are submitting this waiver request.

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. I further affirm that the work that I did not list as work that will be subcontracted on this contract for which I am submitting this waiver request is work that I have performed on past contracts and will not subcontract if awarded this contract.

Signature _____ Date _____

Print Name _____ Title _____

Approvals (for Agency completion only)

ACCO Signature _____ Date _____

CCPO Signature _____ Date _____

Waiver Determination

☐ Full Waiver Approved

☐ Waiver Denied

☐ Partial Waiver Approved

Revised Participation Goal _____ %

ATTACHMENT C

CONSTRUCTION EMPLOYMENT REPORT

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

CONSTRUCTION EMPLOYMENT REPORT

GENERAL INFORMATION

1. Your contractual relationship in this contract is: Prime contractor____ Subcontractor____

1a. Are M/WBE goals attached to this project? Yes ____ No ____

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

___Minority Owned Business Enterprise
___Women Owned Business Enterprise
___Disadvantaged Business Enterprise
___Locally Based Business Enterprise
___Emerging Business Enterprise

2a. If you are certified as an **MBE**, **WBE**, **LBE, EBE** or **DBE**, what city/state agency are you certified with? _____ Are you DBE certified? Yes ____ No ____

3. Please indicate if you would like assistance from SBS in identifying certified M/WBEs for contracting opportunities: Yes___ No___

4. Is this project subject to a project labor agreement? Yes ____ No ____

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

6. Are you a Veteran owned company? Yes ____ No ____

PART I: CONTRACTOR/SUBCONTRACTOR INFORMATION

7. _____
Employer Identification Number or Federal Tax I.D. Email Address

8. _____
Company Name

9. _____
Company Address and Zip Code

10. _____
Chief Operating Officer Telephone Number

11. _____
Designated Equal Opportunity Compliance Officer Telephone Number
(If same as Item #10, write "same")

12. _____
Name of Prime Contractor and Contact Person
(If same as Item #8, write "same")

13. Number of employees in your company: _____

14. Contract information:

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

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

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

(g) Description and location of proposed contract:

_____

_____

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

If yes, attach a copy of certificate.

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

If yes, attach a copy of certificate.

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

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

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

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

If yes,

(a) Name and address of OFCCP office.

_____

_____

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

If yes, attach a copy of such certificate.

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

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

(d) Were any deficiencies found? Yes___ No___

If yes, attach a copy of such findings.

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

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

PART II: DOCUMENTS REQUIRED

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

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

___ (b) Disability, life, other insurance coverage/description

___ (c) Employee Policy/Handbook

___ (d) Personnel Policy/Manual

___ (e) Supervisor's Policy/Manual

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

___ (g) Collective bargaining agreement(s).

___ (h) Employment Application(s)

___ (i) Employee evaluation policy/form(s).

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

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

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

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

_____
_____

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

If yes, is the medical examination given:

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

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

_____
_____

24. Do you have a written equal employment opportunity (EEO) policy? Yes___ No___

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

_____
_____

25. Does the company have a current affirmative action plan(s) (AAP)
_____Minorities and Women
_____Individuals with handicaps
_____Other. Please specify _____

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

If yes, please attach a copy of this policy.

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

27. Has any employee, within the past three years, filed a complaint pursuant to an internal grievance procedure or with any official of your firm with respect to equal employment opportunity? Yes___ No___

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

28. Has your firm, within the past three years, been named as a defendant (or respondent) in any administrative or judicial action where the complainant (plaintiff) alleged violation of any anti-discrimination or affirmative action laws? Yes___ No___

If yes, attach a log. See instructions.

29. Are there any jobs for which there are physical qualifications? Yes___ No___

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

30. Are there any jobs for which there are age, race, color, national origin, sex, creed, disability, marital status, sexual orientation, or citizenship qualifications? Yes___ No___

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

SIGNATURE PAGE

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

_____

Contractor's Name

_____

Name of person who prepared this Employment Report Title

_____

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

_____

Telephone Number

_____

Signature of authorized official Date

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

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

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

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

Only original signatures accepted.

Sworn to before me this _____ day of _____ 20 _____

_____

Notary Public Authorized Signature Date

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

1. Do you plan to subcontractor work on this contract? Yes___ No___

2. If yes, complete the chart below.

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

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

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

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

FORM B: PROJECTED WORKFORCE

TRADE CLASSIFICATION CODES

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

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

_____

_____

FORM 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					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)?

_____

_____

FORM C: CURRENT WORKFORCE

TRADE CLASSIFICATION CODES

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

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: _____

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)?

_____

_____

FOR OFFICIAL USE ONLY: File No._____

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)?

_____

_____

FOR OFFICIAL USE ONLY: File No._____

ATTACHMENT D

Subcontractor Notices and Utilization Form

ATTACHMENT D

Subcontractor Notices and Utilization Form

SUB-CONTRACTING COMPLIANCE NOTICE

Notice for Bidders:

As of March 2013 the City has implemented a new web based subcontractor reporting system through the City's Payee Information Portal (PIP), available at www.nyc.gov/pip. 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 that site. Additional assistance with PIP may be received by emailing the Financial Information Services Agency Help Desk at pip@fisa.nyc.gov.

In order to obtain subcontractor approval under Article 11 of Part D, section 3.02 of Appendix A or Article 17 of the Standard Construction Contract and PPB Rule §4-13, Contractor is required to list the subcontractor in the system. For each subcontractor listed, Contractor is required to provide the following information: maximum contract value, description of subcontractor work, start and end date of the subcontract and identification of the subcontractor's industry. 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 Agency 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. For construction contracts, the provisions of Article 15 of the Standard Construction Contract shall govern the issue of liquidated damages. Contractor hereby agrees to these provisions.

2. CITY OF NEW YORK

4. SUBCONTRACTOR APPROVAL FORM

For subcontracts to be approved before contract registration

Column on left indicates whom that section is to be completed by

B. AGENCY

C. PRIME CONTRACT INFORMATION

Agency:	**Unit/Div:**
PIN:	
Contract Description:	

D. PRIME CONTRACTOR

E. PRIME CONTRACTOR IDENTIFICATION

Name:	EIN/SSN:

1. SUBCONTRACTOR INFORMATION

Name:	PIP Vendor #:	
*Phone:	*Fax:	
*Address:	*City:	*State/Zip:
*EIN/SSN:	*E-Mail:	
Subcontract Description:		
Approx Subcontract Value:$	Approx Start Date __/__/__	Approx End Date __/__/__

Subcontractor is DSBS-certified as: M/WBE ☐ EBE ☐ or LBE ☐ (check all that apply & note status below)

YES☐	Application Pending☐	Intends to Apply☐	NO☐

Prime Contractor Certification: I hereby affirm that the information supplied is true and correct.

Signature _____ Title _____

Print Name _____ Date _____

Email _____ Phone _____

2. AGENCY

3. AGENCY PRELIMINARY REVIEW

PLEASE SEE PAGE 2 FOR INSTRUCTIONS

Agency Preliminary Review Completed By: _____ Date _____

1. PASSPort ☐	2. Employment ☐	3. References ☐
4. PLA ☐	5. Apprenticeship ☐	6. Licenses ☐

4. PRIME CONTRACTOR

5. PRIME CONTRACTOR RESPONSE

For each of the boxes checked in the agency preliminary response above, I have informed the Subcontractor of all relevant requirements and provided all requested documentation. ☐

*Not required if subcontractor is in PIP

7. CITY OF NEW YORK

9. SUBCONTRACTOR APPROVAL FORM

For subcontracts to be approved after contract registration

Column on left indicates whom that section is to be completed by

G. PRIME CONTRACT INFORMATION

AGENCY

Agency:	**Unit/Div:**
Contract ID:	Prime Vendor:
Prime Contract Description:	
Subcontractor Name:	
Subcontract ID (from PIP):	
Agency Preliminary Review Completed By:_____	Date _____

F.

1. PASSPort ☐	2. Employment ☐	3. References ☐
4. PLA ☐	5. Apprenticeship ☐	6. Licenses ☐

2. PRIME CONTRACTOR RESPONSE

1. RIME

For each of the boxes checked in the agency preliminary response above, I have informed the Subcontractor of all relevant requirements and provided all requested documentation. ☐

After completing the Preliminary Review, the agency will mark, on Page 1, the box for any item requiring follow-up and return the form the to the Prime Vendor. The Prime Vendor should follow the instructions below for each of the boxes checked in the Agency Preliminary Review on Page 1, and return the form to the agency with any required documentation.

1. PASSPort

If Box 1 (PASSPort) is checked, the agency has granted preliminary approval, and determined that the subcontractor is required to enroll in PASSPort with the Mayor's Office of Contract Services. PASSPort enrollment is required where the subcontract dollar amount is ≥ $100,000 or where the aggregate business with the City is ≥ $100,000 during the preceding twelve months. PASSPort enrollment information can be found at http://www.nyc.gov/passport. To get started, click on PASSPort Login on the Homepage, click Login on the next page and then Create Account..

2. Employment

If Box 2 (Employment) is checked, the subcontractor must complete a Division of Labor Services (DLS) Construction Employment Report. A subcontractor selected to perform work on a construction project funded or assisted by the City of New York must complete a DLS Construction Employment Report if the subcontract dollar amount > $750,000.For construction projects funded in whole or in part by the federal government, a DLS Construction Employment Report must be completed if the proposed subcontract value > $10,000.For non-construction goods/services subcontracts > $100,000, employment reports are required for any subcontractor with > 50 employees, and a certificate is required for those with fewer employees.

3. References

If Box 3 (References) is checked, you as the prime contractor must provide references with respect to the subcontractor’s ability to perform, consisting of a list of three completed comparable projects. References shall include a full description/location of each project, scope of work, value of project, and the names and phone numbers of owners, architect or engineer who supervised the work. Please attach your documentation to your response.

4. PLA

If Box 4 (PLA) is checked, you as the prime contractor must obtain signed Letter of Assent from the subcontractor which demonstrates that the subcontractor agrees to the terms of the PLA. Please attach the subcontractor's signed Letter of Assent to your response.

5. Apprenticeship

If Box 5 (Apprenticeship) is checked, you as the prime contractor must provide the agency with proof that the subcontractor maintains an apprenticeship agreement appropriate for the scope of

work to be performed, that the apprenticeship agreement has been registered with and approved by the New York State Commission of Labor, and that the program has three years of current, successful experience in providing career opportunities.

6. Licenses

If Box 6 (Licenses) is checked, you as the prime contractor must document that the subcontractor has all required licenses. Please attach your documentation to your response.

ATTACHMENT E

SECURITY REQUIREMENTS FOR ALL WORK PERFORMED ON RIKER'S ISLAND AND BOROUGH - BASED FACILITIES

CONSTRUCTION CONTRACTS:
SECURITY REQUIREMENTS FOR ALL WORK PERFORMED ON RIKERS ISLAND AND BOROUGH FACILITIES

All contractors and their employees including subcontractors must comply with all security and traffic regulations instituted by the Department of Correction.

For the purpose of these security requirements, subcontractors and their employees shall be considered employees of the contractor. Contractors are responsible for informing all subcontractors of these requirements. When the term contractor is used herein it shall mean contractor and subcontractor.

DOC may perform a background investigation on any employee of the Contractor who enters DOC premises. Contractor agrees to replace any employee deemed a security risk by DOC.

S1: IDENTIFICATION OF EMPLOYEES

1. All contractors and their employees who have authorized business at a DOC facility are required to report for identification and approval at established security control points. For employees working on Rikers Island, the security control point shall be the Construction Registration trailer, located in the parking field directly adjacent to the Queens side of the Rikers Island Bridge. At off island facilities the security control point shall be the facility's front entrance.

2. Each contractor shall furnish its employees with an identification (ID) card. The ID card shall be standard size (approximately 2 inches by 3 inches), laminated and furnished with either a clip or light chain so that it may be secured to the person wearing it. The ID cards shall be sequentially numbered and contain the following:

    - The company name;
    - A recognizable photo of the employee;
    - The employee's printed name and signature; and
    - Expiration date (to be provided by the Department's Construction Management Unit).

3. These ID cards are typically exchanged at a facility for an institutional pass when the employee enters the facility. ID cards/institutional passes must be prominently displayed and secured while the wearer is at a DOC facility. Additionally, identification must be produced upon demand of Department of Correction personnel assigned to various checkpoints, as well as security patrols.

4. The contractor shall furnish the Department's Construction Management Unit (CMU) with a duplicate employee identification card for record keeping purposes.

5. The loss of any ID card or institutional pass must be reported immediately to the nearest officer on duty. The officer shall then promptly notify his/her supervisor who shall then take appropriate action.

6. The contractor must notify the Construction Management Unit of the termination of any of its employees by close of business on the day of the termination.

7. Each contractor shall arrange clearances for all new employees through the Construction Management Unit.

8. Each contractor shall keep the Construction Management Unit informed at all times as to the employment status of its employees.

S2: DELIVERING MATERIAL AND EQUIPMENT TO JOB SITES

1. Contractors must obtain clearance from the Construction Management Unit for all deliveries of material and equipment to Department facilities. Upon receiving approval, the delivery shall be made directly to the loading platform of the facility involved. All employees reporting for business (non-delivery staff) shall arrive at the main entrance of the respective facility and abide by that facility's security procedures.

2.a. To avoid any potential traffic congestion, the Construction Management Unit must receive advance notice of all deliveries of material and heavy equipment to or from Rikers Island that require the use of wide load vehicles.

b. For vehicles delivering material and equipment to Rikers Island also refer to Section S3.

3. All vehicles and material contained therein are subject to random searches and inspections. Searches may involve the use of the Canine Unit.

4. In order to remove any materials or equipment from DOC property, Contractor's supervisors will sign their names on a form "Authorization to Take Materials Out of DOC Facilities"; to certify that the property being taken from the DOC facility is their property only, and not that of the City of New York, except in the event that removal of DOC property is specified by contract documents, which shall be reported to the Construction Management Unit. Such authorization must be received prior to the removal of any material from a Department facility. All materials to be removed are to be scheduled and verified by the Construction Management Unit.

S3: CONTRACTOR'S VEHICLES

1. Drivers of contractor vehicles intending to drive to Rikers Island are directed to report to the security control point (see S1.1) on the date and time of the scheduled delivery. The driver will be required to produce the following current and valid documents to the officer:

   i. A drivers license;

   ii. The vehicle's registration; and

   iii. Vehicle Insurance Card.

   Additionally, all occupants of the vehicle will be required to produce their employee ID cards and some form of government issued identification with photo (i.e., Driver's license) to the officer.

Upon producing the above noted documents to the officer's satisfaction, the officer will issue the driver a vehicle access pass and allow the driver and the occupants of the vehicle access to Rikers Island.

Note: Access to Rikers Island and/or any Department of Correction facility shall be limited to employees of the contractors (as described herein). Employees shall remain on Rikers Island and/or in the facility for only the time needed to carry out their business.

2. The vehicle access pass must be prominently displayed in the windshield inside the vehicle at all times.

3. Vehicles must be secured when not occupied. The vehicle must be turned off and the ignition key must be removed. Additionally, all windows must be closed and doors and trunks locked.

4. Vehicles are not permitted to be left at DOC facilities or on DOC Property at the conclusion of each workday.

5. Vehicle access passes and any issued DOC identification cards/tags must be turned in upon leaving Rikers Island.

6. All vehicles are subject to a search at any time while on Rikers Island or on the grounds of any DOC facility and also will be searched prior to departing Rikers Island and borough facilities. Searches will include a visual inspection of the vehicle's trunk, passenger and/or cargo compartment and the undercarriage. Additionally, all vehicle occupants will be required to produce their identification cards prior to departing Rikers Island or any DOC facility.

S4: TRAFFIC REGULATIONS

1. Drivers shall obey all posted traffic regulations and speed restrictions.

2. Passing vehicles on the Rikers Island Bridge is strictly prohibited.

3. Drivers and the occupants of their vehicles must produce their identification at all checkpoints.

4. Drivers must yield to all emergency vehicles.

5. The maximum weight limit on Rikers Island Bridge is 36 Tons.

S5: SECURITY PROCEDURES AND ISSUES

1. Contractors and their employees must remain within the physical limits of their work area. Contractors are forbidden to move into any other area on the Island unless permission is obtained by the Construction Management Unit. There is no walking permitted on Rikers Island outside of the respective work site or delivery destination.

2. Contractors, subcontractors, and their employees are forbidden to take or bring into a DOC facility, any articles for an inmate.

3. Contractors and their employees shall not contact, or communicate with or give anything to inmates.

4. Contractors and their employees shall not possess on their person any contraband as described in paragraph #9 of this section.

5. Contractors will not place or install any trailers, tool sheds, or security shanties on a job site without approval of the Construction Management Unit after requesting such permission.

6.a. Contractors are responsible for the control and security of all tools, supplies, materials, and equipment used by employees regardless of actual ownership of the items. Trailers, tool sheds, or security shanties that are approved by the Construction Management Unit must be kept secured and locked by the contractor. Tools not in use must be kept under lock and key. Tools used during working hours must be checked into the contractor's storage sheds at the end of working hours.

b. Each contractor shall be responsible for the:

i. Control of all tools used by their employees; and

ii. Prevention of theft of tools by inmates

c. Each contractor shall establish rules to insure such control.

7. The personal vehicles of the contractor's employees are not permitted on Rikers Island or at Borough facility loading docks. No personal vehicles will be permitted to enter a DOC facility (not even for the purpose of carrying tools and equipment).

8.a. Food or lunch packages of the contractor's employees are subject to inspection by Department of Correction custodial personnel.

b. No food services are available to contractor's employees at DOC facilities.

9.a. Arrest and prosecution will follow violations of Sections 205.00, 205.20 and 205.25 of the New York State Penal Law, which are summarized as follows:

SECTION 205.00.3 Contraband means any article or thing which a person confined in a detention facility is prohibited from obtaining or possessing by statute, rule, regulation or order.

SECTION 205.00.4 Dangerous contraband means contraband which is capable of such use as may endanger the safety or security of a detention facility or any person therein.

SECTION 205.20 A person is guilty of promoting prison contraband in the second degree when:

1. He knowingly and unlawfully introduces any contraband into a detention facility.

SECTION 205.25 A person is guilty of promoting prison contraband in the first degree when:

1. He knowingly and unlawfully introduces any dangerous contraband into a detention facility.

b. Contraband is described as any article, the presence of which, within the prison may jeopardize safety, security and good order, or impair the moral and physical welfare of prisoners or employees, or which is prohibited by Rules and Regulations of any institution.

c. Items that are considered contraband include but are not limited to: unauthorized clothing, unattended tools, loose or unattended vehicle keys, knives, and items to be considered as such, prescription and over the counter medicines, spices, alcoholic beverages, money in the possession of inmates, tobacco and tobacco related products (see Section S7), unauthorized written communications to and from inmates that were not processed through the institutional mail rooms, unauthorized packages and carrying cases, as well as unsafe conditions of articles which in the opinion of the Warden would affect the security of the institution.

10. The introduction of electronic/recording devices into any facility without the approval of the Construction Management Unit and the Commanding Officer of that facility is strictly prohibited. Electronic/recording devices are defined as any type of instrument, which is designed to transmit and/or receive telephonic, electronic, digital, cellular or radio communication as well as any type of instrument designed to have sound and/or image recording or capturing capabilities. Examples of electronic/recording devices include but are not limited to: cellular or digital phones, any type of pager, two-way radio, text messaging or modem devices, cameras (digital or film), video recorders and tape or digital recording devices.

11. Any violation of the polices and procedures described herein or of any law, Departmental rule and regulation or institutional policy or procedure may result in criminal prosecution (when applicable) and /or the violating individual being banned from future access to Rikers Island or any Departmental facility.

S6: CONDUCT OF CONTRACTORS AND THEIR EMPLOYEES

1. The New York City Department of Correction has a zero tolerance policy with regard to sexual abuse and sexual threats directed at inmates in its custody. **No one** is allowed to have sexual contact with any person who is incarcerated. Other inmates and staff are prohibited from asking, demanding, forcing or participating in a sexual act with an inmate. This applies to EVERYONE including contractors, vendors, volunteers and employees of other agencies who work in the jails.

2. Rikers Island and all Department of Correction facilities are secure facilities. Any person working within secure areas shall exercise extreme caution at all times. Each contractor and its employees must comply with the following security regulations of the Department of Correction:

   a. Personal identification must be produced on demand by the Department of Correction personnel assigned to checkpoints and security patrols.

   b. Employees must remain in the area of their work assignment.

   c. Employees shall not bring any article, letters, notes or messages on the premises for the purpose of giving them to an inmate.

   d. Employees shall not take any article, letters, notes or messages from an inmate to any other person including another inmate.

e. Employees shall not bring alcoholic beverages (beer, wine or liquor) on the premises at any time. Nor shall employees bring drugs or medicines except those required to stock the first aid cabinets in the contractor's field offices.

f. Contractors and their employees are prohibited from burning and/or dumping any refuse, debris or rubble on Department property.

g. When one person engages in conduct, which constitutes a criminal offense, another person is criminally liable for such conduct when, acting with the culpability required for the commission thereof, he or she solicits, requests, commands, importunes, or intentionally aids such person to engage in such conduct.

S7: SMOKING PROHIBITION

1. The Department of Correction maintains a smoke-free environment in accordance with Local Law 47 of 2002, the Smoke Free Air Act which prohibits smoking in public places and workplaces. The following restrictions and procedures apply to all contractors and their employees.

   a. The use of tobacco related products within any Department facility, office, and vehicle is prohibited;

   b. This prohibition applies to all persons, including staff, inmates, and visitors;

   c. In addition to the smoking restrictions, contractors and their employees are prohibited from introducing any type of tobacco products and lighting agents into any department premises that houses or detains inmates, or utilize inmate work details, including the entire area of Rikers Island.

   For the purpose of this document, tobacco products include but are not limited to cigarettes, cigars, pipes, loose tobacco and rolling paper. Lighting agents include cigarette lighters and matches.

   Securing these items in Construction Management Unit-approved trailers, tool sheds and security shanties located outside the premises or contractor vehicles is permitted.

2. a. Inmates are prohibited from smoking and possessing any form of tobacco products including but not limited to cigarettes, lighting agents, cigars, pipes, loose tobacco and rolling paper.

   b. Any contractor or employee providing an inmate tobacco related products shall be deemed as promoting prison contraband and shall be subject to arrest.

NEW YORK CITY DEPARTMENT OF CORRECTION
Cynthia Brann, Commissioner

Ava B. Rice, Assistant Commissioner
Contracts and Procurement
Agency Chief Contracting Officer
75-20 Astoria Boulevard, Suite 160
East Elmhurst, NY 11370
Office: 718 546-0690
Fax: 718 278-6205

Dated_____

RE: Security Requirements

Dear Vendor:

All current Department of Correction contractors are required to acknowledge receipt and full compliance of the Agency's current "Security Requirements", which is attached to this memorandum. You have ten (10) days from the date of receipt of this letter to return the signed acknowledgement page. Failure to do so may cause the Agency to commence contract termination procedures.

Please contact Ava B. Rice at 718-546-0690 if you have any questions. I may also be reached by email at docacco@doc.nyc.gov. In the interim, I thank you for your full cooperation and compliance.

Yours truly,

Ava B. Rice

I hereby acknowledge receipt of the "Security Requirements".

_____

Vendor Name

_____

Vendor Representative's Name (Print)

_____

Vendor Representative's Signature

_____

Date

Attachment F

Security Clearance Request and Authorization Form

The City of New York Department of Correction		Special Operations Division Rikers Island Security Unit

Form SOD/RISU2 | **CLEARANCE REQUEST AND AUTHORIZATION FORM** | *Effective 3/16/98*

SECTION #1 –

Complete all of the required information in Sections #2, #3 and #4. Submission of a clearance request does not necessitate approval. The command receives Notification of denials via fax and/or in writing. Confirmation of approvals shall be telephonically effected as follows:

Wardens/Commanding Officers or Deputy Wardens shall initiate facility clearance requests. All other commands (bureaus, divisions or units) – Senior Staff Members or Commanding Officers or Executive Officers, only. It is the responsibility of each facility/command to ensure that visitors are advised of the security/safety issues of the Riker's Is. Correctional Complex (e.g.. speed limit, securing vehicles, display of ID/pass, unauthorized items)

Category	*Clearance Location*	*Telephone #*
Vehicle Access/Pass	*Construction Control Trailer*	*(718) 546-1578*
Public Transportation	*Rikers Is. Main Control Bldg.*	*(718) 546-1565*
Problems/Information	*Rikers Is. Clearance Office*	*(718) 546-1539*

SECTION #2 – Command Requests / Escort Information

Date Requested:	Requested By (Print Last and First Name)	Rank/Title:	Shield/ID#	Command	Telephone #:
Uniform Escort Provided? ☐ Yes ☐ No	Escort Officer (Print Last and First Name)	Rank:	Shield #:	Command:	Telephone #: (_ _ _) _ _ _ - _ _ _ _
Command Authorization ☒ Approved ☐ Denied	Sr. Staff/Comm. Off./Dep. Warden/Exec. Off.:	Rank/Title:	Shield/ID #:	Command:	Telephone #:

SECTION #3 – Clearance / Visit Information - COMPANY NAME:

Date of Visit:	Visitors' Full Name	Title	Visitors' Full Name	Title	Vi	Title
	1.		6.		11.	
Estimated Time of Arrival:	2.		7.		12.	
	3.		8.		13.	
Agency / DOC Affiliation	4.		9.		14.	
	5.		10.		15.	

Destinations (Check All That Apply):

☐ ARDC	☒ JATC	☐ Assets Management/Environmental Health	☐ Correction Industries Div./Support Services Unit	☐ Riker's Is Main Control Bldg	☐ Riker's Is Visitor Control Bldg
☐ AMKC	☒ NIC	☐ Bureau Chiefs' Trailer	☐ DGS (Dept. of General Svcs.) Trailer	☐ Transportation Div.	
☐ CIFM/HHP	☐ OBCC/CPSU	☐ Chapel	☐ Dockhouse/Ferryboats (OBCC Annex)	☐ Shore Rd. Trailer (Specify Area/Unit)	
☐ GMDC	☐ RMSC/STEP	☐ Chief of Department's Field Office	☐ Firehouse/K-9 Unit	☐ Special Operations Div. (Specify Area/Unit)	
☐ GRVC	☐ WF/CDU	☐ Construction Management Unit	☐ Powerhouse	☐ Other (Specify **Location**):	

Reason For Visit ☐ Construction ☐ Delivery ☐ Repair ☐ Volunteer Work ☐ Clergy ☒ Meeting ☐ Survey ☐ Other (Specify) _____

Type of Access/Pass ☐ Gate #1 Restricted ☐ East/West Parking Field ☐ Gate #2 Restricted ☐ Gate #1 Unrestricted ☐ Other (Specify) _____

SECTION #4 – Vehicle Information

☐ Chack Here if None *In the event the number of vehicles exceeds four (4), attach additional vehicle information on a 600ar.*

Vehicle	Year	Make	Model	Color	License Plate	State	Vehicle Type				
#1							☐ Car	☒ Van	☐ Bus	☐ Truck	☒ **Other**
#2							☐ Car	☐ Van	☐ Bus	☐ Truck	☐ Other
#3							☐ Car	☐ Van	☐ Bus	☐ Truck	☐ Other
#4							☐ Car	☐ Van	☐ Bus	☐ Truck	☐ Other

SECTION #5 – FOR SOD USE ONLY:

Date Received: / /	Reviewed By (Clearance Officer)	Rank:	Shield #:	*SOD Time Stamp*
Time Received: : hr.	Approved By (SOD/RISU Supervisor)	Rank:	Shield #:	

Final Determination	Type of Access/Pass:		
☐ Approved ☐ Denied	☐ Gate #2 Restricted	☐ Gate #1 Restricted ☐ Gate #1Unrestricted	☐ East/West Parking Field ☐ Other (Specify) _____

Remarks:

ATTACHMENT G

§ 220 PREVAILING WAGE SCHEDULE

LABOR LAW ARTICLE 8 - NYC PUBLIC WORKS

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 New York Labor Law Article 8 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 projects. Prevailing rates are required to be annexed to and form part of the public work contract pursuant to Labor Law section 220 (3).

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 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 work contracts. Contractors are advised to review the Comptroller's Prevailing Wage Schedule before bidding on public work contracts. Contractors with questions concerning trade classifications, prevailing rates or prevailing practices with respect to public work 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 work contracts that have already been awarded may be directed to the Bureau of Labor Law's Classification Unit by calling (212) 669-4443. All callers must have the agency name and contract registration number available when calling with questions on public work contracts. Please direct all other compliance issues to: Bureau of Labor Law, Attn: Wasyl Kinach, P.E., Office of the Comptroller, 1 Centre Street, Room 651, New York, N.Y. 10007; Fax (212) 669-4002.

Pursuant to Labor Law § 220 (3-a) (a), the appropriate schedule of prevailing wages and benefits must be posted in a prominent and accessible place at all public work sites along with the Construction Poster provided on our web site at comptroller.nyc.gov/wages. In addition, covered employees must be given the appropriate schedule of prevailing wages and benefits along with the Worker Notice provided on our web site at the time the public work project begins, and with the first paycheck to each such employee after July first of each year.

This schedule is applicable to work performed during the effective period, unless otherwise noted. Changes to this schedule are published on our web site comptroller.nyc.gov/wages. 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 comptroller.nyc.gov/wages.

Prevailing rates and ratios for apprentices are published in the Construction Apprentice Prevailing Wage Schedule. 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 paid at the apprentice rates. Apprentices who are not so registered must be paid as journey persons.

New York City public work projects 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:

https://www1.nyc.gov/site/mocs/legal-forms/project-labor-agreements.page

All the provisions of Labor Law Article 8 remain applicable to PLA work including, but not limited to, the enforcement of prevailing wage requirements by the Comptroller in accordance with the trade classifications in this schedule; however, we will enforce shift, premium, overtime and other non-standard rates as they appear in a project's pre-negotiated labor agreement.

In order to meet their obligation to provide prevailing supplemental benefits to each covered employee, employers must either:

1) **Provide bona fide fringe benefits which cost the employer no less than the prevailing supplemental benefits rate; or**
2) **Supplement the employee's hourly wage by an amount no less than the prevailing supplemental benefits rate; or**
3) **Provide a combination of bona fide fringe benefits and wage supplements which cost the employer no less than the prevailing supplemental benefits rate in total.**

Although prevailing wage laws do not require employers to provide bona fide fringe benefits (as opposed to wage supplements) to their employees, other laws may. For example, the Employee Retirement Income Security Act, 29 U.S.C. § 1001 et seq., the Patient Protection and Affordable Care Act, 42 U.S.C. § 18001 et seq., and the New York City Paid Sick Leave Law, N.Y.C. Admin. Code § 20-911 et seq., require certain employers to provide certain benefits to their employees. Labor agreements to which employers are a party may also require certain benefits. The Comptroller's Office does not enforce these laws or agreements.

Employers must provide prevailing supplemental benefits at the straight time rate for each hour worked unless otherwise noted in the classification.

Paid Holidays, Vacation and Sick Leave when listed must be paid or provided in addition to the prevailing hourly supplemental benefit rate.

For more information, please refer to the Comptroller's Prevailing Wage Law Regulations in Title 44 of the Rules of the City of New York, Chapter 2, available at comptroller.nyc.gov/wages.

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

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ASBESTOS HANDLER
SEE HAZARDOUS MATERIAL HANDLER

BLASTER

Blaster

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $56.21
Supplemental Benefit Rate per Hour: $46.63

Blaster- Hydraulic Trac Drill

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $50.35
Supplemental Benefit Rate per Hour: $46.63

Blaster - Wagon: Air Trac: Quarry Bar: Drillrunners

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $49.52
Supplemental Benefit Rate per Hour: $46.63

Blaster - Journeyperson

(Laborer, Chipper/Jackhammer including Walk Behind Self Propelled Hydraulic Asphalt and Concrete Breakers and Hydro (Water) Demolition, Powder Carrier, Hydraulic Chuck Tender, Chuck Tender and Nipper)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $43.00
Supplemental Benefit Rate per Hour: $46.63

Blaster - Magazine Keepers: (Watch Person)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $21.50
Supplemental Benefit Rate per Hour: $46.63

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

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

Paid Holidays
Labor Day
Thanksgiving Day

Shift Rates
When two shifts are employed, single time rate shall be paid for each shift. When three shifts are found necessary, each shift shall work seven and one half hours (7 ½), but shall be paid for eight (8) hours of labor, and be permitted one half hour for lunch.

(Local #731)

BOILERMAKER

Boilermaker

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $61.24
Supplemental Benefit Rate per Hour: $45.62
Supplemental Note: For time and one half overtime - $67.98 For double overtime - $90.34

Overtime Description
For Repair and Maintenance work:
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
For New Construction work:
Double time the regular rate after an 8 hour day.
Double time the regular time rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day

Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day

Quadruple time the regular rate for work on the following holiday(s).
Labor Day

Paid Holidays
Good Friday
Day after Thanksgiving
Day before Christmas
Day before New Year's Day

Shift Rates
On jobs requiring two (2) or three (3) shifts, the first shift shall work eight (8) hours at the regular straight-time hourly rate. The second shift shall work eight (8) hours and receive eight hours at the regular straight time hourly rate plus two dollars ($2.00) per hour. The third shift shall work eight (8) hours and receive eight hours at the regular straight time hourly rate plus two dollars and twenty-five cents ($2.25) per hour.

(Local #5)

BRICKLAYER

Bricklayer

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $56.32
Supplemental Benefit Rate per Hour: $33.11

Overtime Description
Time and one half the regular rate after a 7 hour day. If working on a job that is predominately Pointer, Cleaner, Caulker work, then Time and one half the regular rate after an 8 hour day.

Overtime
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day

Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
The second shift wage rate shall be a 15% wage premium with no premium for supplemental benefits. There must be a first shift in order to work a second shift. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, eight hours will be paid at straight time rate for seven hours of work.

(Bricklayer District Council)

CARPENTER - BUILDING COMMERCIAL

Building Commercial

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $54.00
Supplemental Benefit Rate per Hour: $46.88

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

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

Shift Rates

The second shift will receive one hour at the double time rate of pay for the last hour of the shift; eight hours pay for seven hours of work, nine hours pay for eight hours of work. There must be a first shift in order to work a second shift. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

(Carpenters District Council)

CARPENTER - HEAVY CONSTRUCTION WORK
(Construction of Engineered Structures and Building Foundations including all form work)

Heavy Construction Work

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $55.93
Supplemental Benefit Rate per Hour: $52.49

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. When two (2) or more shifts of Carpenters are employed, single time will be paid for each shift.

(Carpenters District Council)

CARPENTER - HIGH RISE CONCRETE FORMS
(Excludes Engineered Structures and Building Foundations)

Carpenter High Rise A

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $50.78
Supplemental Benefit Rate per Hour: $43.44

Carpenter High Rise B

Carpenter High Rise B worker is excluded from high risk operations such as erection decking, perimeter debris netting, leading edge work, self-climbing form systems, and the installation of cocoon systems unless directly supervised by a Carpenter High Rise A worker.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $40.19
Supplemental Benefit Rate per Hour: $16.75

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates

The second shift wage rate shall be 113% of the straight time hourly wage rate. However, any shift beginning after 5:00 P.M. shall be paid at time and one half the regular hourly rate. There must be a first shift in order to work a second shift. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

(Carpenters District Council)

CARPENTER - SIDEWALK SHED, SCAFFOLD AND HOIST

Carpenter - Hod Hoist

(Assisted by Mason Tender)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $51.50
Supplemental Benefit Rate per Hour: $46.15

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

Shift Rates
The second shift will receive one hour at the double time rate of pay for the last hour of the shift; eight hours pay for seven hours of work, nine hours pay for eight hours of work. There must be a first shift in order to work a second shift. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

(Carpenters District Council)

CARPENTER - WOOD WATER STORAGE TANK

Tank Mechanic

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $35.21
Supplemental Benefit Rate per Hour: $21.03

Tank Helper

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $27.97
Supplemental Benefit Rate per Hour: $21.03

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Time and one half the regular rate for work on a holiday plus the day's pay.

Paid Holidays

New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day
Day after Thanksgiving
1/2 day on Christmas Eve if work is performed in the A.M.
Christmas Day
1/2 day on New Year's Eve if work is performed in the A.M.

Vacation

Employed for one (1) year.....one (1) week vacation (40 hours)
Employed for three (3) years.....two (2) weeks vacation (80 hours)
Employed for more than twenty (20) years.....three (3) weeks vacation (120 hours)

SICK LEAVE:
Two (2) sick days after being employed for twenty (20) years.

(Carpenters District Council)

CEMENT & CONCRETE WORKER

Cement & Concrete Worker

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $45.28
Supplemental Benefit Rate per Hour: $29.20
Supplemental Note: $32.70 on Saturdays; $36.20 on Sundays & Holidays

Cement & Concrete Worker - (Hired after 2/6/2016)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $34.80
Supplemental Benefit Rate per Hour: $21.20
Supplemental Note: $22.70 on Saturdays; $24.20 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)

CEMENT MASON

Cement Mason

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $44.97
Supplemental Benefit Rate per Hour: $40.56
Supplemental Note: Supplemental benefit time and one half rate: $71.19; Double time rate: double the base supplemental benefit rate.

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. Four Days a week at Ten (10) hours straight time is allowed.

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 off shift work, (at times other than the regular 7:00 A.M. to 3:30 P.M. work day) a cement mason shall be paid at the regular hourly rate plus a 25% per hour differential.

(Local #780) (BCA)

CORE DRILLER

Core Driller

Effective Period: 7/1/2020 - 6/30/2021

Wage Rate per Hour: **$41.19**
Supplemental Benefit Rate per Hour: **$27.95**

Core Driller Helper

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$32.62**
Supplemental Benefit Rate per Hour: **$27.95**

Core Driller Helper(Third year in the industry)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$29.36**
Supplemental Benefit Rate per Hour: **$27.95**

Core Driller Helper (Second year in the industry)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$26.10**
Supplemental Benefit Rate per Hour: **$27.95**

Core Driller Helper (First year in the industry)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$22.83**
Supplemental Benefit Rate per Hour: **$27.95**

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
When two (2) or more shifts are employed, single time shall be paid for each shift, but those employees employed on a shift other than from 8:00 A.M. to 5:00 P.M. shall, in addition, receive seventy-five cents ($0.75) per hour differential for each hour worked. When three (3) shifts are needed, each shift shall work seven and one-half (7 ½) hours paid for eight (8) hours of labor and be permitted one-half (½) hour for mealtime.

(Carpenters District Council)

DERRICKPERSON AND RIGGER

Derrick Person & Rigger

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $53.13
Supplemental Benefit Rate per Hour: $54.60
Supplemental Note: The above supplemental rate applies for work performed in Manhattan, Bronx, Brooklyn and Queens. $56.02 - For work performed in Staten Island.

Derrick Person & Rigger - Site Work

Assists the Stone Mason-Setter in the setting of stone and paving stone.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $44.02
Supplemental Benefit Rate per Hour: $43.12

Overtime Description
The first two hours of overtime on weekdays and the first seven hours of work on Saturdays are paid at time and one half for wages and supplemental benefits. All additional overtimes is paid at double time for wages and supplemental benefits. Deduct $1.42 from the Staten Island hourly benefits rate before computing overtime.

Overtime
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Washington's Birthday
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

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

(Local #197)

DIVER

Diver (Marine)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $70.80
Supplemental Benefit Rate per Hour: $52.49

Diver Tender (Marine)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $50.34
Supplemental Benefit Rate per Hour: $52.49

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)

DOCKBUILDER - PILE DRIVER

Dockbuilder - Pile Driver

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $55.93
Supplemental Benefit Rate per Hour: $52.49

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

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

(Carpenters District Council)

DRIVER: TRUCK (TEAMSTER)

Driver - Dump Truck

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $41.18
Supplemental Benefit Rate per Hour: $49.65
Supplemental Note: Over 40 hours worked: at time and one half rate - $22.08; at double time rate - $29.44

Driver - Tractor Trailer

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $45.06
Supplemental Benefit Rate per Hour: $50.56
Supplemental Note: Over 40 hours worked: at time and one half rate - $21.61; at double time rate - $28.82

Driver - Euclid & Turnapull Operator

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $45.62
Supplemental Benefit Rate per Hour: $50.56
Supplemental Note: Over 40 hours worked: at time and one half rate - $21.61; at double time rate - $28.82

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

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

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates
Off shift work commencing between 6:00 P.M. and 4:30 A.M. shall work eight and one half (8 1/2) hours allowing for one half hour for lunch and receive 9 hours pay for 8 hours of work.

Driver Redi-Mix (Sand & Gravel)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $39.00
Supplemental Benefit Rate per Hour: $45.52
Supplemental Note: Over 40 hours worked: time and one half rate $16.78; double time rate $22.37

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

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

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
President's Day
Columbus Day
Veteran's Day

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

Paid Holiday
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Thanksgiving Day
Christmas Day

(Local #282)

ELECTRICIAN

(Including installation of low voltage cabling carrying data, video and/or voice on building construction/alteration/renovation projects.)

Electrician "A" (Single Shift / First Shift)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $58.00
Supplemental Benefit Rate per Hour: $58.46

Electrician "A" (Single Shift Overtime after 7 hrs / First Shift Overtime after 8 hrs)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $87.00
Supplemental Benefit Rate per Hour: $62.12

Electrician "A" (Second Shift)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $68.05
Supplemental Benefit Rate per Hour: $66.61

Electrician "A" (Second Shift Overtime after 7.5 hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $102.08
Supplemental Benefit Rate per Hour: $70.91

Electrician "A" (Third Shift)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $76.23
Supplemental Benefit Rate per Hour: $73.47

Electrician "A" (Third Shift Overtime after 7 hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $114.35
Supplemental Benefit Rate per Hour: $78.28

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 two (2) or three (3) shifts are worked for at least five days, the above shift rates apply.

For multiple shifts of temporary light and/or power, the temporary light and/or power employee shall be paid for 8 hours at the straight time rate. For three or less workers performing 8 hours temporary light and/or power the supplemental benefit rate is $25.46.

Electrician "M" (First 8 hours)

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $30.50
Supplemental Benefit Rate per Hour: $24.45
First and Second Year "M" Wage Rate Per Hour: $26.00
First and Second Year "M" Supplemental Rate: $22.06

Electrician "M" (Overtime After First 8 hours)

"M" rated work shall be defined as jobbing: electrical work of limited duration and scope, also consisting of repairs and/or replacement of electrical and tele-data equipment. Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $45.75
Supplemental Benefit Rate per Hour: $26.38
First and Second Year "M" Wage Rate Per Hour: $39.00
First and Second Year "M" Supplemental Rate: $23.70

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

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

(Local #3)

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

Alarm Technician

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $33.90
Supplemental Benefit Rate per Hour: $18.43
Supplemental Note: $16.80 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.

Time and one half the regular rate for Sunday.

Paid Holidays

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

Shift Rates

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

Vacation

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

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

(Local #3)

ELECTRICIAN-STREET LIGHTING WORKER

Electrician - Electro Pole Electrician

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $58.00
Supplemental Benefit Rate per Hour: $60.43

Electrician - Electro Pole Foundation Installer

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $43.16
Supplemental Benefit Rate per Hour: $44.83

Electrician - Electro Pole Maintainer

Effective Period: 7/1/2020 - 6/30/2021

Wage Rate per Hour: $37.11
Supplemental Benefit Rate per Hour: $40.34

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)

ELEVATOR CONSTRUCTOR

Elevator Constructor

Effective Period: 7/1/2020 - 3/16/2021
Wage Rate per Hour: $69.56
Supplemental Benefit Rate per Hour: $37.47

Effective Period: 3/17/2021 - 6/30/2021
Wage Rate per Hour: $72.29
Supplemental Benefit Rate per Hour: $38.29

Overtime Description
For New Construction: work performed after 7 or 8 hour day, Saturday, Sunday or between 4:30pm and 7:00am shall be paid at double time rate.

Existing buildings: work performed after an 8 hour day, Saturday, Sunday or between 5:30pm and 7:00 am shall be paid time and one half.

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

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

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

(Local #1)

ELEVATOR REPAIR & MAINTENANCE

Elevator Service/Modernization Mechanic

Effective Period: 7/1/2020 - 3/16/2021
Wage Rate per Hour: $54.56
Supplemental Benefit Rate per Hour: $37.37

Effective Period: 3/17/2021 - 6/30/2021
Wage Rate per Hour: $56.77
Supplemental Benefit Rate per Hour: $38.19

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

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

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

Paid Holidays

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

Shift Rates

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

Vacation

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

(Local #1)

ENGINEER

Engineer - Heavy Construction Operating Engineer I

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

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $72.93
Supplemental Benefit Rate per Hour: $40.60
Supplemental Note: $73.80 on overtime
Off-Shift Wage Rate: $116.69

Engineer - Heavy Construction Operating Engineer II

Backhoes, Basin Machines, Groover, Mechanical Sweepers, Bobcat, Boom Truck, Barrier Transport (Barrier Mover) & machines of similar nature. Operation of Churn Drills and machines of a similar nature, Stetco Silent Hoist and machines of similar nature, Vac-Alls, Meyers Machines, John Beam and machines of a similar nature, Ross Carriers and Travel Lifts and machines of a similar nature, Bulldozers, Scrapers and Turn-a-Pulls: Tugger Hoists (Used exclusively for handling excavated material); Tractors with attachments, Hyster and Roustabout Cranes, Cherrypickers. Austin Western, Grove and machines of a similar nature, Scoopmobiles, Monorails, Conveyors, Trenchers: Loaders-Rubber Tired and Tractor: Barber Greene and Eimco Loaders and Eimco

Backhoes; Mighty Midget and similar breakers and Tampers, Curb and Gutter Pavers and Motor Patrol, Motor Graders and all machines of a similar nature. Locomotives 10 Tons or under. Mini-Max, Break-Tech and machines of a similar nature; Milling machines, robotic and demolition machines and machines of a similar nature, shot blaster, skid steer machines and machines of a similar nature including bobcat, pile rig rubber-tired excavator (37,000 lbs. and under), 2 man auger.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $70.74
Supplemental Benefit Rate per Hour: $40.60
Supplemental Note: $73.80 on overtime
Off-Shift Wage Rate: $113.18

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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $67.06
Supplemental Benefit Rate per Hour: $40.60
Supplemental Note: $73.80 on overtime
Off-Shift Wage Rate: $107.30

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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $70.40
Supplemental Benefit Rate per Hour: $40.60
Supplemental Note: $73.80 on overtime
Off-Shift Wage Rate: $112.64

Engineer - Heavy Construction Maintenance Engineer II

On Base Mounted Tower Cranes

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $92.76
Supplemental Benefit Rate per Hour: $40.60
Supplemental Note: $73.80 on overtime

Off-Shift Wage Rate: $148.42

Engineer - Heavy Construction Maintenance Engineer III

On Generators, Light Towers

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $46.12
Supplemental Benefit Rate per Hour: $40.60
Supplemental Note: $73.80 on overtime
Off-Shift Wage Rate: $73.79

Engineer - Heavy Construction Maintenance Engineer IV

On Pumps and Mixers including mud sucking

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $47.34
Supplemental Benefit Rate per Hour: $40.60
Supplemental Note: $73.80 on overtime
Off-Shift Wage Rate: $75.74

Engineer - Heavy Construction Service Engineer

Gradalls: Concrete Pumps: Power Houses: Driving Truck Cranes: Driving and Operating Fuel and Grease Trucks.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $63.37
Supplemental Benefit Rate per Hour: $40.60
Supplemental Note: $73.80 on overtime
Off-Shift Wage Rate: $101.39

Engineer - Heavy Construction Service Mechanic

Shovels: Cranes: Draglines: Backhoes: Keystones: Pavers: Trenching Machines: Gunite Machines: Compressors (three (3) or more in Battery): Crawler Cranes- having a straight lattice boom with no attachment or luffing boom, no jib and no auxiliary attachment.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $43.54
Supplemental Benefit Rate per Hour: $40.60
Supplemental Note: $73.80 on overtime
Off-Shift Wage Rate: $69.66

Engineer - Steel Erection Maintenance Engineers

Derrick, Travelers, Tower, Crawler Tower and Climbing Cranes

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $65.31

Supplemental Benefit Rate per Hour: $39.74
Supplemental Note: $72.08 on overtime
Off-Shift Wage Rate: $104.50

Engineer - Steel Erection Oiler I

On a Truck Crane

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $61.05
Supplemental Benefit Rate per Hour: $39.74
Supplemental Note: $72.08 on overtime
Off-Shift Wage Rate: $97.68

Engineer - Steel Erection Oiler II

On a Crawler Crane

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $46.18
Supplemental Benefit Rate per Hour: $39.74
Supplemental Note: $72.08 on overtime
Off-Shift Wage Rate: $73.89

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

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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $62.45
Supplemental Benefit Rate per Hour: $39.74
Supplemental Note: $72.08 on overtime

Engineer - Building Work Maintenance Engineers II

On Pumps, Generators, Mixers and Heaters

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $48.26
Supplemental Benefit Rate per Hour: $39.74
Supplemental Note: $72.08 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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $59.33
Supplemental Benefit Rate per Hour: $39.74
Supplemental Note: $72.08 on overtime

Engineer - Building Work Oilers II

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

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $43.78
Supplemental Benefit Rate per Hour: $39.74
Supplemental Note: $72.08 on overtime

Overtime Description

On jobs of more than one shift, if an Employee fails to report for work through any cause over which the Employer has no control, the Employee on duty will continue to work at the rate of single time.

Overtime

Double time the regular rate after an 8 hour day.

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

Paid Holidays

New Year's Day
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

Shift Rates

When two (2) or more shifts are employed, single time will be paid for each shift.

(Local #15)

ENGINEER - CITY SURVEYOR AND CONSULTANT

Party Chief

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $40.41
Supplemental Benefit Rate per Hour: $22.75
Supplemental Note: Overtime Benefit Rate - $27.25 per hour (time & one half) $31.75 per hour (double time).

Instrument Person

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $33.13
Supplemental Benefit Rate per Hour: $22.75
Supplemental Note: Overtime Benefit Rate - $27.25 per hour (time & one half) $31.75 per hour (double time).

Rodperson

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $28.54
Supplemental Benefit Rate per Hour: $22.75
Supplemental Note: Overtime Benefit Rate - $27.25 per hour (time & one half) $31.75 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
Day after Thanksgiving
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

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

Field Engineer - BC Party Chief

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $65.44
Supplemental Benefit Rate per Hour: $35.12
Supplemental Note: Overtime Benefit Rate - $49.33 per hour (time & one half) $63.54 per hour (double time).

Field Engineer - BC Instrument Person

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $50.83
Supplemental Benefit Rate per Hour: $35.12
Supplemental Note: Overtime Benefit Rate - $49.33 per hour (time & one half) $63.54 per hour (double time).

Field Engineer - BC Rodperson

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $32.84
Supplemental Benefit Rate per Hour: $35.12
Supplemental Note: Overtime Benefit Rate - $49.33 per hour (time & one half) $63.54 per hour (double time).

Overtime Description

Time and one half the regular rate after a 7 hour work and time and one half the regular rate for Saturday for the first seven hours worked, Double time the regular time rate for Saturday for work performed in excess of seven hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

Paid Holidays

New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - FIELD (HEAVY CONSTRUCTION)

(Construction of Roads, Tunnels, Bridges, Sewers, Building Foundations, Engineering Structures etc.)

Field Engineer - HC Party Chief

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $76.22
Supplemental Benefit Rate per Hour: $37.55
Supplemental Note: Overtime benefit rate - $52.85 per hour (time & one half), $68.15 per hour (double time).

Field Engineer - HC Instrument Person

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $55.96
Supplemental Benefit Rate per Hour: $37.55
Supplemental Note: Overtime benefit rate - $52.58 per hour (time & one half), $68.15 per hour (double time).

Field Engineer - HC Rodperson

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $46.94
Supplemental Benefit Rate per Hour: $37.55
Supplemental Note: Overtime benefit rate - $52.85 per hour (time & one half), $68.15 per hour (double time).

Overtime Description

Time and one half the regular rate after an 8 hour day, Time and one half the regular rate for Saturday for the first eight hours worked, Double time the regular time rate for Saturday for work performed in excess of eight hours, Double time the regular rate for Sunday and Double time the regular rate for work on a holiday.

Paid Holidays

New Year's Day
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - FIELD (STEEL ERECTION)

Field Engineer - Steel Erection Party Chief

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $69.15
Supplemental Benefit Rate per Hour: $36.01
Supplemental Note: Overtime benefit rate - $50.54 per hour (time & one half), $65.07 per hour (double time).

Field Engineer - Steel Erection Instrument Person

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $53.88
Supplemental Benefit Rate per Hour: $36.01
Supplemental Note: Overtime benefit rate - $50.54 per hour (time & one half), $65.07 per hour (double time).

Field Engineer - Steel Erection Rodperson

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $36.04
Supplemental Benefit Rate per Hour: $36.01
Supplemental Note: Overtime benefit rate - $50.54 per hour (time & one half), $65.07 per hour (double time).

Overtime Description

Time and one half the regular rate for Saturday for the first eight hours worked.
Double time the regular rate for Saturday for work performed in excess of eight hours.

Overtime

Time and one half the regular rate after an 8 hour day.
Double time the regular rate for Sunday.
Double time the regular rate for work on the following holiday(s).

Paid Holidays

New Year's Day
Lincoln's Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Operating Engineer Local #15-D)

ENGINEER - OPERATING

Operating Engineer - Road & Heavy Construction I

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

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $84.47
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $135.15

Operating Engineer - Road & Heavy Construction II

Backhoes, Power Shovels, Hydraulic Clam Shells, Steel Erection, Moles and machines of a similar nature.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $87.39
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $139.82

Operating Engineer - Road & Heavy Construction III

Mine Hoists (Cranes, etc. when used as Mine Hoists)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $90.15
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $144.24

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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $88.02
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $140.83

Operating Engineer - Road & Heavy Construction V

Pile Drivers & Rigs (working alongside Dock Builder foreperson): Derrick Boats, Tunnel Shovels.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $86.31
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $138.10

Operating Engineer - Road & Heavy Construction VI

Mixers (Concrete with loading attachment), Concrete Pavers, Cableways, Land Derricks, Power Houses (Low Air Pressure Units).

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $82.08
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $131.33

Operating Engineer - Road & Heavy Construction VII

Barrier Movers, Barrier Transport and Machines of a Similar Nature.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $66.62
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $106.59

Operating Engineer - Road & Heavy Construction VIII

Utility Compressors

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $52.08
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $65.21

Operating Engineer - Road & Heavy Construction IX

Horizontal Boring Rig

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $78.15
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: 125.04

Operating Engineer - Road & Heavy Construction X

Elevators (manually operated as personnel hoist).

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $71.97
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $115.15

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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $56.26
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $90.02

Operating Engineer - Road & Heavy Construction XII

All Drills and Machines of a similar nature.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $82.94
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $132.70

Operating Engineer - Road & Heavy Construction XIII

Concrete Pumps, Concrete Plant, Stone Crushers, Double Drum Hoist, Power Houses (other than above).

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $80.38
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $128.61

Operating Engineer - Road & Heavy Construction XIV

Concrete Mixer

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $76.91
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $123.06

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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $52.41
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $83.86

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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $73.53
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $117.65

Operating Engineer - Road & Heavy Construction XVII

On-Site concrete plant engineer, On-site Asphalt Plant Engineer, and Vibratory console.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $74.07
Supplemental Benefit Rate per Hour: $32.95

Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $118.51

Operating Engineer - Road & Heavy Construction XVIII

Tower Crane

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $105.59
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $168.94

Operating Engineer - Paving I

Asphalt Spreaders, Autogrades (C.M.I.), Roto/Mil

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $82.08
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $131.33

Operating Engineer - Paving II

Asphalt Roller

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $80.01
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $128.02

Operating Engineer - Paving III

Asphalt Plants

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $67.92
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $108.67

Operating Engineer - Concrete I

Cranes

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $87.64

Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours

Operating Engineer - Concrete II

Compressors

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $52.80
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours

Operating Engineer - Concrete III

Micro-traps (Negative Air Machines), Vac-All Remediation System.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $70.36
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours

Operating Engineer - Steel Erection I

Three Drum Derricks

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $90.61
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $144.98

Operating Engineer - Steel Erection II

Cranes, 2 Drum Derricks, Hydraulic Cranes, Fork Lifts and Boom Trucks.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $87.12
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $139.39

Operating Engineer - Steel Erection III

Compressors, Welding Machines.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $52.37
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95overtime hours
Off-Shift Wage Rate: $83.79

Operating Engineer - Steel Erection IV

Compressors - Not Combined with Welding Machine.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $49.93
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
Off-Shift Wage Rate: $79.89

Operating Engineer - Building Work I

Forklifts, Plaster (Platform machine), Plaster Bucket, Concrete Pump and all other equipment used for hoisting material.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $69.51
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours

Operating Engineer - Building Work II

Compressors, Welding Machines (Cutting Concrete-Tank Work), Paint Spraying, Sandblasting, Pumps (with the exclusion of Concrete Pumps), All Engines irrespective of Power (Power-Pac) used to drive Auxiliary Equipment, Air, Hydraulic, Jacking System, etc.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $52.21
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours

Operating Engineer - Building Work III

Double Drum

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $79.02
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours

Operating Engineer - Building Work IV

Stone Derrick, Cranes, Hydraulic Cranes Boom Trucks.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $83.68
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours

Operating Engineer - Building Work V

Dismantling and Erection of Cranes, Relief Engineer.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $77.15
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours

Operating Engineer - Building Work VI

4 Pole Hoist, Single Drum Hoists.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $76.35
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours

Operating Engineer - Building Work VII

Rack & Pinion and House Cars

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $60.84
Supplemental Benefit Rate per Hour: $32.95
Supplemental Note: $59.95 overtime hours
For New House Car projects Wage Rate per Hour $48.70

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

When two (2) or more shifts are employed, single time will be paid for each shift.
For Steel Erection Only: Shifts may be worked at the single time rate at other than the regular working hours (8:00 A.M. to 4:30 P.M.) on the following work ONLY: Heavy construction jobs on work below the street level, over railroad tracks and on building jobs.

(Operating Engineer Local #14)

FLOOR COVERER

(Interior vinyl composition tile, sheath vinyl linoleum and wood parquet tile including site preparation and synthetic turf not including site preparation)

Floor Coverer

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $54.00
Supplemental Benefit Rate per Hour: $46.88

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

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Day after Thanksgiving
Day before Christmas
Christmas Day
Day before New Year's Day

Shift Rates

Two shifts may be utilized with the first shift working 8 a.m. to the end of the shift at straight time rate of pay. The wage rate for the second shift consisting of 7 hours shall be paid at 114.29% of straight time wage rate. The wage rate for the second shift consisting of 8 hours shall be paid 112.5% of the straight time wage rate. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

(Carpenters District Council)

GLAZIER
(New Construction, Remodeling, and Alteration)

Glazier

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $46.55
Supplemental Benefit Rate per Hour: $45.34
Supplemental Note: Supplemental Benefit Overtime Rate: $68.03

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

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

Shift Rates
Shifts shall be any 8 consecutive hours after the normal working day for which the Glazier shall receive 9 hours pay for 8 hours worked.

(Local #1281)

GLAZIER - REPAIR & MAINTENANCE

(For the Installation of Glass - All repair and maintenance work on a particular building.)

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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $26.02
Supplemental Benefit Rate per Hour: $23.19

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 rate for work on the following holiday(s).
Time and one half the regular hourly rate after 40 straight time 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
Employees must work at least one day in the payroll week in which the holiday occurs to receive the paid holiday

(Local #1281)

HAZARDOUS MATERIAL HANDLER

(Removal, abatement, encapsulation or decontamination of asbestos, lead, mold, or other toxic or hazardous waste/materials)

Handler

Effective Period: 7/1/2020 - 9/6/2020
Wage Rate per Hour: $37.50
Supplemental Benefit Rate per Hour: $16.95

Effective Period: 9/7/2020 - 6/30/2021
Wage Rate per Hour: $38.05
Supplemental Benefit Rate per Hour: $17.75

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 straight time 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)

HEAT AND FROST INSULATOR

Heat & Frost Insulator

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $62.01
Supplemental Benefit Rate per Hour: $41.16

Overtime Description
Double time shall be paid for supplemental benefits during overtime work.
8th hour paid at time and one half.

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

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day

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

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

Paid Holidays
None

Shift Rates
The first shift shall work seven hours at the regular straight time rate. The second and third shift shall work seven hours the regular straight time hourly rate plus a fourteen percent wage and benefit premium.There must be a first shift to work the second shift, and a second shift to work the third shift. Off-hour jobs in occupied buildings may be worked on weekdays with an increment of one-dollar ($1.00) per hour and eight (8) hours pay for seven (7) hours worked.

(Local #12) (BCA)

HOUSE WRECKER
(TOTAL DEMOLITION)

House Wrecker - Tier A

On all work sites the first, second, eleventh and every third House Wrecker thereafter will be Tier A House Wreckers (i.e. 1st, 2nd, 11th, 14th etc). Other House Wreckers may be Tier B House Wreckers.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $37.18
Supplemental Benefit Rate per Hour: $30.07

House Wrecker - Tier B

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $26.41
Supplemental Benefit Rate per Hour: $22.48

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

Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

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

Paid Holidays
None

(Mason Tenders District Council)

IRON WORKER - ORNAMENTAL

Iron Worker - Ornamental

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $45.65
Supplemental Benefit Rate per Hour: $57.62
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
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates
When two or three shifts are employed on a job, Monday through Friday, the second and third shift are paid eight and one half (8 ½) hours at the straight time rate for seven (7) hours of work, and ten (10) hours at the straight time rate for eight (8) hours of work. When it is not possible to conduct alteration or repair work during regular working hours in a building occupied by tenants, eight hours will be paid at straight time rate for seven hours of work.

(Local #580)

IRON WORKER - STRUCTURAL

Iron Worker - Structural

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $52.70
Supplemental Benefit Rate per Hour: $80.82
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. Four Days a week at Ten (10) hours straight time is allowed.

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

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

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

Shift Rates

Monday through Friday - First Shift: First eight hours are paid at straight time, the 9th & 10th hours are paid at time and a half, double time paid thereafter. Second and third Shifts: First eight hours are paid at time and one-half, double time thereafter. Saturdays: All shifts, first eight hours paid at time and one-half, double time thereafter: Sunday all shifts are paid at double time.

(Local #40 & #361)

LABORER
(Foundation, Concrete, Excavating, Street Pipe Layer and Common)

Laborer

Excavation and foundation work for buildings, heavy construction, engineering work, and hazardous waste removal in connection with the above work. Landscaping tasks in connection with heavy construction work, engineering work and building projects. Projects include, but are not limited to pollution plants, sewers, parks, subways, bridges, highways, etc.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $43.00
Supplemental Benefit Rate per Hour: $46.63

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

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

Paid Holidays
Labor Day
Thanksgiving Day

Shift Rates
When two shifts are employed, single time rate shall be paid for each shift. When three shifts are found necessary, each shift shall work seven and one half hours (7 ½), but shall be paid for eight (8) hours of labor, and be permitted one half hour for lunch.

(Local #731)

LANDSCAPING

(Landscaping tasks, as well as tree pruning, tree removing, spraying and maintenance in connection with Green Infrastructure projects, the planting of street trees and trees in city parks but not when such activities are performed as part of, or in connection with, other construction or reconstruction projects.)

Landscaper (Year 6 and above)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $32.80
Supplemental Benefit Rate per Hour: $16.55

Landscaper (Year 3 - 5)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $31.74
Supplemental Benefit Rate per Hour: $16.55

Landscaper (up to 3 years)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $29.08
Supplemental Benefit Rate per Hour: $16.55

Groundperson

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $29.08
Supplemental Benefit Rate per Hour: $16.55

Tree Remover / Pruner

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $38.14
Supplemental Benefit Rate per Hour: $16.55

Landscaper Sprayer (Pesticide Applicator)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $27.48

Supplemental Benefit Rate per Hour: $16.55

Watering - Plant Maintainer

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $22.12
Supplemental Benefit Rate per Hour: $16.55

Overtime Description
For all overtime work performed, supplemental benefits shall include an additional seventy-five ($0.75) cents per hour.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Time and one half the regular rate for work on a holiday plus the day's pay.

Paid Holidays
New Year's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Shift Rates
Work performed on a 4pm to 12am shift has a 15% differential. Work performed on a 12am to 8am shift has a 20% differential.

(Local #175)

MARBLE MECHANIC

Marble Setter

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $55.35
Supplemental Benefit Rate per Hour: $41.26

Marble Finisher

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $43.37
Supplemental Benefit Rate per Hour: $38.71

Marble Polisher

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $41.41
Supplemental Benefit Rate per Hour: $30.93

Marble Maintenance Finisher

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $25.53
Supplemental Benefit Rate per Hour: $13.46

Overtime Description
Supplemental Benefit contributions are to be made at the applicable overtime rates. Time and one half the regular rate after a 7 hour day or time and one half the regular rate after an 8 hour day - chosen by Employer at the start of the project and then would last for the full duration of the project.

Overtime
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

(Local #7)

MASON TENDER

Mason Tender

Effective Period: 7/1/2020 - 6/30/2021

Wage Rate per Hour: $38.40
Supplemental Benefit Rate per Hour: $31.04

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

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

Paid Holidays
None

Shift Rates
The employer may work two (2) shifts with the first shift at the straight time wage rate and the second shift receiving eight (8) hours paid for seven (7) hours work at the straight time wage rate. When it is not possible to conduct alteration work during regular working hours in a building occupied by tenants, the rule for the second shift will apply.

(Local #79)

MASON TENDER (INTERIOR DEMOLITION WORKER)

Mason Tender Tier A

Tier A Interior Demolition Worker performs all burning, chopping, and other technically skilled tasks related to interior demolition work.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $36.84
Supplemental Benefit Rate per Hour: $24.90

Mason Tender Tier B

Tier B Interior Demolition Worker performs manual work and work incidental to demolition work, such as loading and carting of debris from the work site to an area where it can be loaded in to bins/trucks for removal. Also performs clean-up of the site when demolition is completed.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $26.03
Supplemental Benefit Rate per Hour: $19.22

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

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

Paid Holidays
None

(Local #79)

METALLIC LATHER

Metallic Lather

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $46.25
Supplemental Benefit Rate per Hour: $48.15
Supplemental Note: For time and one half overtime - $59.40 For double overtime - $74.65

Overtime Description
Overtime would be time and one half the regular rate after a seven (7) or eight (8) hours workday, which would be set at the start of the job.

Overtime
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.

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

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

Paid Holidays

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

Shift Rates

Off-shift work outside of normal working hours shall receive straight time rate plus $12 per hour for the first seven (7) or eight (8) hours.

(Local #46)

MILLWRIGHT

Millwright

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $55.70
Supplemental Benefit Rate per Hour: $54.31

Overtime

Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Veteran's 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
Second shift receives the straight time rate of pay plus fifteen (15%) percent allowing for one half hour for a meal. 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%) percent for weekday hours.

(Local #740)

MOSAIC MECHANIC

Mosaic Mechanic - Mosaic & Terrazzo Mechanic

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $50.82
Supplemental Benefit Rate per Hour: $42.73

Mosaic Mechanic - Mosaic & Terrazzo Finisher

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $49.22
Supplemental Benefit Rate per Hour: $42.73

Mosaic Mechanic - Machine Operator Grinder

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $49.22
Supplemental Benefit Rate per Hour: $42.73

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

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Washington's Birthday
Good Friday
Independence Day
Labor Day
Columbus Day

Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

(Local #7)

PAINTER

Painter - Brush & Roller

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $43.00
Supplemental Benefit Rate per Hour: $34.70
Supplemental Note: $40.99 on overtime

Spray & Scaffold / Decorative / Sandblast

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $46.00
Supplemental Benefit Rate per Hour: $34.70
Supplemental Note: $ 40.99 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)

PAINTER - LINE STRIPING (ROADWAY)

Striping - Machine Operator

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $36.00
Supplemental Benefit Rate per Hour: $13.37
Supplemental Note: Overtime Supplemental Benefit rate - $15.00

Lineperson (Thermoplastic)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $40.00
Supplemental Benefit Rate per Hour: $13.37
Supplemental Note: Overtime Supplemental Benefit rate - $15.00

Overtime Description
Time and one half the regular rate for all work in excess of ten (10) straight time hours per day and in excess of forty (40) straight time hours per week.

For Paid Holidays: Employees will only receive Holiday Pay for holidays not worked if said employee worked both the regularly scheduled workday before and after the holiday.

Overtime
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
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Presidential Election Day
Thanksgiving Day
Christmas Day

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.

(Local #1010)

PAINTER - METAL POLISHER

METAL POLISHER

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $31.08
Supplemental Benefit Rate per Hour: $9.59

METAL POLISHER - NEW CONSTRUCTION

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $32.03
Supplemental Benefit Rate per Hour: $9.59

METAL POLISHER - SCAFFOLD OVER 34 FEET

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $34.58
Supplemental Benefit Rate per Hour: $9.59

Overtime Description
All work performed on Saturdays shall be paid at time-in-a half. The exception being; for suspended scaffold work and work deemed as a construction project; an eight (8) hour shift lost during the week due to circumstances beyond the control of the employer, up to a maximum of eight (8) hours per week, may be worked on Saturday at the straight time rate. Four Days a week at Ten (10) hours straight time is allowed.

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.
Triple 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

Local 8A-28A

PAINTER - SIGN

Sign Painter

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $43.13
Supplemental Benefit Rate per Hour: $21.13

Assistant Sign Painter

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $36.65
Supplemental Benefit Rate per Hour: $19.40

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.
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

Vacation
At least 1 year of employment.....1 week
2 years or more of employment.....2 weeks
8 years or more of employment.....3 weeks

(Local #8A-28A)

PAINTER - STRUCTURAL STEEL

Painters on Structural Steel

Effective Period: 7/1/2020 - 9/30/2020
Wage Rate per Hour: $50.25
Supplemental Benefit Rate per Hour: $46.53

Effective Period: 10/1/2020 - 6/30/2021
Wage Rate per Hour: $51.50
Supplemental Benefit Rate per Hour: $48.28

Painter - Power Tool

Effective Period: 7/1/2020 - 9/30/2020
Wage Rate per Hour: $56.25
Supplemental Benefit Rate per Hour: $46.53
Overtime Wage Rate: $6.00 above the "Painters on Structural Steel" overtime rate.

Effective Period: 10/1/2020 - 6/30/2021
Wage Rate per Hour: $57.50
Supplemental Benefit Rate per Hour: $48.28
Overtime Wage Rate: $6.00 above the "Painters on Structural Steel" overtime rate.

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

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

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

Paid Holidays
None

Shift Rates
Second shift is paid at regular hourly wage rates plus a ten percent (10%) differential. There must be a first shift in order to work a second shift.

(Local #806)

PAPERHANGER

Paperhanger

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $46.00
Supplemental Benefit Rate per Hour: $36.36
Supplemental Note: Supplemental benefits are to be paid at the appropriate straight time and overtime rate.

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

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

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

(District Council of Painters #9)

PAVER AND ROADBUILDER

Paver & Roadbuilder - Formsetter

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $47.35

Supplemental Benefit Rate per Hour: $46.71
Supplemental Note: For time and one half overtime - $50.71 For double overtime - $54.71

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 for installation of rubberized materials and similar surfaces; installation and repair of temporary construction fencing; slurry/seal coating, paving stones, maintenance of safety surfaces; play equipment installation, and other related work.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $43.48
Supplemental Benefit Rate per Hour: $46.71
Supplemental Note: For time and one half overtime - $50.71 For double overtime - $54.71

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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $47.95
Supplemental Benefit Rate per Hour: $46.71
Supplemental Note: For time and one half overtime - $50.71 For double overtime - $54.71

Production Paver & Roadbuilder - Raker

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $47.35
Supplemental Benefit Rate per Hour: $46.71
Supplemental Note: For time and one half overtime - $50.71 For double overtime - $54.71

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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $43.48
Supplemental Benefit Rate per Hour: $46.71
Supplemental Note: For time and one half overtime - $50.71 For double overtime - $54.71

Overtime Description

If an employee works New Year's Day or Christmas Day, they receive the single time rate plus 25%.

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.

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

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day

Paid Holidays
Memorial Day
Independence Day
Labor 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 10% over the single time rate for the screed person, rakers and shovelers directly involved only. This differential is to be paid when there is only one shift and the shift works at night. All other workers will be exempt. Hours worked over eight (8) hours during said shift shall be paid for at the time and one-half rate.

(Local #1010)

PLASTERER

Plasterer

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $45.73
Supplemental Benefit Rate per Hour: $27.37

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

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

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

Paid Holidays
None

Shift Rates
When it is not possible to conduct work during regular working hours (between 6:30am and 4:30pm), a shift differential shall be paid at the regular hourly rate plus a twelve percent (12%) per hour differential. Workers on shift work shall be allowed a paid one-half hour meal break.

(Local #262)

PLASTERER - TENDER

Plasterer - Tender

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $38.40
Supplemental Benefit Rate per Hour: $31.04

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Saturday may be used as a make-up day at straight time when a day is lost during that week to inclement weather.

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Presidential Election Day
Thanksgiving Day

Christmas Day

Paid Holidays
None

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

(Mason Tenders District Council)

PLUMBER

Plumber

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $70.35
Supplemental Benefit Rate per Hour: $37.85
Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $56.36
Supplemental Benefit Rate per Hour: $30.20

Overtime Description
Double time the regular rate after a 7 hour or 8 hours per day at the employers option.

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

(Plumbers Local #1)

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

Plumber

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $44.37
Supplemental Benefit Rate per Hour: $18.31

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

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

(Plumbers Local # 1)

PLUMBER (RESIDENTIAL RATES FOR 1, 2 AND 3 FAMILY HOME CONSTRUCTION)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $48.84
Supplemental Benefit Rate per Hour: $27.20

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

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

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

(Plumbers Local #1)

PLUMBER: PUMP & TANK
Oil Trades (Installation and Maintenance)

Plumber - Pump & Tank

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $68.38
Supplemental Benefit Rate per Hour: $26.33

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)

POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER
(Exterior Building Renovation)

Journeyperson

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $54.39
Supplemental Benefit Rate per Hour: $27.79

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 4:00 P.M.) is to be paid at time and one half the regular rate. However, the employer may establish one (1) or two (2) shifts starting at or after 4:00 P.M. to be paid at the regular hourly rate plus a 10% differential.

(Bricklayer District Council)

ROOFER

Roofer

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $44.25
Supplemental Benefit Rate per Hour: $34.81

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

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

Shift Rates

Second shift - Regular hourly rate plus a 10% differential. Third shift - Regular hourly rate plus a 15% differential. There must be a first shift to work the second shift, and a second shift to work the third shift. All other work outside the regular work day (an eight hour workday between the hours of 5:00 A.M. and 4:00 P.M.) is to be paid at time and one half the regular rate.

(Local #8)

SHEET METAL WORKER

Sheet Metal Worker

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $50.61
Supplemental Benefit Rate per Hour: $52.09
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: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $40.49
Supplemental Benefit Rate per Hour: $52.09

Sheet Metal Worker - Duct Cleaner

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $18.26
Supplemental Benefit Rate per Hour: $11.63

Overtime

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

Overtime Holidays

Double time the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day

Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Paid Holidays
None

Shift Rates
Work that can only be performed outside regular working hours (eight hours of work between 7:30 A.M. and 3:30 P.M.) - First shift (work between 3:30 P.M. and 11:30 P.M.) - 10% differential above the established hourly rate. Second shift (work between 11:30 P.M. and 7:30 A.M.) - 15% differential above the established hourly rate.

For Fan Maintenance: On all full shifts of fan maintenance work the straight time hourly rate of pay will be paid for each shift, including nights, Saturdays, Sundays, and holidays.

(Local #28

SHEET METAL WORKER - SPECIALTY
(Decking & Siding)

Sheet Metal Specialty Worker

The first worker to perform this work must be paid at the rate of the Sheet Metal Worker. The second and third workers shall be paid the Specialty Worker Rate. The ratio of One Sheet Metal Worker, then Two Specialty Workers shall be utilized thereafter.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $47.66
Supplemental Benefit Rate per Hour: $25.99
Supplemental Note: Supplemental benefit contributions are to be made at the applicable overtime rates.

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

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Memorial Day
Independence Day
Labor Day
Columbus Day

Veteran's Day
Thanksgiving Day
Christmas Day

Paid Holidays
None

(Local #28)

SHIPYARD WORKER

Shipyard Mechanic - First Class

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $28.50
Supplemental Benefit Rate per Hour: $3.95

Shipyard Mechanic - Second Class

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $19.07
Supplemental Benefit Rate per Hour: $3.59

Shipyard Laborer - First Class

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $23.40
Supplemental Benefit Rate per Hour: $3.75

Shipyard Laborer - Second Class

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $17.38
Supplemental Benefit Rate per Hour: $3.52

Shipyard Dockhand - First Class

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $21.57
Supplemental Benefit Rate per Hour: $3.68

Shipyard Dockhand - Second Class

Effective Period: 7/1/2020 - 6/30/2021

Wage Rate per Hour: **$17.28**
Supplemental Benefit Rate per Hour: **$3.52**

Overtime Description
Work performed on holiday is paid double time the regular hourly wage rate plus holiday pay.

Overtime
Time and one half the regular rate after an 8 hour day.
Time and one half the regular rate for Saturday.
Double time the regular rate for Sunday.
Time and one half the regular hourly rate after 40 straight time hours in any work week.

Paid Holidays
New Year's Day
Martin Luther King Jr. Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Based on Survey Data

SIGN ERECTOR
(Sheet Metal, Plastic, Electric, and Neon)

Sign Erector

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$50.79**
Supplemental Benefit Rate per Hour: **$56.05**

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
President's Day
Memorial Day

Independence Day
Labor Day
Columbus Day
Election Day
Thanksgiving Day
Day after Thanksgiving
Christmas Day

Shift Rates

Time and one half the regular hourly rate is to be paid for all hours worked outside the regular workday either (7:00 A.M. through 2:30 P.M.) or (8:00 A.M. through 3:30 P.M.)

(Local #137)

STEAMFITTER

Steamfitter

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $57.95
Supplemental Benefit Rate per Hour: $57.84
Supplemental Note: Overtime supplemental benefit rate: $114.94

Steamfitter -Temporary Services

When steamfitters are present during the regular working day, no temporary services steamfitter will be required.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $44.04
Supplemental Benefit Rate per Hour: $47.01

Overtime Description

Double Time the regular rate after 7 or 8 hours in a day.

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

Paid Holidays
None

Shift Rates
May be performed outside of the regular workday except Saturday, Sunday and Holidays. When shift work is performed the wage rate for regular time worked is a 15% percent premium on wage and 15% percent premium on supplemental benefits.

On Transit Authority projects, where work is performed in the vicinity of tracks all shift work on weekends and holidays may be performed at the regular shift rates.

Local 638

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

Refrigeration and Air Conditioner Mechanic

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $42.60
Supplemental Benefit Rate per Hour: $17.96

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

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

Double time and one half the regular rate for work on the following holiday(s).
Martin Luther King Jr. Day
President's Day
Memorial Day
Columbus Day

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

(Local #638-B)

STONE MASON - SETTER

Stone Mason - Setter

(Assisted by Derrickperson and Rigger)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $54.99
Supplemental Benefit Rate per Hour: $45.58

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

Overtime Holidays
Double time the regular rate for work on the following holiday(s).
New Year's Day
Washington's Birthday
Good Friday
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Day

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

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

(Bricklayers District Council)

TAPER

Drywall Taper

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $47.82
Supplemental Benefit Rate per Hour: $27.56

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

Overtime Holidays
Time and one half the regular rate for work on the following holiday(s).
New Year's Day
Martin Luther King Jr. Day
President's Day
Good Friday
Memorial Day
Independence Day
Labor Day
Columbus Day
Thanksgiving Day
Christmas Day

Paid Holidays
Any worker who reports to work on Christmas Eve or New Year's Eve pursuant to his employer's instruction shall be entitled to three (3) hours afternoon pay without working.

(Local #1974)

TELECOMMUNICATION WORKER
(Install/maintain/repair telecommunications cables carrying data, video, and/or voice except for installation on building construction/alteration/renovation projects.)

Telecommunication Worker

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $45.88
Supplemental Benefit Rate per Hour: $23.15
Supplemental Note: The above rate applies for Manhattan, Bronx, Brooklyn, Queens. $22.84 for Staten Island only.

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

Paid Holidays

New Year's Day
Lincoln's Birthday
Washington's Birthday
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Veteran's Day
Thanksgiving Day
Christmas Day
Employees have the option of observing either Martin Luther King's Birthday or the day after Thanksgiving instead of Lincoln's Birthday

Shift Rates

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

Vacation

After 6 months.....one week.
After 12 months but less than 7 years.....two weeks.
After 7 or more but less than 15 years.....three weeks.
After 15 years or more but less than 25 years.....four weeks.

(C.W.A.)

TILE FINISHER

Tile Finisher

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $43.31
Supplemental Benefit Rate per Hour: $34.43

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 (performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TILE LAYER - SETTER

Tile Layer - Setter

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $55.86
Supplemental Benefit Rate per Hour: $39.08

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 (performed outside the regular 8:00 A.M. to 3:30 P.M. workday): shift differential of one and one quarter (1¼) times the regular straight time rate of pay for the seven hours of actual off-shift work.

(Local #7)

TIMBERPERSON

Timberperson

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $51.05
Supplemental Benefit Rate per Hour: $51.94

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.

(Local #1536)

TUNNEL WORKER

Blasters, Mucking Machine Operators (Compressed Air Rates)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $67.00
Supplemental Benefit Rate per Hour: $58.33

Tunnel Workers (Compressed Air Rates)

Includes shield driven liner plate portions or solidification portions work (8 hour shift) during excavation phase.

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $64.63
Supplemental Benefit Rate per Hour: $56.47

Top Nipper (Compressed Air Rates)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $63.53
Supplemental Benefit Rate per Hour: $55.38

Outside Lock Tender, Outside Gauge Tender,Muck Lock Tender (Compressed Air Rates)

Effective Period: 7/1/2020 - 6/30/2021

Wage Rate per Hour: **$62.29**
Supplemental Benefit Rate per Hour: **$54.44**

Bottom Bell & Top Bell Signal Person: Shaft Person (Compressed Air Rates)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$62.29**
Supplemental Benefit Rate per Hour: **$54.44**

Changehouse Attendant: Powder Watchperson (Compressed Air Rates)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$54.72**
Supplemental Benefit Rate per Hour: **$51.24**

Blasters (Free Air Rates)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$63.91**
Supplemental Benefit Rate per Hour: **$56.01**

Tunnel Workers (Free Air Rates)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$61.15**
Supplemental Benefit Rate per Hour: **$53.66**

All Others (Free Air Rates)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$56.51**
Supplemental Benefit Rate per Hour: **$49.67**

Microtunneling (Free Air Rates)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$48.92**
Supplemental Benefit Rate per Hour: **$42.93**

Overtime Description

For work performed during excavation and primary concrete tunnel lining phases - Double time the regular rate after an 8 hour day and Saturday, Sunday and on the following holiday(s) listed below.
For Repair-Maintenance Work on Existing Equipment and Facilities - Time and one half the regular rate after a 7 hour day, Saturday, Sunday and double time the regular rate for work on the following holiday(s) listed below.
For Small-Bore Micro Tunneling Machines - Time and one-half the regular rate shall be paid for all overtime.
For work not listed above - Time and one half the regular rate after an 8 hour day and Saturday and double time the regular rate on Sunday and on the following holiday(s) listed below.

Paid Holidays

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

(Local #147)

UTILITY LOCATOR
(Locate & mark underground utilities for street excavation.)

Utility Locator (Year 7 and above)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $31.56
Supplemental Benefit Rate per Hour: $1.43

Utility Locator (Year 5 - 6)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $22.85
Supplemental Benefit Rate per Hour: $1.43

Utility Locator (Year 4)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $21.54
Supplemental Benefit Rate per Hour: $1.43

Utility Locator (Year 3)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $20.30
Supplemental Benefit Rate per Hour: $1.43

Utility Locator (Year 2)

Effective Period: 7/1/2020 - 6/30/2021

Wage Rate per Hour: $19.13
Supplemental Benefit Rate per Hour: $1.43

Utility Locator (Year 1)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $18.04
Supplemental Benefit Rate per Hour: $1.43

Utility Locator (Up to 1 year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $17.00
Supplemental Benefit Rate per Hour: $1.43
Supplemental Note: No benefits for the first 90 days of employment.

Overtime
Time and one half the regular rate for work on the following holiday(s).
Time and one half the regular hourly rate after 40 straight time hours in any work week.

Paid Holidays
New Year's Day
Memorial Day
Independence Day
Thanksgiving Day
Christmas Day

Shift Rates
10% shift differential to employees working any shift starting between noon and 5 AM.

Vacation
For up to 1 year 0 hours
For year 1 - 2 48 hours per year
For year 3 - 9 96 hours per year
For year 10 or more 144 hours per year

Sick Days:
For up to 1 year employee receives 40 hours paid sick leave.
For year 1 employee earns 2 hours of paid sick leave for every 100 overtime hours worked.
For year 2 - 9 years employee earns 4 hours of paid sick leave for every 100 overtime hours worked.
For year 10 or more employee earns 6 hours of paid sick leave for every 100 overtime hours worked.

(C.W.A.)

WELDER

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

OFFICE OF THE COMPTROLLER

CITY OF NEW YORK

CONSTRUCTION APPRENTICE PREVAILING WAGE SCHEDULE

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 paid at the apprentice rates in this schedule. Apprentices who are not so registered must be paid as journey persons in accordance with the trade classification of the work they actually performed.

Apprentice ratios are established to ensure the proper safety, training and supervision of apprentices. A ratio establishes the number of journey workers required for each apprentice in a program and on a job site. Ratios are interpreted as follows: in the case of a 1:1, 1:4 ratio, there must be one journey worker for the first apprentice, and four additional journey workers for each subsequent apprentice.

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

Boilermaker (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $32.44

Boilermaker (Second Year: 1st Six Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $34.32

Boilermaker (Second Year: 2nd Six Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $36.21

Boilermaker (Third Year: 1st Six Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $38.07

Boilermaker (Third Year: 2nd Six Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 85% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $39.97

Boilermaker (Fourth Year: 1st Six Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $41.86

Boilermaker (Fourth Year: 2nd Six Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 95% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $43.73

(Local #5)

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

Bricklayer (First 750 Hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $20.61

Bricklayer (Second 750 Hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $20.61

Bricklayer (Third 750 Hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $20.61

Bricklayer (Fourth 750 Hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $20.61

Bricklayer (Fifth 750 Hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $20.61

Bricklayer (Sixth 750 Hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 95% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $20.61

(Bricklayer District Council)

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

Carpenter (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour For Building Apprentice: $19.20
Supplemental Benefit Rate Per Hour For Building Apprentice: $15.95

Wage Rate Per Hour For Heavy Apprentice: 40% of Journeyperson's rate
Supplemental Benefit Rate Per Hour For Heavy Apprentice: $34.49

Carpenter (Second Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour For Building Apprentice: $22.20
Supplemental Benefit Rate Per Hour For Building Apprentice: $17.45

Wage Rate Per Hour For Heavy Apprentice: 50% of Journeyperson's rate
Supplemental Benefit Rate Per Hour For Heavy Apprentice: $34.49

Carpenter (Third Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour For Building Apprentice: $26.45
Supplemental Benefit Rate Per Hour For Building Apprentice: $21.05

Wage Rate Per Hour For Heavy Apprentice: 65% of Journeyperson's rate
Supplemental Benefit Rate Per Hour For Heavy Apprentice: $34.49

Carpenter (Fourth Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour For Building Apprentice: $34.33
Supplemental Benefit Rate Per Hour For Building Apprentice: $23.05

Wage Rate Per Hour For Heavy Apprentice: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour For Heavy Apprentice: $34.49

(Carpenters District Council)

CARPENTER - HIGH RISE CONCRETE FORMS
(Ratio of Apprentice to Journeyperson: 1 to 1, 2 to 5)

Carpenter - High Rise (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $17.52
Supplemental Benefit Rate per Hour: $16.30

Carpenter - High Rise (Second Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $23.95
Supplemental Benefit Rate per Hour: $16.43

Carpenter - High Rise (Third Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $30.53
Supplemental Benefit Rate per Hour: $16.56

Carpenter - High Rise (Fourth Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $38.15
Supplemental Benefit Rate per Hour: $16.71

(Carpenters District Council)

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

Cement Mason (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's Rate

Cement Mason (Second Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's Rate

Cement Mason (Third Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 70% of Journeyperson's Rate

(Local #780)

CEMENT AND CONCRETE WORKER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Cement & Concrete Worker (First 1333 hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 53% of Journeyperson's rate
Supplemental Benefit Rate per Hour: $14.29

Cement & Concrete Worker (Second 1333 hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 69% of Journeyperson's rate
Supplemental Benefit Rate per Hour: $19.22

Cement & Concrete Worker (Last 1334 hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 85% of Journeyperson's rate
Supplemental Benefit Rate per Hour: $20.30

(Cement Concrete Workers District Council)

DERRICKPERSON & RIGGER (STONE)
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Derrickperson & Rigger (stone) - First Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 50% of Journeyperson's rate

Derrickperson & Rigger (stone) - Second Year: 1st Six Months

Effective Period: 7/1/2020 - 6/30/2021

Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

Derrickperson & Rigger (stone) - Second Year: 2nd Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

Derrickperson & Rigger (stone) - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: 75% of Journeyperson's rate

(Local #197)

DOCKBUILDER/PILE DRIVER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Dockbuilder/Pile Driver (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 40% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $34.49

Dockbuilder/Pile Driver (Second Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $34.49

Dockbuilder/Pile Driver (Third Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $34.49

Dockbuilder/Pile Driver (Fourth Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $34.49

(Carpenters District Council)

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

Electrician (First Term: 0-6 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $16.50
Supplemental Benefit Rate per Hour: $14.54
Overtime Supplemental Rate Per Hour: $15.63

Electrician (First Term: 7-12 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $17.00
Supplemental Benefit Rate per Hour: $14.80
Overtime Supplemental Rate Per Hour: $15.93

Electrician (Second Term: 0-6 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $18.00
Supplemental Benefit Rate per Hour: $15.31
Overtime Supplemental Rate Per Hour: $16.51

Electrician (Second Term: 7-12 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $19.00
Supplemental Benefit Rate per Hour: $15.83
Overtime Supplemental Rate Per Hour: $17.09

Electrician (Third Term: 0-6 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $20.00
Supplemental Benefit Rate per Hour: $16.35
Overtime Supplemental Rate Per Hour: $17.68

Electrician (Third Term: 7-12 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $21.00

Supplemental Benefit Rate per Hour: $16.87
Overtime Supplemental Rate Per Hour: $18.26

Electrician (Fourth Term: 0-6 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $22.00
Supplemental Benefit Rate per Hour: $17.38
Overtime Supplemental Rate Per Hour: $18.84

Electrician (Fourth Term: 7-12 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $24.00
Supplemental Benefit Rate per Hour: $18.42
Overtime Supplemental Rate Per Hour: $20.01

Electrician (Fifth Term: 0-12 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $26.00
Supplemental Benefit Rate per Hour: $22.06
Overtime Supplemental Rate Per Hour: $23.70

Electrician (Fifth Term: 13-18 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $30.50
Supplemental Benefit Rate per Hour: $24.45
Overtime Supplemental Rate Per Hour: $26.38

Overtime Description
Overtime Wage paid at time and one half the regular rate

(Local #3)

ELEVATOR CONSTRUCTOR
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

Elevator (Constructor) - First Year

Effective Period: 7/1/2020 - 3/16/2021
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: $32.14

Effective Period: 3/17/2021 - 6/30/2021
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: $32.76

Elevator (Constructor) - Second Year

Effective Period: 7/1/2020 - 3/16/2021
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $32.67

Effective Period: 3/17/2021 - 6/30/2021
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $33.31

Elevator (Constructor) - Third Year

Effective Period: 7/1/2020 - 3/16/2021
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: $33.74

Effective Period: 3/17/2021 - 6/30/2021
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: $34.42

Elevator (Constructor) - Fourth Year

Effective Period: 7/1/2020 - 3/16/2021
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: $34.80

Effective Period: 3/17/2021 - 6/30/2021
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: $35.52

(Local #1)

ELEVATOR REPAIR & MAINTENANCE
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

Elevator Service/Modernization Mechanic (First Year)

Effective Period: 7/1/2020 - 3/16/2021
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Per Hour: $32.09

Effective Period: 3/17/2021 - 6/30/2021
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Per Hour: $32.71

Elevator Service/Modernization Mechanic (Second Year)

Effective Period: 7/1/2020 - 3/16/2021
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Benefit Per Hour: $32.62

Effective Period: 3/17/2021 - 6/30/2021
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Benefit Per Hour: $33.26

Elevator Service/Modernization Mechanic (Third Year)

Effective Period: 7/1/2020 - 3/16/2021
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Benefit Per Hour: $33.67

Effective Period: 3/17/2021 - 6/30/2021
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Benefit Per Hour: $34.35

Elevator Service/Modernization Mechanic (Fourth Year)

Effective Period: 7/1/2020 - 3/16/2021
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Per Hour: $34.73

Effective Period: 3/17/2021 - 6/30/2021
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Per Hour: $35.45

(Local #1)

ENGINEER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

Engineer - First Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $25.38
Supplemental Benefit Rate per Hour: $26.69

Engineer - Second Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $31.72
Supplemental Benefit Rate per Hour: $26.69

Engineer - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $34.89
Supplemental Benefit Rate per Hour: $26.69

Engineer - Fourth Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $38.06
Supplemental Benefit Rate per Hour: $26.69

(Local #15)

ENGINEER - OPERATING
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 5)

Operating Engineer - First Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour 40% of Journeyperson's Rate
Supplemental Benefit Per Hour: $22.45

Operating Engineer - Second Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 50% of Journeyperson's Rate
Supplemental Benefit Per Hour: $22.45

Operating Engineer - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 60% of Journeyperson's Rate
Supplemental Benefit Per Hour: $22.45

(Local #14)

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

Floor Coverer (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $24.20
Supplemental Benefit Rate per Hour: $15.95

Floor Coverer (Second Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $27.20
Supplemental Benefit Rate per Hour: $17.45

Floor Coverer (Third Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $31.45
Supplemental Benefit Rate per Hour: $21.05

Floor Coverer (Fourth Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $39.33
Supplemental Benefit Rate per Hour: $23.05

(Carpenters District Council)

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

Glazier (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Glazier (Second Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Glazier (Third Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Glazier (Fourth Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #1281)

HAZARDOUS MATERIAL HANDLER
(Ratio of Apprentice Journeyperson: 1 to 1, 1 to 3)

Handler (First 1000 Hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 78% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $14.25

Handler (Second 1000 Hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $14.25

Handler (Third 1000 Hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 83% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $14.25

Handler (Fourth 1000 Hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 89% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $14.25

(Local #78)

HEAT & FROST INSULATOR
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Heat & Frost Insulator (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 35% of Journeyperson's rate

Heat & Frost Insulator (Second Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 45% of Journeyperson's rate

Heat & Frost Insulator (Third Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

Heat & Frost Insulator (Fourth Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

(Local #12)

HOUSE WRECKER
(TOTAL DEMOLITION)
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

House Wrecker - First Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $20.20
Supplemental Benefit Rate per Hour: $9.67

House Wrecker - Second Year

Effective Period: 7/1/2020 - 6/30/2021

Wage Rate per Hour: $22.15
Supplemental Benefit Rate per Hour: $9.67

House Wrecker - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $23.65
Supplemental Benefit Rate per Hour: $9.67

House Wrecker - Fourth Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $26.15
Supplemental Benefit Rate per Hour: $9.67

(Mason Tenders District Council)

IRON WORKER - ORNAMENTAL
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Iron Worker (Ornamental) - 1st Ten Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: $40.20

Iron Worker (Ornamental) - 11 -16 Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $41.44

Iron Worker (Ornamental) - 17 - 22 Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: $42.68

Iron Worker (Ornamental) - 23 - 28 Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: $45.17

Iron Worker (Ornamental) - 29 - 36 Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Rate Per Hour: $47.65

(Local #580)

IRON WORKER - STRUCTURAL
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 6)

Iron Worker (Structural) - 1st Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $27.45
Supplemental Benefit Rate per Hour: $55.62

Iron Worker (Structural) - 7- 18 Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $28.05
Supplemental Benefit Rate per Hour: $55.62

Iron Worker (Structural) - 19 - 36 months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $28.66
Supplemental Benefit Rate per Hour: $55.62

(Local #40 and #361)

LABORER (FOUNDATION, CONCRETE, EXCAVATING, STREET PIPE LAYER & COMMON)
(Ratio Apprentice to Journeyperson: 1 to 1, 1 to 3)

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

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: $46.63

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

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: $46.63

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

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: $46.63

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

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 90% of Journeyperson's rate
Supplemental Rate Per Hour: $46.63

(Local #731)

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

Cutters & Setters - First 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

Cutters & Setters - Second 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 45% of Journeyperson's rate

Cutters & Setters - Third 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Cutters & Setters - Fourth 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

Cutters & Setters - Fifth 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Cutters & Setters - Sixth 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

Cutters & Setters - Seventh 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

Cutters & Setters - Eighth 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

Cutters & Setters - Ninth 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

Cutters & Setters - Tenth 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

Polishers & Finishers - First 900 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 70% of Journeyperson's rate

NO BENEFITS PAID DURING THE FIRST TWO MONTHS (PROBATIONARY PERIOD)

Polishers & Finishers - Second 900 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

Polishers & Finishers - Third 900 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 90% of Journeyperson's rate

(Local #7)

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

Mason Tender - First Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $20.20
Supplemental Benefit Rate per Hour: $9.67

Mason Tender - Second Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $22.15
Supplemental Benefit Rate per Hour: $9.67

Mason Tender - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $23.65
Supplemental Benefit Rate per Hour: $9.67

Mason Tender - Fourth Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $26.15
Supplemental Benefit Rate per Hour: $9.67

(Local #79)

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

Metallic Lather (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $22.55
Supplemental Benefit Rate per Hour: $17.87

Metallic Lather (Second Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $28.38
Supplemental Benefit Rate per Hour: $20.66

Metallic Lather (Third Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $34.68
Supplemental Benefit Rate per Hour: $21.32

Metallic Lather (Fourth Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $37.18
Supplemental Benefit Rate per Hour: $21.82

(Local #46)

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

Millwright (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $29.99
Supplemental Benefit Rate per Hour: $34.94

Millwright (Second Year)

Effective Period: 7/1/2020 - 6/30/2021

Wage Rate per Hour: **$35.44**
Supplemental Benefit Rate per Hour: **$38.64**

Millwright (Third Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$40.89**
Supplemental Benefit Rate per Hour: **$42.99**

Millwright (Fourth Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$51.79**
Supplemental Benefit Rate per Hour: **$49.75**

(Local #740)

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

Painter - Brush & Roller - First Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$17.20**
Supplemental Benefit Rate per Hour: **$15.93**

Painter - Brush & Roller - Second Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$21.50**
Supplemental Benefit Rate per Hour: **$20.49**

Painter - Brush & Roller - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$25.80**
Supplemental Benefit Rate per Hour: **$24.11**

Painter - Brush & Roller - Fourth Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: **$34.40**

Supplemental Benefit Rate per Hour: $30.93

(District Council of Painters)

PAINTER - METAL POLISHER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Metal Polisher (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $16.00
Supplemental Benefit Rate per Hour: $6.66

Metal Polisher (Second Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $17.00
Supplemental Benefit Rate per Hour: $6.66

Metal Polisher (Third Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $18.00
Supplemental Benefit Rate per Hour: $6.66

(Local 8A-28)

PAINTER - STRUCTURAL STEEL
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Painters - Structural Steel (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Painters - Structural Steel (Second Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Painters - Structural Steel (Third Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #806)

PAVER AND ROADBUILDER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Paver and Roadbuilder - First Year (Minimum 1000 hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $29.36
Supplemental Benefit Rate per Hour: $22.50

Paver and Roadbuilder - Second Year (Minimum 1000 hours)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $31.00
Supplemental Benefit Rate per Hour: $22.50

(Local #1010)

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

Plasterer - First Year: 1st Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 40% of Journeyperson's rate
Supplemental Rate Per Hour: $13.88

Plasterer - First Year: 2nd Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 45% of Journeyperson's rate
Supplemental Rate Per Hour: $14.36

Plasterer - Second Year: 1st Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $16.44

Plasterer - Second Year: 2nd Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: $17.53

Plasterer - Third Year: 1st Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: $19.72

Plasterer - Third Year: 2nd Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: $20.81

(Local #530)

PLASTERER - TENDER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Plasterer Tender - First Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $20.20
Supplemental Benefit Rate per Hour: $9.67

Plasterer Tender - Second Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $22.15
Supplemental Benefit Rate per Hour: $9.67

Plasterer Tender - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $23.65
Supplemental Benefit Rate per Hour: $9.67

Plasterer Tender - Fourth Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $26.15
Supplemental Benefit Rate per Hour: $9.67

(Local #79)

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

Plumber - First Year: 1st Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $16.28
Supplemental Benefit Rate per Hour: $5.43

Plumber - First Year: 2nd Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $19.28
Supplemental Benefit Rate per Hour: $6.43

Plumber - Second Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $27.91
Supplemental Benefit Rate per Hour: $20.13

Plumber - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $30.01
Supplemental Benefit Rate per Hour: $20.13

Plumber - Fourth Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $32.86
Supplemental Benefit Rate per Hour: $20.13

Plumber - Fifth Year: 1st Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $34.26
Supplemental Benefit Rate per Hour: $20.13

Plumber - Fifth Year: 2nd Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $46.33
Supplemental Benefit Rate per Hour: $20.13

(Plumbers Local #1)

POINTER, WATERPROOFER, CAULKER, SANDBLASTER, STEAMBLASTER
(Exterior Building Renovation)
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - First Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $27.14
Supplemental Benefit Rate per Hour: $14.34

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Second Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $30.50
Supplemental Benefit Rate per Hour: $19.24

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $36.10
Supplemental Benefit Rate per Hour: $21.99

Pointer, Waterproofer, Caulker, Sandblaster, Steamblaster - Fourth Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $43.46
Supplemental Benefit Rate per Hour: $22.99

(Bricklayer District Council)

ROOFER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 2)

Roofer - First Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 35% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $3.51

Roofer - Second Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $17.54

Roofer - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $20.99

Roofer - Fourth Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Benefit Rate Per Hour: $26.18

(Local #8)

SHEET METAL WORKER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Sheet Metal Worker (0-6 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 25% of Journeyperson's rate
Supplemental Rate Per Hour: $6.51

Sheet Metal Worker (7-18 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 35% of Journeyperson's rate
Supplemental Rate Per Hour: $19.11

Sheet Metal Worker (19-30 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 45% of Journeyperson's rate
Supplemental Rate Per Hour: $26.09

Sheet Metal Worker (31-36 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $30.81

Sheet Metal Worker (37-42 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $30.81

Sheet Metal Worker (43-48 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: $37.91

Sheet Metal Worker (49-54 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: $37.91

Sheet Metal Worker (55-60 Months)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 80% of Journeyperson's rate

Supplemental Rate Per Hour: $42.65

(Local #28)

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

Sign Erector - First Year: 1st Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 35% of Journeyperson's rate
Supplemental Rate Per Hour: $16.13

Sign Erector - First Year: 2nd Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 40% of Journeyperson's rate
Supplemental Rate Per Hour: $18.29

Sign Erector - Second Year: 1st Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 45% of Journeyperson's rate
Supplemental Rate Per Hour: $20.47

Sign Erector - Second Year: 2nd Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: $22.67

Sign Erector - Third Year: 1st Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 55% of Journeyperson's rate
Supplemental Rate Per Hour: $30.68

Sign Erector - Third Year: 2nd Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: $33.38

Sign Erector - Fourth Year: 1st Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: $36.84

Sign Erector - Fourth Year: 2nd Six Months

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 70% of Journeyperson's rate
Supplemental Rate Per Hour: $39.62

Sign Erector - Fifth Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 75% of Journeyperson's rate
Supplemental Rate Per Hour: $42.38

Sign Erector - Sixth Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Rate Per Hour: $45.13

(Local #137)

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

Steamfitter - First Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate and Supplemental Per Hour: 40% of Journeyperson's rate

Steamfitter - Second Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate and Supplemental Rate Per Hour: 50% of Journeyperson's rate.

Steamfitter - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate and Supplemental Rate per Hour: 65% of Journeyperson's rate.

Steamfitter - Fourth Year

Effective Period: 7/1/2020 - 6/30/2021

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

Steamfitter - Fifth Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate and Supplemental Rate Per Hour: 85% of Journeyperson's rate.

(Local #638)

STEAMFITTER - REFRIGERATION & AIR CONDITIONER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 3)

Refrigeration & Air Conditioner (First Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $20.63
Supplemental Benefit Rate per Hour: $12.13

Refrigeration & Air Conditioner (Second Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $24.89
Supplemental Benefit Rate per Hour: $13.25

Refrigeration & Air Conditioner (Third Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $29.00
Supplemental Benefit Rate per Hour: $14.43

Refrigeration & Air Conditioner (Fourth Year)

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate per Hour: $35.01
Supplemental Benefit Rate per Hour: $16.02

(Local #638-B)

STONE MASON - SETTER
(Ratio Apprentice of Journeyperson: 1 to 1, 1 to 2)

Stone Mason - Setters - First 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Second 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 60% of Journeyperson's rate
Supplemental Rate Per Hour: 50% of Journeyperson's rate

Stone Mason - Setters - Third 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
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: 7/1/2020 - 6/30/2021
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: 7/1/2020 - 6/30/2021
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: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 100% of Journeyperson's rate
Supplemental Rate Per Hour: 50% of Journeyperson's rate

(Bricklayers District Council)

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

Drywall Taper - First Year

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 40% of Journeyperson's rate

Drywall Taper - Second Year

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 60% of Journeyperson's rate

Drywall Taper - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 80% of Journeyperson's rate

(Local #1974)

TILE LAYER - SETTER
(Ratio of Apprentice to Journeyperson: 1 to 1, 1 to 4)

Tile Layer - Setter - First 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 50% of Journeyperson's rate

Tile Layer - Setter - Second 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 55% of Journeyperson's rate

Tile Layer - Setter - Third 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 65% of Journeyperson's rate

Tile Layer - Setter - Fourth 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 75% of Journeyperson's rate

Tile Layer - Setter - Fifth 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 85% of Journeyperson's rate

Tile Layer - Setter - Sixth 750 Hours

Effective Period: 7/1/2020 - 6/30/2021
Wage and Supplemental Rate Per Hour: 95% of Journeyperson's rate

(Local #7)

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

Timberperson - First Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 40% of Journeyperson's rate
Supplemental Rate Per Hour: $34.22

Timberperson - Second Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 50% of Journeyperson's rate
Supplemental Rate Per Hour: $34.22

Timberperson - Third Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 65% of Journeyperson's rate
Supplemental Rate Per Hour: $34.22

Timberperson - Fourth Year

Effective Period: 7/1/2020 - 6/30/2021
Wage Rate Per Hour: 80% of Journeyperson's rate
Supplemental Rate Per Hour: $34.22

(Local #1536)

Attachment H

Prison Rape Elimination Act (PREA)

- PREA Prison and Jails Final Standards
- PREA Contractor Notice
- PREA Contractor Certification
- PREA Training and Education Package

PRISON RAPE ELIMINATION ACT

PRISONS AND JAIL STANDARDS

United States Department of Justice Final Rule

National Standards to Prevent,
Detect, and Respond to Prison Rape
Under the Prison Rape Elimination Act (PREA)

28 C.F.R. Part 115
Docket No. OAG-131
RIN 1105-AB34
May 17, 2012

PRISON RAPE ELIMINATION ACT NATIONAL STANDARDS – PRISONS & JAILS

Sec.

115.5 General definitions.

115.6 Definitions related to sexual abuse.

Standards for Adult Prisons and Jails

Prevention Planning

115.11 Zero tolerance of sexual abuse and sexual harassment; PREA coordinator.

115.12 Contracting with other entities for the confinement of inmates.

115.13 Supervision and monitoring.

115.14 Youthful inmates.

115.15 Limits to cross-gender viewing and searches.

115.16 Inmates with disabilities and inmates who are limited English proficient.

115.17 Hiring and promotion decisions.

115.18 Upgrades to facilities and technologies.

Responsive Planning

115.21 Evidence protocol and forensic medical examinations.

115.22 Policies to ensure referrals of allegations for investigations.

Training and Education

115.31 Employee training.

115.32 Volunteer and contractor training.

115.33 Inmate education.

115.34 Specialized training: Investigations.

115.35 Specialized training: Medical and mental health care. **Screening**

for Risk of Sexual Victimization and Abusiveness

115.41 Screening for risk of victimization and abusiveness.

115.42 Use of screening information.

115.43 Protective custody.

Reporting

115.51 Inmate reporting.

115.52 Exhaustion of administrative remedies.

115.53 Inmate access to outside confidential support services.

115.54 Third-party reporting.

Official Response Following an Inmate Report

115.61 Staff and agency reporting duties.

115.62 Agency protection duties.

115.63 Reporting to other confinement facilities.

115.64 Staff first responder duties.

115.65 Coordinated response.

115.66 Preservation of ability to protect inmates from contact with abusers.

115.67 Agency protection against retaliation.

115.68 Post-allegation protective custody.

Investigations

115.71 Criminal and administrative agency investigations.

115.72 Evidentiary standard for administrative investigations.

115.73 Reporting to inmates.

Discipline

115.76 Disciplinary sanctions for staff.

115.77 Corrective action for contractors and volunteers.

115.78 Disciplinary sanctions for inmates.

Medical and Mental Care

115.81 Medical and mental health screenings; history of sexual abuse.

115.82 Access to emergency medical and mental health services.

115.83 Ongoing medical and mental health care for sexual abuse victims and abusers.

Data Collection and Review 115.86

Sexual abuse incident reviews.

115.87 Data collection.

115.88 Data review for corrective action.

115.89 Data storage, publication, and destruction.

Audits

115.93 Audits of standards.

Auditing and Corrective Action 115.401

Frequency and scope of audits.

115.402 Auditor qualifications.

115.403 Audit contents and findings.

115.404 Audit corrective action plan.

115.405 Audit appeals.

State Compliance

115.501 State determination and certification of full compliance.

Standards for Prisons and Jails §

115.5 General definitions.

For purposes of this part, the term—

Agency means the unit of a State, local, corporate, or nonprofit authority, or of the Department of Justice, with direct responsibility for the operation of any facility that confines inmates, detainees, or residents, including the implementation of policy as set by the governing, corporate, or nonprofit authority.

Agency head means the principal official of an agency.

Community confinement facility means a community treatment center, halfway house, restitution center, mental health facility, alcohol or drug rehabilitation center, or other community correctional facility (including residential re-entry centers), other than a juvenile facility, in which individuals reside as part of a term of imprisonment or as a condition of pre-trial release or post-release supervision, while participating in gainful employment, employment search efforts, community service, vocational training, treatment, educational programs, or similar facilityapproved programs during nonresidential hours.

Contractor means a person who provides services on a recurring basis pursuant to a contractual agreement with the agency.

Detainee means any person detained in a lockup, regardless of adjudication status.

Direct staff supervision means that security staff are in the same room with, and within reasonable hearing distance of, the resident or inmate.

Employee means a person who works directly for the agency or facility.

Exigent circumstances means any set of temporary and unforeseen circumstances that require immediate action in order to combat a threat to the security or institutional order of a facility.

Facility means a place, institution, building (or part thereof), set of buildings, structure, or area (whether or not enclosing a building or set of buildings) that is used by an agency for the confinement of individuals.

Facility head means the principal official of a facility.

Full compliance means compliance with all material requirements of each standard except for *de minimis* violations, or discrete and temporary violations during otherwise sustained periods of compliance.

Gender nonconforming means a person whose appearance or manner does not conform to traditional societal gender expectations.

Inmate means any person incarcerated or detained in a prison or jail.

Intersex means a person whose sexual or reproductive anatomy or chromosomal pattern does not seem to fit typical definitions of male or female. Intersex medical conditions are sometimes referred to as disorders of sex development.

Jail means a confinement facility of a Federal, State, or local law enforcement agency whose primary use is to hold persons pending adjudication of criminal charges, persons committed to

confinement after adjudication of criminal charges for sentences of one year or less, or persons adjudicated guilty who are awaiting transfer to a correctional facility.

Juvenile means any person under the age of 18, unless under adult court supervision and confined or detained in a prison or jail.

Juvenile facility means a facility primarily used for the confinement of juveniles pursuant to the juvenile justice system or criminal justice system.

Law enforcement staff means employees responsible for the supervision and control of detainees in lockups.

Lockup means a facility that contains holding cells, cell blocks, or other secure enclosures that are:

(1) Under the control of a law enforcement, court, or custodial officer; and

(2) Primarily used for the temporary confinement of individuals who have recently been arrested, detained, or are being transferred to or from a court, jail, prison, or other agency.

Medical practitioner means a health professional who, by virtue of education, credentials, and experience, is permitted by law to evaluate and care for patients within the scope of his or her professional practice. A "qualified medical practitioner" refers to such a professional who has also successfully completed specialized training for treating sexual abuse victims.

Mental health practitioner means a mental health professional who, by virtue of education, credentials, and experience, is permitted by law to evaluate and care for patients within the scope of his or her professional practice. A "qualified mental health practitioner" refers to such a professional who has also successfully completed specialized training for treating sexual abuse victims.

Pat-down search means a running of the hands over the clothed body of an inmate, detainee, or resident by an employee to determine whether the individual possesses contraband.

Prison means an institution under Federal or State jurisdiction whose primary use is for the confinement of individuals convicted of a serious crime, usually in excess of one year in length, or a felony.

Resident means any person confined or detained in a juvenile facility or in a community confinement facility.

Secure juvenile facility means a juvenile facility in which the movements and activities of individual residents may be restricted or subject to control through the use of physical barriers or intensive staff supervision. A facility that allows residents access to the community to achieve

treatment or correctional objectives, such as through educational or employment programs, typically will not be considered to be a secure juvenile facility.

Security staff means employees primarily responsible for the supervision and control of inmates, detainees, or residents in housing units, recreational areas, dining areas, and other program areas of the facility.

Staff means employees.

Strip search means a search that requires a person to remove or arrange some or all clothing so as to permit a visual inspection of the person's breasts, buttocks, or genitalia.

Transgender means a person whose gender identity (i.e., internal sense of feeling male or female) is different from the person's assigned sex at birth.

Substantiated allegation means an allegation that was investigated and determined to have occurred.

Unfounded allegation means an allegation that was investigated and determined not to have occurred.

Unsubstantiated allegation means an allegation that was investigated and the investigation produced insufficient evidence to make a final determination as to whether or not the event occurred.

Volunteer means an individual who donates time and effort on a recurring basis to enhance the activities and programs of the agency.

Youthful inmate means any person under the age of 18 who is under adult court supervision and incarcerated or detained in a prison or jail.

Youthful detainee means any person under the age of 18 who is under adult court supervision and detained in a lockup.

§ 115.6 Definitions related to sexual abuse.

For purposes of this part, the term—

Sexual abuse includes—
(1) Sexual abuse of an inmate, detainee, or resident by another inmate, detainee, or resident; and

(2) Sexual abuse of an inmate, detainee, or resident by a staff member, contractor, or volunteer.

Sexual abuse of an inmate, detainee, or resident by another inmate, detainee, or resident includes any of the following acts, if the victim does not consent, is coerced into such act by overt or implied threats of violence, or is unable to consent or refuse:

(1) Contact between the penis and the vulva or the penis and the anus, including penetration, however slight;

(2) Contact between the mouth and the penis, vulva, or anus;

(3) Penetration of the anal or genital opening of another person, however slight, by a hand, finger, object, or other instrument; and

(4) Any other intentional touching, either directly or through the clothing, of the genitalia, anus, groin, breast, inner thigh, or the buttocks of another person, excluding contact incidental to a physical altercation.

Sexual abuse of an inmate, detainee, or resident by a staff member, contractor, or volunteer includes any of the following acts, with or without consent of the inmate, detainee, or resident:

(1) Contact between the penis and the vulva or the penis and the anus, including penetration, however slight;

(2) Contact between the mouth and the penis, vulva, or anus;

(3) Contact between the mouth and any body part where the staff member, contractor, or volunteer has the intent to abuse, arouse, or gratify sexual desire;

(4) Penetration of the anal or genital opening, however slight, by a hand, finger, object, or other instrument, that is unrelated to official duties or where the staff member, contractor, or volunteer has the intent to abuse, arouse, or gratify sexual desire;

(5) Any other intentional contact, either directly or through the clothing, of or with the genitalia, anus, groin, breast, inner thigh, or the buttocks, that is unrelated to official duties or where the staff member, contractor, or volunteer has the intent to abuse, arouse, or gratify sexual desire;

(6) Any attempt, threat, or request by a staff member, contractor, or volunteer to engage in the activities described in paragraphs (1)-(5) of this section;

(7) Any display by a staff member, contractor, or volunteer of his or her uncovered genitalia, buttocks, or breast in the presence of an inmate, detainee, or resident, and

(8) Voyeurism by a staff member, contractor, or volunteer.

Voyeurism by a staff member, contractor, or volunteer means an invasion of privacy of an inmate, detainee, or resident by staff for reasons unrelated to official duties, such as peering at an inmate who is using a toilet in his or her cell to perform bodily functions; requiring an inmate to expose his or her buttocks, genitals, or breasts; or taking images of all or part of an inmate's naked body or of an inmate performing bodily functions.

Sexual harassment includes—

(1) Repeated and unwelcome sexual advances, requests for sexual favors, or verbal comments, gestures, or actions of a derogatory or offensive sexual nature by one inmate, detainee, or resident directed toward another; and

(2) Repeated verbal comments or gestures of a sexual nature to an inmate, detainee, or resident by a staff member, contractor, or volunteer, including demeaning references to gender, sexually suggestive or derogatory comments about body or clothing, or obscene language or gestures.

Standards for Adult Prisons and Jails

Prevention Planning

§ 115.11 Zero tolerance of sexual abuse and sexual harassment; PREA coordinator.

(a) An agency shall have a written policy mandating zero tolerance toward all forms of sexual abuse and sexual harassment and outlining the agency's approach to preventing, detecting, and responding to such conduct.

(b) An agency shall employ or designate an upper-level, agency-wide PREA coordinator with sufficient time and authority to develop, implement, and oversee agency efforts to comply with the PREA standards in all of its facilities.

(c) Where an agency operates more than one facility, each facility shall designate a PREA compliance manager with sufficient time and authority to coordinate the facility's efforts to comply with the PREA standards.

§ 115.12 Contracting with other entities for the confinement of inmates.

(a) A public agency that contracts for the confinement of its inmates with private agencies or other entities, including other government agencies, shall include in any new contract or contract renewal the entity's obligation to adopt and comply with the PREA standards.

(b) Any new contract or contract renewal shall provide for agency contract monitoring to ensure that the contractor is complying with the PREA standards.

§ 115.13 Supervision and monitoring.

(a) The agency shall ensure that each facility it operates shall develop, document, and make its best efforts to comply on a regular basis with a staffing plan that provides for adequate levels of staffing, and, where applicable, video monitoring, to protect inmates against sexual abuse. In calculating adequate staffing levels and determining the need for video monitoring, facilities shall take into consideration:

(1) Generally accepted detention and correctional practices;

(2) Any judicial findings of inadequacy;

(3) Any findings of inadequacy from Federal investigative agencies;

(4) Any findings of inadequacy from internal or external oversight bodies;

(5) All components of the facility's physical plant (including "blind-spots" or areas where staff or inmates may be isolated);

(6) The composition of the inmate population;

(7) The number and placement of supervisory staff;

(8) Institution programs occurring on a particular shift;

(9) Any applicable State or local laws, regulations, or standards;

(10) The prevalence of substantiated and unsubstantiated incidents of sexual abuse; and

(11) Any other relevant factors.

(b) In circumstances where the staffing plan is not complied with, the facility shall document and justify all deviations from the plan.

(c) Whenever necessary, but no less frequently than once each year, for each facility the agency operates, in consultation with the PREA coordinator required by § 115.11, the agency shall assess, determine, and document whether adjustments are needed to:

(1) The staffing plan established pursuant to paragraph (a) of this section;

(2) The facility's deployment of video monitoring systems and other monitoring technologies; and

(3) The resources the facility has available to commit to ensure adherence to the staffing plan.

(d) Each agency operating a facility shall implement a policy and practice of having intermediate-level or higher-level supervisors conduct and document unannounced rounds to identify and deter staff sexual abuse and sexual harassment. Such policy and practice shall be implemented for night shifts as well as day shifts. Each agency shall have a policy to prohibit staff from alerting other staff members that these supervisory rounds are occurring, unless such announcement is related to the legitimate operational functions of the facility.

§ 115.14 Youthful inmates.

(a) A youthful inmate shall not be placed in a housing unit in which the youthful inmate will have sight, sound, or physical contact with any adult inmate through use of a shared dayroom or other common space, shower area, or sleeping quarters.

(b) In areas outside of housing units, agencies shall either:

(1) maintain sight and sound separation between youthful inmates and adult inmates, or

(2) provide direct staff supervision when youthful inmates and adult inmates have sight, sound, or physical contact.

(c) Agencies shall make best efforts to avoid placing youthful inmates in isolation to comply with this provision. Absent exigent circumstances, agencies shall not deny youthful inmates daily

large-muscle exercise and any legally required special education services to comply with this provision. Youthful inmates shall also have access to other programs and work opportunities to the extent possible.

§ 115.15 Limits to cross-gender viewing and searches.

(a) The facility shall not conduct cross-gender strip searches or cross-gender visual body cavity searches (meaning a search of the anal or genital opening) except in exigent circumstances or when performed by medical practitioners.

(b) As of August 20, 2015, or August 20, 2017 for a facility whose rated capacity does not exceed 50 inmates, the facility shall not permit cross-gender pat-down searches of female inmates, absent exigent circumstances. Facilities shall not restrict female inmates' access to regularly available programming or other out-of-cell opportunities in order to comply with this provision.

(c) The facility shall document all cross-gender strip searches and cross-gender visual body cavity searches, and shall document all cross-gender pat-down searches of female inmates.

(d) The facility shall implement policies and procedures that enable inmates to shower, perform bodily functions, and change clothing without nonmedical staff of the opposite gender viewing their breasts, buttocks, or genitalia, except in exigent circumstances or when such viewing is incidental to routine cell checks. Such policies and procedures shall require staff of the opposite gender to announce their presence when entering an inmate housing unit.

(e) The facility shall not search or physically examine a transgender or intersex inmate for the sole purpose of determining the inmate's genital status. If the inmate's genital status is unknown, it may be determined during conversations with the inmate, by reviewing medical records, or, if necessary, by learning that information as part of a broader medical examination conducted in private by a medical practitioner.

(f) The agency shall train security staff in how to conduct cross-gender pat-down searches, and searches of transgender and intersex inmates, in a professional and respectful manner, and in the least intrusive manner possible, consistent with security needs.

§ 115.16 Inmates with disabilities and inmates who are limited English proficient.

(a) The agency shall take appropriate steps to ensure that inmates with disabilities (including, for example, inmates who are deaf or hard of hearing, those who are blind or have low vision, or those who have intellectual, psychiatric, or speech disabilities), have an equal opportunity to participate in or benefit from all aspects of the agency's efforts to prevent, detect, and respond to sexual abuse and sexual harassment. Such steps shall include, when necessary to ensure effective communication with inmates who are deaf or hard of hearing, providing access to interpreters who can interpret effectively, accurately, and impartially, both receptively and expressively,

using any necessary specialized vocabulary. In addition, the agency shall ensure that written materials are provided in formats or through methods that ensure effective communication with inmates with disabilities, including inmates who have intellectual disabilities, limited reading skills, or who are blind or have low vision. An agency is not required to take actions that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity, or in undue financial and administrative burdens, as those terms are used in regulations promulgated under title II of the Americans With Disabilities Act, 28 CFR 35.164.

(b) The agency shall take reasonable steps to ensure meaningful access to all aspects of the agency's efforts to prevent, detect, and respond to sexual abuse and sexual harassment to inmates who are limited English proficient, including steps to provide interpreters who can interpret effectively, accurately, and impartially, both receptively and expressively, using any necessary specialized vocabulary.

(c) The agency shall not rely on inmate interpreters, inmate readers, or other types of inmate assistants except in limited circumstances where an extended delay in obtaining an effective interpreter could compromise the inmate's safety, the performance of first-response duties under § 115.64, or the investigation of the inmate's allegations.

§ 115.17 Hiring and promotion decisions.

(a) The agency shall not hire or promote anyone who may have contact with inmates, and shall not enlist the services of any contractor who may have contact with inmates, who—

(1) Has engaged in sexual abuse in a prison, jail, lockup, community confinement facility, juvenile facility, or other institution (as defined in 42 U.S.C. 1997);

(2) Has been convicted of engaging or attempting to engage in sexual activity in the community facilitated by force, overt or implied threats of force, or coercion, or if the victim did not consent or was unable to consent or refuse; or

(3) Has been civilly or administratively adjudicated to have engaged in the activity described in paragraph (a)(2) of this section.

(b) The agency shall consider any incidents of sexual harassment in determining whether to hire or promote anyone, or to enlist the services of any contractor, who may have contact with inmates.

(c) Before hiring new employees who may have contact with inmates, the agency shall:

(1) Perform a criminal background records check; and

(2) Consistent with Federal, State, and local law, make its best efforts to contact all prior institutional employers for information on substantiated allegations of sexual abuse or any resignation during a pending investigation of an allegation of sexual abuse.

(d) The agency shall also perform a criminal background records check before enlisting the services of any contractor who may have contact with inmates.

(e) The agency shall either conduct criminal background records checks at least every five years of current employees and contractors who may have contact with inmates or have in place a system for otherwise capturing such information for current employees.

(f) The agency shall ask all applicants and employees who may have contact with inmates directly about previous misconduct described in paragraph (a) of this section in written applications or interviews for hiring or promotions and in any interviews or written selfevaluations conducted as part of reviews of current employees. The agency shall also impose upon employees a continuing affirmative duty to disclose any such misconduct.

(g) Material omissions regarding such misconduct, or the provision of materially false information, shall be grounds for termination.

(h) Unless prohibited by law, the agency shall provide information on substantiated allegations of sexual abuse or sexual harassment involving a former employee upon receiving a request from an institutional employer for whom such employee has applied to work.

§ 115.18 Upgrades to facilities and technologies.

(a) When designing or acquiring any new facility and in planning any substantial expansion or modification of existing facilities, the agency shall consider the effect of the design, acquisition, expansion, or modification upon the agency's ability to protect inmates from sexual abuse.

(b) When installing or updating a video monitoring system, electronic surveillance system, or other monitoring technology, the agency shall consider how such technology may enhance the agency's ability to protect inmates from sexual abuse.

Responsive Planning

§ 115.21 Evidence protocol and forensic medical examinations.

(a) To the extent the agency is responsible for investigating allegations of sexual abuse, the agency shall follow a uniform evidence protocol that maximizes the potential for obtaining usable physical evidence for administrative proceedings and criminal prosecutions.

(b) The protocol shall be developmentally appropriate for youth where applicable, and, as appropriate, shall be adapted from or otherwise based on the most recent edition of the U.S. Department of Justice's Office on Violence Against Women publication, "A National Protocol for Sexual Assault Medical Forensic Examinations, Adults/Adolescents," or similarly comprehensive and authoritative protocols developed after 2011.

(c) The agency shall offer all victims of sexual abuse access to forensic medical examinations, whether on-site or at an outside facility, without financial cost, where evidentiarily or medically appropriate. Such examinations shall be performed by Sexual Assault Forensic Examiners (SAFEs) or Sexual Assault Nurse Examiners (SANEs) where possible. If SAFEs or SANEs cannot be made available, the examination can be performed by other qualified medical practitioners. The agency shall document its efforts to provide SAFEs or SANEs.

(d) The agency shall attempt to make available to the victim a victim advocate from a rape crisis center. If a rape crisis center is not available to provide victim advocate services, the agency shall make available to provide these services a qualified staff member from a community-based organization, or a qualified agency staff member. Agencies shall document efforts to secure services from rape crisis centers. For the purpose of this standard, a rape crisis center refers to an entity that provides intervention and related assistance, such as the services specified in 42 U.S.C. 14043g(b)(2)(C), to victims of sexual assault of all ages. The agency may utilize a rape crisis center that is part of a governmental unit as long as the center is not part of the criminal justice system (such as a law enforcement agency) and offers a comparable level of confidentiality as a nongovernmental entity that provides similar victim services.

(e) As requested by the victim, the victim advocate, qualified agency staff member, or qualified community-based organization staff member shall accompany and support the victim through the forensic medical examination process and investigatory interviews and shall provide emotional support, crisis intervention, information, and referrals.

(f) To the extent the agency itself is not responsible for investigating allegations of sexual abuse, the agency shall request that the investigating agency follow the requirements of paragraphs (a) through (e) of this section.

(g) The requirements of paragraphs (a) through (f) of this section shall also apply to:

(1) Any State entity outside of the agency that is responsible for investigating allegations of sexual abuse in prisons or jails; and

(2) Any Department of Justice component that is responsible for investigating allegations of sexual abuse in prisons or jails.

(h) For the purposes of this section, a qualified agency staff member or a qualified communitybased staff member shall be an individual who has been screened for appropriateness to serve in this role and has received education concerning sexual assault and forensic examination issues in general.

§ 115.22 Policies to ensure referrals of allegations for investigations.

(a) The agency shall ensure that an administrative or criminal investigation is completed for all allegations of sexual abuse and sexual harassment.

(b) The agency shall have in place a policy to ensure that allegations of sexual abuse or sexual harassment are referred for investigation to an agency with the legal authority to conduct criminal investigations, unless the allegation does not involve potentially criminal behavior. The agency shall publish such policy on its website or, if it does not have one, make the policy available through other means. The agency shall document all such referrals.

(c) If a separate entity is responsible for conducting criminal investigations, such publication shall describe the responsibilities of both the agency and the investigating entity.

(d) Any State entity responsible for conducting administrative or criminal investigations of sexual abuse or sexual harassment in prisons or jails shall have in place a policy governing the conduct of such investigations.

(e) Any Department of Justice component responsible for conducting administrative or criminal investigations of sexual abuse or sexual harassment in prisons or jails shall have in place a policy governing the conduct of such investigations.

Training and Education

§ 115.31 Employee training.

(a) The agency shall train all employees who may have contact with inmates on:

(1) Its zero-tolerance policy for sexual abuse and sexual harassment;

(2) How to fulfill their responsibilities under agency sexual abuse and sexual harassment prevention, detection, reporting, and response policies and procedures;

(3) Inmates' right to be free from sexual abuse and sexual harassment;

(4) The right of inmates and employees to be free from retaliation for reporting sexual abuse and sexual harassment;

(5) The dynamics of sexual abuse and sexual harassment in confinement;

(6) The common reactions of sexual abuse and sexual harassment victims;

(7) How to detect and respond to signs of threatened and actual sexual abuse;

(8) How to avoid inappropriate relationships with inmates;

(9) How to communicate effectively and professionally with inmates, including lesbian, gay, bisexual, transgender, intersex, or gender nonconforming inmates; and

(10) How to comply with relevant laws related to mandatory reporting of sexual abuse to outside authorities.

(b) Such training shall be tailored to the gender of the inmates at the employee's facility. The employee shall receive additional training if the employee is reassigned from a facility that houses only male inmates to a facility that houses only female inmates, or vice versa.

(c) All current employees who have not received such training shall be trained within one year of the effective date of the PREA standards, and the agency shall provide each employee with refresher training every two years to ensure that all employees know the agency's current sexual abuse and sexual harassment policies and procedures. In years in which an employee does not receive refresher training, the agency shall provide refresher information on current sexual abuse and sexual harassment policies.

(d) The agency shall document, through employee signature or electronic verification, that employees understand the training they have received.

§ 115.32 Volunteer and contractor training.

(a) The agency shall ensure that all volunteers and contractors who have contact with inmates have been trained on their responsibilities under the agency's sexual abuse and sexual harassment prevention, detection, and response policies and procedures.

(b) The level and type of training provided to volunteers and contractors shall be based on the services they provide and level of contact they have with inmates, but all volunteers and contractors who have contact with inmates shall be notified of the agency's zero-tolerance policy regarding sexual abuse and sexual harassment and informed how to report such incidents.

(c) The agency shall maintain documentation confirming that volunteers and contractors understand the training they have received.

§ 115.33 Inmate education.

(a) During the intake process, inmates shall receive information explaining the agency's zerotolerance policy regarding sexual abuse and sexual harassment and how to report incidents or suspicions of sexual abuse or sexual harassment.

(b) Within 30 days of intake, the agency shall provide comprehensive education to inmates either in person or through video regarding their rights to be free from sexual abuse and sexual harassment and to be free from retaliation for reporting such incidents, and regarding agency policies and procedures for responding to such incidents.

(c) Current inmates who have not received such education shall be educated within one year of the effective date of the PREA standards, and shall receive education upon transfer to a

different facility to the extent that the policies and procedures of the inmate's new facility differ from those of the previous facility.

(d) The agency shall provide inmate education in formats accessible to all inmates, including those who are limited English proficient, deaf, visually impaired, or otherwise disabled, as well as to inmates who have limited reading skills.

(e) The agency shall maintain documentation of inmate participation in these education sessions.

(f) In addition to providing such education, the agency shall ensure that key information is continuously and readily available or visible to inmates through posters, inmate handbooks, or other written formats.

§ 115.34 Specialized training: Investigations.

(a) In addition to the general training provided to all employees pursuant to § 115.31, the agency shall ensure that, to the extent the agency itself conducts sexual abuse investigations, its investigators have received training in conducting such investigations in confinement settings.

(b) Specialized training shall include techniques for interviewing sexual abuse victims, proper use of Miranda and Garrity warnings, sexual abuse evidence collection in confinement settings, and the criteria and evidence required to substantiate a case for administrative action or prosecution referral.

(c) The agency shall maintain documentation that agency investigators have completed the required specialized training in conducting sexual abuse investigations.

(d) Any State entity or Department of Justice component that investigates sexual abuse in confinement settings shall provide such training to its agents and investigators who conduct such investigations.

§ 115.35 Specialized training: Medical and mental health care.

(a) The agency shall ensure that all full- and part-time medical and mental health care practitioners who work regularly in its facilities have been trained in:

(1) How to detect and assess signs of sexual abuse and sexual harassment;

(2) How to preserve physical evidence of sexual abuse;

(3) How to respond effectively and professionally to victims of sexual abuse and sexual harassment; and

(4) How and to whom to report allegations or suspicions of sexual abuse and sexual harassment.
(b) If medical staff employed by the agency conduct forensic examinations, such medical staff shall receive the appropriate training to conduct such examinations.

(c) The agency shall maintain documentation that medical and mental health practitioners have received the training referenced in this standard either from the agency or elsewhere.

(d) Medical and mental health care practitioners shall also receive the training mandated for employees under § 115.31 or for contractors and volunteers under § 115.32, depending upon the practitioner's status at the agency.

Screening for Risk of Sexual Victimization and Abusiveness

§ 115.41 Screening for risk of victimization and abusiveness.

(a) All inmates shall be assessed during an intake screening and upon transfer to another facility for their risk of being sexually abused by other inmates or sexually abusive toward other inmates.

(b) Intake screening shall ordinarily take place within 72 hours of arrival at the facility.

(c) Such assessments shall be conducted using an objective screening instrument.

(d) The intake screening shall consider, at a minimum, the following criteria to assess inmates for risk of sexual victimization:

(1) Whether the inmate has a mental, physical, or developmental disability;

(2) The age of the inmate;

(3) The physical build of the inmate;

(4) Whether the inmate has previously been incarcerated;

(5) Whether the inmate's criminal history is exclusively nonviolent;

(6) Whether the inmate has prior convictions for sex offenses against an adult or child;

(7) Whether the inmate is or is perceived to be gay, lesbian, bisexual, transgender, intersex, or gender nonconforming;

(8) Whether the inmate has previously experienced sexual victimization;

(9) The inmate's own perception of vulnerability; and

(10) Whether the inmate is detained solely for civil immigration purposes.

(e) The initial screening shall consider prior acts of sexual abuse, prior convictions for violent offenses, and history of prior institutional violence or sexual abuse, as known to the agency, in assessing inmates for risk of being sexually abusive.

(f) Within a set time period, not to exceed 30 days from the inmate's arrival at the facility, the facility will reassess the inmate's risk of victimization or abusiveness based upon any additional, relevant information received by the facility since the intake screening.

(g) An inmate's risk level shall be reassessed when warranted due to a referral, request, incident of sexual abuse, or receipt of additional information that bears on the inmate's risk of sexual victimization or abusiveness.

(h) Inmates may not be disciplined for refusing to answer, or for not disclosing complete information in response to, questions asked pursuant to paragraphs (d)(1), (d)(7), (d)(8), or (d)(9) of this section.

(i) The agency shall implement appropriate controls on the dissemination within the facility of responses to questions asked pursuant to this standard in order to ensure that sensitive information is not exploited to the inmate's detriment by staff or other inmates.

§ 115.42 Use of screening information.

(a) The agency shall use information from the risk screening required by § 115.41 to inform housing, bed, work, education, and program assignments with the goal of keeping separate those inmates at high risk of being sexually victimized from those at high risk of being sexually abusive.

(b) The agency shall make individualized determinations about how to ensure the safety of each inmate.

(c) In deciding whether to assign a transgender or intersex inmate to a facility for male or female inmates, and in making other housing and programming assignments, the agency shall consider on a case-by-case basis whether a placement would ensure the inmate's health and safety, and whether the placement would present management or security problems.

(d) Placement and programming assignments for each transgender or intersex inmate shall be reassessed at least twice each year to review any threats to safety experienced by the inmate.

(e) A transgender or intersex inmate's own views with respect to his or her own safety shall be given serious consideration.

(f) Transgender and intersex inmates shall be given the opportunity to shower separately from other inmates.

(g) The agency shall not place lesbian, gay, bisexual, transgender, or intersex inmates in dedicated facilities, units, or wings solely on the basis of such identification or status, unless such placement is in a dedicated facility, unit, or wing established in connection with a consent decree, legal settlement, or legal judgment for the purpose of protecting such inmates.

§ 115.43 Protective custody.

(a) Inmates at high risk for sexual victimization shall not be placed in involuntary segregated housing unless an assessment of all available alternatives has been made, and a determination has been made that there is no available alternative means of separation from likely abusers. If a facility cannot conduct such an assessment immediately, the facility may hold the inmate in involuntary segregated housing for less than 24 hours while completing the assessment.

(b) Inmates placed in segregated housing for this purpose shall have access to programs, privileges, education, and work opportunities to the extent possible. If the facility restricts access to programs, privileges, education, or work opportunities, the facility shall document:

(1) The opportunities that have been limited;

(2) The duration of the limitation; and

(3) The reasons for such limitations.

(c) The facility shall assign such inmates to involuntary segregated housing only until an alternative means of separation from likely abusers can be arranged, and such an assignment shall not ordinarily exceed a period of 30 days.

(d) If an involuntary segregated housing assignment is made pursuant to paragraph (a) of this section, the facility shall clearly document:

(1) The basis for the facility's concern for the inmate's safety; and

(2) The reason why no alternative means of separation can be arranged.

(e) Every 30 days, the facility shall afford each such inmate a review to determine whether there is a continuing need for separation from the general population.

Reporting

§ 115.51 Inmate reporting.

(a) The agency shall provide multiple internal ways for inmates to privately report sexual abuse and sexual harassment, retaliation by other inmates or staff for reporting sexual abuse and sexual harassment, and staff neglect or violation of responsibilities that may have contributed to such incidents.

(b) The agency shall also provide at least one way for inmates to report abuse or harassment to a public or private entity or office that is not part of the agency, and that is able to receive and immediately forward inmate reports of sexual abuse and sexual harassment to agency officials, allowing the inmate to remain anonymous upon request. Inmates detained solely for civil

immigration purposes shall be provided information on how to contact relevant consular officials and relevant officials at the Department of Homeland Security.

(c) Staff shall accept reports made verbally, in writing, anonymously, and from third parties and shall promptly document any verbal reports.

(d) The agency shall provide a method for staff to privately report sexual abuse and sexual harassment of inmates.

§ 115.52 Exhaustion of administrative remedies.

(a) An agency shall be exempt from this standard if it does not have administrative procedures to address inmate grievances regarding sexual abuse.

(b)(1) The agency shall not impose a time limit on when an inmate may submit a grievance regarding an allegation of sexual abuse.

(2) The agency may apply otherwise-applicable time limits to any portion of a grievance that does not allege an incident of sexual abuse.

(3) The agency shall not require an inmate to use any informal grievance process, or to otherwise attempt to resolve with staff, an alleged incident of sexual abuse.

(4) Nothing in this section shall restrict the agency's ability to defend against an inmate lawsuit on the ground that the applicable statute of limitations has expired.

(c) The agency shall ensure that—

(1) An inmate who alleges sexual abuse may submit a grievance without submitting it to a staff member who is the subject of the complaint, and

(2) Such grievance is not referred to a staff member who is the subject of the complaint.

(d)(1) The agency shall issue a final agency decision on the merits of any portion of a grievance alleging sexual abuse within 90 days of the initial filing of the grievance.

(2) Computation of the 90-day time period shall not include time consumed by inmates in preparing any administrative appeal.

(3) The agency may claim an extension of time to respond, of up to 70 days, if the normal time period for response is insufficient to make an appropriate decision. The agency shall notify the inmate in writing of any such extension and provide a date by which a decision will be made.

(4) At any level of the administrative process, including the final level, if the inmate does not receive a response within the time allotted for reply, including any properly noticed extension, the inmate may consider the absence of a response to be a denial at that level.

(e)(1) Third parties, including fellow inmates, staff members, family members, attorneys, and outside advocates, shall be permitted to assist inmates in filing requests for administrative remedies relating to allegations of sexual abuse, and shall also be permitted to file such requests on behalf of inmates.

(2) If a third party files such a request on behalf of an inmate, the facility may require as a condition of processing the request that the alleged victim agree to have the request filed on his or her behalf, and may also require the alleged victim to personally pursue any subsequent steps in the administrative remedy process.

(3) If the inmate declines to have the request processed on his or her behalf, the agency shall document the inmate's decision.

(f)(1) The agency shall establish procedures for the filing of an emergency grievance alleging that an inmate is subject to a substantial risk of imminent sexual abuse.

(2) After receiving an emergency grievance alleging an inmate is subject to a substantial risk of imminent sexual abuse, the agency shall immediately forward the grievance (or any portion thereof that alleges the substantial risk of imminent sexual abuse) to a level of review at which immediate corrective action may be taken, shall provide an initial response within 48 hours, and shall issue a final agency decision within 5 calendar days. The initial response and final agency decision shall document the agency's determination whether the inmate is in substantial risk of imminent sexual abuse and the action taken in response to the emergency grievance.

(g) The agency may discipline an inmate for filing a grievance related to alleged sexual abuse only where the agency demonstrates that the inmate filed the grievance in bad faith.

§ 115.53 Inmate access to outside confidential support services.

(a) The facility shall provide inmates with access to outside victim advocates for emotional support services related to sexual abuse by giving inmates mailing addresses and telephone numbers, including toll-free hotline numbers where available, of local, State, or national victim advocacy or rape crisis organizations, and, for persons detained solely for civil immigration purposes, immigrant services agencies. The facility shall enable reasonable communication between inmates and these organizations and agencies, in as confidential a manner as possible.

(b) The facility shall inform inmates, prior to giving them access, of the extent to which such communications will be monitored and the extent to which reports of abuse will be forwarded to authorities in accordance with mandatory reporting laws.

(c) The agency shall maintain or attempt to enter into memoranda of understanding or other agreements with community service providers that are able to provide inmates with confidential emotional support services related to sexual abuse. The agency shall maintain copies of agreements or documentation showing attempts to enter into such agreements.

§ 115.54 Third-party reporting.

The agency shall establish a method to receive third-party reports of sexual abuse and sexual harassment and shall distribute publicly information on how to report sexual abuse and sexual harassment on behalf of an inmate.

Official Response Following an Inmate Report

§ 115.61 Staff and agency reporting duties.

(a) The agency shall require all staff to report immediately and according to agency policy any knowledge, suspicion, or information regarding an incident of sexual abuse or sexual harassment that occurred in a facility, whether or not it is part of the agency; retaliation against inmates or staff who reported such an incident; and any staff neglect or violation of responsibilities that may have contributed to an incident or retaliation.

(b) Apart from reporting to designated supervisors or officials, staff shall not reveal any information related to a sexual abuse report to anyone other than to the extent necessary, as specified in agency policy, to make treatment, investigation, and other security and management decisions.

(c) Unless otherwise precluded by Federal, State, or local law, medical and mental health practitioners shall be required to report sexual abuse pursuant to paragraph (a) of this section and to inform inmates of the practitioner's duty to report, and the limitations of confidentiality, at the initiation of services.

(d) If the alleged victim is under the age of 18 or considered a vulnerable adult under a State or local vulnerable persons statute, the agency shall report the allegation to the designated State or local services agency under applicable mandatory reporting laws.

(e) The facility shall report all allegations of sexual abuse and sexual harassment, including third-party and anonymous reports, to the facility's designated investigators.

§ 115.62 Agency protection duties.

When an agency learns that an inmate is subject to a substantial risk of imminent sexual abuse, it shall take immediate action to protect the inmate.

§ 115.63 Reporting to other confinement facilities.

(a) Upon receiving an allegation that an inmate was sexually abused while confined at another facility, the head of the facility that received the allegation shall notify the head of the facility or appropriate office of the agency where the alleged abuse occurred.

(b) Such notification shall be provided as soon as possible, but no later than 72 hours after receiving the allegation.

(c) The agency shall document that it has provided such notification.

(d) The facility head or agency office that receives such notification shall ensure that the allegation is investigated in accordance with these standards.

§ 115.64 Staff first responder duties.

(a) Upon learning of an allegation that an inmate was sexually abused, the first security staff member to respond to the report shall be required to:

(1) Separate the alleged victim and abuser;

(2) Preserve and protect any crime scene until appropriate steps can be taken to collect any evidence;

(3) If the abuse occurred within a time period that still allows for the collection of physical evidence, request that the alleged victim not take any actions that could destroy physical evidence, including, as appropriate, washing, brushing teeth, changing clothes, urinating, defecating, smoking, drinking, or eating; and

(4) If the abuse occurred within a time period that still allows for the collection of physical evidence, ensure that the alleged abuser does not take any actions that could destroy physical evidence, including, as appropriate, washing, brushing teeth, changing clothes, urinating, defecating, smoking, drinking, or eating.

(b) If the first staff responder is not a security staff member, the responder shall be required to request that the alleged victim not take any actions that could destroy physical evidence, and then notify security staff.

§ 115.65 Coordinated response.

The facility shall develop a written institutional plan to coordinate actions taken in response to an incident of sexual abuse, among staff first responders, medical and mental health practitioners, investigators, and facility leadership.

§ 115.66 Preservation of ability to protect inmates from contact with abusers.

(a) Neither the agency nor any other governmental entity responsible for collective bargaining on the agency's behalf shall enter into or renew any collective bargaining agreement or other agreement that limits the agency's ability to remove alleged staff sexual abusers from contact with any inmates pending the outcome of an investigation or of a determination of whether and to what extent discipline is warranted.

(b) Nothing in this standard shall restrict the entering into or renewal of agreements that govern:

(1) The conduct of the disciplinary process, as long as such agreements are not inconsistent with the provisions of §§ 115.72 and 115.76; or

(2) Whether a no-contact assignment that is imposed pending the outcome of an investigation shall be expunged from or retained in the staff member's personnel file following a determination that the allegation of sexual abuse is not substantiated.

§ 115.67 Agency protection against retaliation.

(a) The agency shall establish a policy to protect all inmates and staff who report sexual abuse or sexual harassment or cooperate with sexual abuse or sexual harassment investigations from retaliation by other inmates or staff, and shall designate which staff members or departments are charged with monitoring retaliation.

(b) The agency shall employ multiple protection measures, such as housing changes or transfers for inmate victims or abusers, removal of alleged staff or inmate abusers from contact with victims, and emotional support services for inmates or staff who fear retaliation for reporting sexual abuse or sexual harassment or for cooperating with investigations.

(c) For at least 90 days following a report of sexual abuse, the agency shall monitor the conduct and treatment of inmates or staff who reported the sexual abuse and of inmates who were reported to have suffered sexual abuse to see if there are changes that may suggest possible retaliation by inmates or staff, and shall act promptly to remedy any such retaliation. Items the agency should monitor include any inmate disciplinary reports, housing, or program changes, or negative performance reviews or reassignments of staff. The agency shall continue such monitoring beyond 90 days if the initial monitoring indicates a continuing need.

(d) In the case of inmates, such monitoring shall also include periodic status checks.

(e) If any other individual who cooperates with an investigation expresses a fear of retaliation, the agency shall take appropriate measures to protect that individual against retaliation.

(f) An agency's obligation to monitor shall terminate if the agency determines that the allegation is unfounded.

§ 115.68 Post-allegation protective custody.

Any use of segregated housing to protect an inmate who is alleged to have suffered sexual abuse shall be subject to the requirements of § 115.43.

Investigations

§ 115.71 Criminal and administrative agency investigations.

(a) When the agency conducts its own investigations into allegations of sexual abuse and sexual harassment, it shall do so promptly, thoroughly, and objectively for all allegations, including third-party and anonymous reports.

(b) Where sexual abuse is alleged, the agency shall use investigators who have received special training in sexual abuse investigations pursuant to § 115.34.

(c) Investigators shall gather and preserve direct and circumstantial evidence, including any available physical and DNA evidence and any available electronic monitoring data; shall interview alleged victims, suspected perpetrators, and witnesses; and shall review prior complaints and reports of sexual abuse involving the suspected perpetrator.

(d) When the quality of evidence appears to support criminal prosecution, the agency shall conduct compelled interviews only after consulting with prosecutors as to whether compelled interviews may be an obstacle for subsequent criminal prosecution.

(e) The credibility of an alleged victim, suspect, or witness shall be assessed on an individual basis and shall not be determined by the person's status as inmate or staff. No agency shall require an inmate who alleges sexual abuse to submit to a polygraph examination or other truthtelling device as a condition for proceeding with the investigation of such an allegation.

(f) Administrative investigations:

(1) Shall include an effort to determine whether staff actions or failures to act contributed to the abuse; and

(2) Shall be documented in written reports that include a description of the physical and testimonial evidence, the reasoning behind credibility assessments, and investigative facts and findings.

(g) Criminal investigations shall be documented in a written report that contains a thorough description of physical, testimonial, and documentary evidence and attaches copies of all documentary evidence where feasible.

(h) Substantiated allegations of conduct that appears to be criminal shall be referred for prosecution.

(i) The agency shall retain all written reports referenced in paragraphs (f) and (g) of this section for as long as the alleged abuser is incarcerated or employed by the agency, plus five years.

(j) The departure of the alleged abuser or victim from the employment or control of the facility or agency shall not provide a basis for terminating an investigation.

(k) Any State entity or Department of Justice component that conducts such investigations shall do so pursuant to the above requirements.

(l) When outside agencies investigate sexual abuse, the facility shall cooperate with outside investigators and shall endeavor to remain informed about the progress of the investigation.

§ 115.72 Evidentiary standard for administrative investigations.

The agency shall impose no standard higher than a preponderance of the evidence in determining whether allegations of sexual abuse or sexual harassment are substantiated.

§ 115.73 Reporting to inmates.

(a) Following an investigation into an inmate's allegation that he or she suffered sexual abuse in an agency facility, the agency shall inform the inmate as to whether the allegation has been determined to be substantiated, unsubstantiated, or unfounded.

(b) If the agency did not conduct the investigation, it shall request the relevant information from the investigative agency in order to inform the inmate.

(c) Following an inmate's allegation that a staff member has committed sexual abuse against the inmate, the agency shall subsequently inform the inmate (unless the agency has determined that the allegation is unfounded) whenever:

(1) The staff member is no longer posted within the inmate's unit;

(2) The staff member is no longer employed at the facility;

(3) The agency learns that the staff member has been indicted on a charge related to sexual abuse within the facility; or

(4) The agency learns that the staff member has been convicted on a charge related to sexual abuse within the facility.

(d) Following an inmate's allegation that he or she has been sexually abused by another inmate, the agency shall subsequently inform the alleged victim whenever:

(1) The agency learns that the alleged abuser has been indicted on a charge related to sexual abuse within the facility; or

(2) The agency learns that the alleged abuser has been convicted on a charge related to sexual abuse within the facility.

(e) All such notifications or attempted notifications shall be documented.

(f) An agency's obligation to report under this standard shall terminate if the inmate is released from the agency's custody.

Discipline

§ 115.76 Disciplinary sanctions for staff.

(a) Staff shall be subject to disciplinary sanctions up to and including termination for violating agency sexual abuse or sexual harassment policies.

(b) Termination shall be the presumptive disciplinary sanction for staff who have engaged in sexual abuse.

(c) Disciplinary sanctions for violations of agency policies relating to sexual abuse or sexual harassment (other than actually engaging in sexual abuse) shall be commensurate with the nature and circumstances of the acts committed, the staff member's disciplinary history, and the sanctions imposed for comparable offenses by other staff with similar histories.

(d) All terminations for violations of agency sexual abuse or sexual harassment policies, or resignations by staff who would have been terminated if not for their resignation, shall be reported to law enforcement agencies, unless the activity was clearly not criminal, and to any relevant licensing bodies.

§ 115.77 Corrective action for contractors and volunteers.

(a) Any contractor or volunteer who engages in sexual abuse shall be prohibited from contact with inmates and shall be reported to law enforcement agencies, unless the activity was clearly not criminal, and to relevant licensing bodies.

(b) The facility shall take appropriate remedial measures, and shall consider whether to prohibit further contact with inmates, in the case of any other violation of agency sexual abuse or sexual harassment policies by a contractor or volunteer.

§ 115.78 Disciplinary sanctions for inmates.

(a) Inmates shall be subject to disciplinary sanctions pursuant to a formal disciplinary process following an administrative finding that the inmate engaged in inmate-on-inmate sexual abuse or following a criminal finding of guilt for inmate-on-inmate sexual abuse.

(b) Sanctions shall be commensurate with the nature and circumstances of the abuse committed, the inmate's disciplinary history, and the sanctions imposed for comparable offenses by other inmates with similar histories.

(c) The disciplinary process shall consider whether an inmate's mental disabilities or mental illness contributed to his or her behavior when determining what type of sanction, if any, should be imposed.

(d) If the facility offers therapy, counseling, or other interventions designed to address and correct underlying reasons or motivations for the abuse, the facility shall consider whether to require the offending inmate to participate in such interventions as a condition of access to programming or other benefits.

(e) The agency may discipline an inmate for sexual contact with staff only upon a finding that the staff member did not consent to such contact.

(f) For the purpose of disciplinary action, a report of sexual abuse made in good faith based upon a reasonable belief that the alleged conduct occurred shall not constitute falsely reporting an incident or lying, even if an investigation does not establish evidence sufficient to substantiate the allegation.

(g) An agency may, in its discretion, prohibit all sexual activity between inmates and may discipline inmates for such activity. An agency may not, however, deem such activity to constitute sexual abuse if it determines that the activity is not coerced.

Medical and Mental Care

§ 115.81 Medical and mental health screenings; history of sexual abuse.

(a) If the screening pursuant to § 115.41 indicates that a prison inmate has experienced prior sexual victimization, whether it occurred in an institutional setting or in the community, staff shall ensure that the inmate is offered a follow-up meeting with a medical or mental health practitioner within 14 days of the intake screening.

(b) If the screening pursuant to § 115.41 indicates that a prison inmate has previously perpetrated sexual abuse, whether it occurred in an institutional setting or in the community, staff shall ensure that the inmate is offered a follow-up meeting with a mental health practitioner within 14 days of the intake screening.

(c) If the screening pursuant to § 115.41 indicates that a jail inmate has experienced prior

sexual victimization, whether it occurred in an institutional setting or in the community, staff shall ensure that the inmate is offered a follow-up meeting with a medical or mental health practitioner within 14 days of the intake screening.

(d) Any information related to sexual victimization or abusiveness that occurred in an institutional setting shall be strictly limited to medical and mental health practitioners and other staff, as necessary, to inform treatment plans and security and management decisions, including housing, bed, work, education, and program assignments, or as otherwise required by Federal, State, or local law.

(e) Medical and mental health practitioners shall obtain informed consent from inmates before reporting information about prior sexual victimization that did not occur in an institutional setting, unless the inmate is under the age of 18.

§ 115.82 Access to emergency medical and mental health services.

(a) Inmate victims of sexual abuse shall receive timely, unimpeded access to emergency medical treatment and crisis intervention services, the nature and scope of which are determined by medical and mental health practitioners according to their professional judgment.

(b) If no qualified medical or mental health practitioners are on duty at the time a report of recent abuse is made, security staff first responders shall take preliminary steps to protect the victim pursuant to § 115.62 and shall immediately notify the appropriate medical and mental health practitioners.

(c) Inmate victims of sexual abuse while incarcerated shall be offered timely information about and timely access to emergency contraception and sexually transmitted infections prophylaxis, in accordance with professionally accepted standards of care, where medically appropriate.

(d) Treatment services shall be provided to the victim without financial cost and regardless of whether the victim names the abuser or cooperates with any investigation arising out of the incident.

§ 115.83 Ongoing medical and mental health care for sexual abuse victims and abusers.

(a) The facility shall offer medical and mental health evaluation and, as appropriate, treatment to all inmates who have been victimized by sexual abuse in any prison, jail, lockup, or juvenile facility.

(b) The evaluation and treatment of such victims shall include, as appropriate, follow-up services, treatment plans, and, when necessary, referrals for continued care following their transfer to, or placement in, other facilities, or their release from custody.

(c) The facility shall provide such victims with medical and mental health services consistent with the community level of care.

(d) Inmate victims of sexually abusive vaginal penetration while incarcerated shall be offered pregnancy tests.

(e) If pregnancy results from the conduct described in paragraph (d) of this section, such victims shall receive timely and comprehensive information about and timely access to all lawful pregnancy-related medical services.

(f) Inmate victims of sexual abuse while incarcerated shall be offered tests for sexually transmitted infections as medically appropriate.

(g) Treatment services shall be provided to the victim without financial cost and regardless of whether the victim names the abuser or cooperates with any investigation arising out of the incident.

(h) All prisons shall attempt to conduct a mental health evaluation of all known inmate-oninmate abusers within 60 days of learning of such abuse history and offer treatment when deemed appropriate by mental health practitioners.

Data Collection and Review

§ 115.86 Sexual abuse incident reviews.

(a) The facility shall conduct a sexual abuse incident review at the conclusion of every sexual abuse investigation, including where the allegation has not been substantiated, unless the allegation has been determined to be unfounded.

(b) Such review shall ordinarily occur within 30 days of the conclusion of the investigation.

(c) The review team shall include upper-level management officials, with input from line supervisors, investigators, and medical or mental health practitioners.

(d) The review team shall:

(1) Consider whether the allegation or investigation indicates a need to change policy or practice to better prevent, detect, or respond to sexual abuse;

(2) Consider whether the incident or allegation was motivated by race; ethnicity; gender identity; lesbian, gay, bisexual, transgender, or intersex identification, status, or perceived status; or gang affiliation; or was motivated or otherwise caused by other group dynamics at the facility;

(3) Examine the area in the facility where the incident allegedly occurred to assess whether physical barriers in the area may enable abuse;

(4) Assess the adequacy of staffing levels in that area during different shifts;

(5) Assess whether monitoring technology should be deployed or augmented to supplement supervision by staff; and

(6) Prepare a report of its findings, including but not necessarily limited to determinations made pursuant to paragraphs (d)(1)-(d)(5) of this section, and any recommendations for improvement and submit such report to the facility head and PREA compliance manager.

(e) The facility shall implement the recommendations for improvement, or shall document its reasons for not doing so.

§ 115.87 Data collection.

(a) The agency shall collect accurate, uniform data for every allegation of sexual abuse at facilities under its direct control using a standardized instrument and set of definitions.

(b) The agency shall aggregate the incident-based sexual abuse data at least annually.

(c) The incident-based data collected shall include, at a minimum, the data necessary to answer all questions from the most recent version of the Survey of Sexual Violence conducted by the Department of Justice.

(d) The agency shall maintain, review, and collect data as needed from all available incidentbased documents, including reports, investigation files, and sexual abuse incident reviews.

(e) The agency also shall obtain incident-based and aggregated data from every private facility with which it contracts for the confinement of its inmates.

(f) Upon request, the agency shall provide all such data from the previous calendar year to the Department of Justice no later than June 30.

§ 115.88 Data review for corrective action.

(a) The agency shall review data collected and aggregated pursuant to § 115.87 in order to assess and improve the effectiveness of its sexual abuse prevention, detection, and response policies, practices, and training, including by:

(1) Identifying problem areas;

(2) Taking corrective action on an ongoing basis; and

(3) Preparing an annual report of its findings and corrective actions for each facility, as well as the agency as a whole.

(b) Such report shall include a comparison of the current year's data and corrective actions with those from prior years and shall provide an assessment of the agency's progress in addressing sexual abuse.

(c) The agency's report shall be approved by the agency head and made readily available to the public through its website or, if it does not have one, through other means.

(d) The agency may redact specific material from the reports when publication would present a clear and specific threat to the safety and security of a facility, but must indicate the nature of the material redacted.

§ 115.89 Data storage, publication, and destruction.

(a) The agency shall ensure that data collected pursuant to § 115.87 are securely retained.

(b) The agency shall make all aggregated sexual abuse data, from facilities under its direct control and private facilities with which it contracts, readily available to the public at least annually through its website or, if it does not have one, through other means.

(c) Before making aggregated sexual abuse data publicly available, the agency shall remove all personal identifiers.

(d) The agency shall maintain sexual abuse data collected pursuant to § 115.87 for at least 10 years after the date of the initial collection unless Federal, State, or local law requires otherwise.

Audits

§ 115.93 Audits of standards.

The agency shall conduct audits pursuant to §§ 115.401–.405.

Auditing and Corrective Action

§ 115.401 Frequency and scope of audits.

(a) During the three-year period starting on August 20, 2013, and during each three-year period thereafter, the agency shall ensure that each facility operated by the agency, or by a private organization on behalf of the agency, is audited at least once.

(b) During each one-year period starting on August 20, 2013, the agency shall ensure that at least one-third of each facility type operated by the agency, or by a private organization on behalf of the agency, is audited.

(c) The Department of Justice may send a recommendation to an agency for an expedited audit if the Department has reason to believe that a particular facility may be experiencing problems relating to sexual abuse. The recommendation may also include referrals to resources that may assist the agency with PREA-related issues.

(d) The Department of Justice shall develop and issue an audit instrument that will provide guidance on the conduct of and contents of the audit.

(e) The agency shall bear the burden of demonstrating compliance with the standards.

(f) The auditor shall review all relevant agency-wide policies, procedures, reports, internal and external audits, and accreditations for each facility type.

(g) The audits shall review, at a minimum, a sampling of relevant documents and other records and information for the most recent one-year period.

(h) The auditor shall have access to, and shall observe, all areas of the audited facilities.

(i) The auditor shall be permitted to request and receive copies of any relevant documents (including electronically stored information).

(j) The auditor shall retain and preserve all documentation (including, e.g., video tapes and interview notes) relied upon in making audit determinations. Such documentation shall be provided to the Department of Justice upon request.

(k) The auditor shall interview a representative sample of inmates, residents, and detainees, and of staff, supervisors, and administrators.

(l) The auditor shall review a sampling of any available videotapes and other electronically available data (e.g., Watchtour) that may be relevant to the provisions being audited.

(m) The auditor shall be permitted to conduct private interviews with inmates, residents, and detainees.

(n) Inmates, residents, and detainees shall be permitted to send confidential information or correspondence to the auditor in the same manner as if they were communicating with legal counsel.

(o) Auditors shall attempt to communicate with community-based or victim advocates who may have insight into relevant conditions in the facility.

§ 115.402 Auditor qualifications.

(a) An audit shall be conducted by:

(1) A member of a correctional monitoring body that is not part of, or under the authority of, the agency (but may be part of, or authorized by, the relevant State or local government);

(2) A member of an auditing entity such as an inspector general's or ombudsperson's office that is external to the agency; or

(3) Other outside individuals with relevant experience.

(b) All auditors shall be certified by the Department of Justice. The Department of Justice shall develop and issue procedures regarding the certification process, which shall include training requirements.

(c) No audit may be conducted by an auditor who has received financial compensation from the agency being audited (except for compensation received for conducting prior PREA audits) within the three years prior to the agency's retention of the auditor.

(d) The agency shall not employ, contract with, or otherwise financially compensate the auditor for three years subsequent to the agency's retention of the auditor, with the exception of contracting for subsequent PREA audits.

§ 115.403 Audit contents and findings.

(a) Each audit shall include a certification by the auditor that no conflict of interest exists with respect to his or her ability to conduct an audit of the agency under review.

(b) Audit reports shall state whether agency-wide policies and procedures comply with relevant PREA standards.

(c) For each PREA standard, the auditor shall determine whether the audited facility reaches one of the following findings: Exceeds Standard (substantially exceeds requirement of standard); Meets Standard (substantial compliance; complies in all material ways with the standard for the relevant review period); Does Not Meet Standard (requires corrective action). The audit summary shall indicate, among other things, the number of provisions the facility has achieved at each grade level.

(d) Audit reports shall describe the methodology, sampling sizes, and basis for the auditor's conclusions with regard to each standard provision for each audited facility, and shall include recommendations for any required corrective action.

(e) Auditors shall redact any personally identifiable inmate or staff information from their reports, but shall provide such information to the agency upon request, and may provide such information to the Department of Justice.

(f) The agency shall ensure that the auditor's final report is published on the agency's website if it has one, or is otherwise made readily available to the public.

§ 115.404 Audit corrective action plan.

(a) A finding of "Does Not Meet Standard" with one or more standards shall trigger a 180-day corrective action period.

(b) The auditor and the agency shall jointly develop a corrective action plan to achieve compliance.

(c) The auditor shall take necessary and appropriate steps to verify implementation of the corrective action plan, such as reviewing updated policies and procedures or re-inspecting portions of a facility.

(d) After the 180-day corrective action period ends, the auditor shall issue a final determination as to whether the facility has achieved compliance with those standards requiring corrective action.

(e) If the agency does not achieve compliance with each standard, it may (at its discretion and cost) request a subsequent audit once it believes that is has achieved compliance.

§ 115.405 Audit appeals.

(a) An agency may lodge an appeal with the Department of Justice regarding any specific audit finding that it believes to be incorrect. Such appeal must be lodged within 90 days of the auditor's final determination.

(b) If the Department determines that the agency has stated good cause for a re-evaluation, the agency may commission a re-audit by an auditor mutually agreed upon by the Department and the agency. The agency shall bear the costs of this re-audit.

(c) The findings of the re-audit shall be considered final.

State Compliance

§ 115.501 State determination and certification of full compliance.

(a) In determining pursuant to 42 U.S.C. 15607(c)(2) whether the State is in full compliance with the PREA standards, the Governor shall consider the results of the most recent agency audits.

(b) The Governor's certification shall apply to all facilities in the State under the operational control of the State's executive branch, including facilities operated by private entities on behalf of the State's executive branch.

ELIMINATION OF SEXUAL ABUSE AND SEXUAL HARASSMENT-PRISON RAPE ELIMINATION ACT (PREA) CONTRACTOR NOTICE

This Notice applies only to Contractors and their employees who have "Inmate Contact". Inmate Contact is defined as material and intentional contact, such as engaging in conversations, work, programs, religious worship, presentations, health care, recreation, education, or any other similar contact with inmates, whether supervised or unsupervised. Inmate Contact does not mean incidental contact such as walking through a hall by an inmate or simply seeing an inmate in the course of duties.

A. Contractor Requirements

In the performance of services under any contract with DOC, contractors shall comply with all federal and state laws and Department policies regarding sexual misconduct including, but not limited to:

Federal Law:

- Prison Rape Elimination Act of 2003 (PREA)

City & State Law, New York:

- City of New York, Mayoral Executive Order No. 16
- New York City Equal Employment Opportunity Commission Laws and Regulations
- New York State Division of Human Rights Laws and Regulations

DOC Policy:

- Directive 5011, Elimination of Sexual Abuse and Sexual Harassment.

Contractors must comply with the following:

1. The DOC has a zero tolerance policy toward all forms of sexual abuse and sexual harassment. Any contractor working for DOC shall not engage in sexual abuse or harassment of any inmate;
2. All contractors shall report any knowledge, suspicion or involvement in inmate sexual abuse or harassment. To report abuse or harassment, contractors shall call: 212-266-1900
3. Contractors shall familiarize themselves with the federal PREA law, relevant New York State and City laws and DOC policies regarding PREA and sexual misconduct. A copy of the DOC's policy is available upon request, and available online at www.nyc.gov/doc.
4. The DOC will provide PREA basic training to contractors based on the degree of contact they have with inmates, which is described in more detail in the sections below.
5. Contractor employees who will have Inmate Contact must submit to a criminal records background check prior to working on DOC premises.
6. Contractors who engage in sexual abuse or harassment or fail to conform to the DOC's zero tolerance policy are subject to any of the following remedies at the sole discretion of DOC:

    a. Removal from proximity to inmates;
    b. Removal from contract work on DOC premises;
    c. Contract termination;
    d. Possible referral of offenses for criminal prosecution.

B. Contractor Background Checks

1. All contractor employees who will have Inmate Contact must undergo a criminal records background check and be cleared by DOC prior to having contact with inmates. This clearance must be repeated at least once every five years thereafter.

2. Contractors with incidental contact shall not be required to undergo a background check, but must have direct staff supervision at all times while working within any Departmental facility with inmates.

C. <u>Contractor Training</u>

1. The Department will ensure that all Contractor employees who have Inmate Contact have been trained on their responsibilities under DOC sexual abuse and sexual harassment prevention, detection, and response policies and procedures. Contractor employees must be trained prior to having Inmate Contact.

2. The level and type of training provided to Contractors shall be based on the services they provide and level of Inmate Contact as determined by DOC. Contractor shall make employees available for training as directed by DOC. The three levels of Inmate Contact are as follows:

   - High contact: Direct contact on a daily or regular basis or any unsupervised direct contact with inmates will require the contractor be provided a four (4) hour PREA employee training class.
   - Medium contact: Direct contact on a recurring basis, but with supervised interaction at all times, will require the contractor be provided a four (4) hour PREA training class.
   - Low contact: One-time or very infrequent contact with inmates that is always supervised will require the contractor to read the *Elimination of Sexual Abuse and Sexual Harassment Prison Rape Elimination Act (PREA) Training and Education Package* and sign the Acknowledgment Form.

D. <u>Employee Certifications</u>

Contractor shall ensure that any of its employees who will have Inmate Contact shall sign the attached Certification form prior to entering DOC property.

_____
Print Name

_____
Signature

_____/_____/_____
Date

ELIMINATION OF SEXUAL ABUSE AND SEXUAL HARASSMENT-PRISON RAPE ELIMINATION ACT (PREA) CONTRACTOR CERTIFICATION

I acknowledge receipt and understanding of the Department of Correction's PREA policy and my responsibilities under the DOC's zero tolerance policy.

I hereby certify that I have not:

- Engaged in sexual misconduct in a prison, jail, lockup, community confinement facility, juvenile facility, or other institution as defined in 42 U.S.C. 1997;

- Been convicted of engaging or attempting to engage in sexual activity in the community facilitated by force, overt or implied threats of force, or coercion, or if the victim did not consent or was unable to consent or refuse; or

- Been civilly or administratively adjudicated to have engaged in the activity described above.
- I understand I have a continuing affirmative duty to report any conviction or adjudication of a violation of any of the offenses listed above.

_____

Company Name

_____

Print Employee Name

_____

Employee Signature

_____/_____/_____

Date

ELIMINATION OF SEXUAL ABUSE AND SEXUAL HARASSMENT-PRISON RAPE ELIMINATION ACT (PREA) TRAINING AND EDUCATION PACKAGE

PREA supports the elimination of sexual abuse in correctional settings. It covers more than prison and jail sexual abuse of inmates, but also includes retaliation for reporting and sexual harassment.

The New York City Department of Correction has a **zero-tolerance** policy toward all forms of sexual abuse and sexual harassment against any person confined in any of its facilities. The Department takes any allegation of sexual misconduct seriously and will respond to, investigate, and support the prosecution of any staff, vendor, contractor, service provider, or volunteer who engages in sexual misconduct within any of our facilities.

- **Zero tolerance** means that no sexual activity of any kind is permitted in a DOC facility. This includes forced or consensual activity between inmates and inmates, and staff/volunteers/contractors/service providers/vendors and inmates.
- All inmates have a right to be free from sexual abuse and harassment from other inmates, staff, volunteers, or contractors.
- Being in jail does not mean sexual abuse or harassment is a part of the punishment.
- Any sexual activity, ***even consensual,*** between a staff/volunteer/contractor/service provider/vendor and inmate is considered a ***violation*** of PREA and DOC's zero-tolerance policy and may lead to criminal prosecution.

The Department also has a zero-tolerance policy when it comes to retaliation.

- **Retaliation** occurs when an inmate, staff, or volunteer injures, harms, or intimidates a person who has reported sexual abuse and/or sexual harassment — or attempts to do so — in response to the report.
- Retaliation contributes to a "code of silence" by creating barriers to reporting through threats and intimidation.
- Each facility is required to protect inmates and staff members who report sexual abuse, sexual harassment, or cooperate with an investigation from retaliation.
- The PREA Compliance Manager (PCM) and Warden are responsible for the monitoring of retaliation. There is both a Warden and PCM assigned to each facility**.**
- No staff/volunteer/contractor/service provider/vendor may retaliate against any inmate or staff in any way if they report abuse or harassment and no staff/volunteer/contractor/service provider/vendor may be retaliated against for making a report.
- A code of silence is not acceptable. If it happens or you are told about it, report it.

ELIMINATION OF SEXUAL ABUSE AND SEXUAL HARASSMENT-PRISON RAPE ELIMINATION ACT (PREA) TRAINING AND EDUCATION PACKAGE

By law, inmates cannot consent to sex while in a confinement setting with staff, volunteers, service providers, vendors, or contractors. This is a violation because of the **imbalance of power** that exists in confinement settings and the inability of inmates to have the freedom to walk away or stay away from others. Staff/volunteers/contractors/service providers/vendors can sit in more powerful positions to inmates, may have access to items or services the inmates want, and due to this, can coerce a relationship an inmate would not otherwise have entered on the outside. Inmates may attempt to engage in sexual relationships with you that they would not engage in on the outside. They might do this to gain comfort, items, create instability, or gain friendship. No one thinks they will ever be in a relationship, sexual or otherwise, with an inmate but it happens. Don't risk your position or your freedom. It's not worth it.

Understanding Inmates in Confinement Settings

- Inmates can be at risk for unhealthy relationships with authority figures, especially female inmates.
- Inmates can be considered "vulnerable" by past sexual and physical abuse/molestation, inability to communicate well (e.g., limited English language skills, intellectual or developmental disability), age and size, prior trauma or mental health issues and might be easily taken advantage of.
- Inmates may try to manipulate others to gain items, comfort, or leverage of some kind. They may intentionally try to flirt with, gain the trust of or seek your help bringing in contraband to cope with their current status as an inmate and lack of freedom.
- Inmates sometimes have difficulty adjusting to coercive, restrictive environments and seek out comfort and ways to manage their confinement through relationships or leveraging others.
- Inmates may question their own sexual identity/preference and may engage in relationships they would not on the outside.

Setting clear boundaries

- Realize that you may have a lot in common with an inmate and may even easily form a friendship.
- Be aware of that possibility and avoid developing a personal relationship.
- Be approachable and respectful and use professional communication only.
- Understand your own personal vulnerabilities and how they might affect your time with inmates.
- Role model respectful behavior with inmates and refer them to appropriate staff when needed.
- Follow your agency policy and ask staff for help if you aren't sure what to do in a particular situation.

ELIMINATION OF SEXUAL ABUSE AND SEXUAL HARASSMENT-PRISON RAPE ELIMINATION ACT (PREA) TRAINING AND EDUCATION PACKAGE

Respectful communication with LGBTI (Lesbian, Gay, Bisexual, Transgender, Intersex) Inmates

As a DOC volunteer/vendor/contractor/service provider you do not have to change your own personal or religious views about LGBTI people, however, all inmates must be treated with respect, regardless of their sexual orientation or identity. Here are some definitions it will help to know:

Definitions:

Lesbian – Women attracted to women

Gay – Men attracted to men

Bisexual – People attracted to both sexes

Transgender – A person whose internal sense of being male or female does not match their gender at birth

Intersex – A person who has ambiguous chromosomal patterns or genitals; considered a disorder of sex development as a developing fetus

Pronoun Usage

- Transgender females *(persons who are anatomically male but who identify as female)* should be addressed as "she" and referred to as "her."
- Transgender males *(persons who are anatomically female but who identify as male)* should be addressed as "he" and referred to as "him."

Using appropriate pronouns and communicating professionally is a sign of respect. Intentionally referring to LGBTI inmates by derogatory names or pronouns can constitute sexual harassment and is a sign of disrespect. Everyone is responsible for ensuring that LGBTI inmates live in a safe, non-discriminatory and respectful environment within the facility.

Prevention and Detection of Sexual Abuse and Sexual Harassment

Prevention is the act or practice from stopping something bad from happening.

Detection is the act or process of discovering, finding, or noticing something.

Prevention Strategies

- Ensure respectful communication between you and the inmates and between yourself and staff.
- Daily remind yourself of the DOC's zero tolerance policy.
- Follow the DOC's reporting policy; if you see something or even have a suspicion, report it.

- Don't spend so much time alone with one inmate that an inappropriate relationship could develop or appears to others to be developing; be aware of how you spend your time.
- Professionalism is a cornerstone to a respectful culture. Keep it professional at all times; language, dress, and behavior should reflect modesty and be appropriate for a correctional setting. No profanity or name-calling is ever permitted.
- Understand inmates and their behaviors and realize they are different from those who are not confined for a variety of reasons; do not become "friends" with an inmate.

Detection Strategies

- Be observant of inmate behaviors and patterns and report to the facility if an inmate's behavior becomes uncharacteristic or demonstrates signs they are being abused or harassed.
- If you see something, say something. Even a small interaction or verbal/nonverbal message from an inmate that seems concerning should be reported.
- Take note of staff or other contractor/vendor/volunteers' behaviors should they become concerning to you and report it to the facility.

Potential Physical Signs of sexual Abuse

- Sexually transmitted infections and/or diseases
- Unexplained pregnancies for female inmates
- Stomach or abdominal pain
- Difficulty in walking and sitting
- Unexplained injuries

Psychological Signs of Sexual Abuse

- Acting out
- Anger
- Anxiety
- Depression
- Disbelief
- Difficulty concentrating
- Suicidal thoughts
- Numbness

ELIMINATION OF SEXUAL ABUSE AND SEXUAL HARASSMENT-PRISON RAPE ELIMINATION ACT (PREA) TRAINING AND EDUCATION PACKAGE

If you are told about an allegation of sexual abuse, sexual harassment, and/or retaliation:

You must take any report from an inmate either verbally, in writing, anonymously, or from third parties. All verbal reports must be documented immediately. *This must be done even if you do not believe the inmate or if the allegation is against another volunteer/contractor/peer that you trust and work with*. Allow the Department's investigators to sort out the facts. **All allegations must be reported to the facility immediately.** If you are aware of a staff who neglects their responsibilities and sexual abuse occurs, you are also required to report that.

WAYS TO REPORT

- *Tell the Warden or Deputy Warden*
- *Tell the PREA Compliance Manager*
- *Call 311 (you don't have to give your name)*
- *Tell any supervisor, such as a Captain or Tour Commander*
- *Tell medical/mental health staff*
- *Tell a Chaplain*
- *Call the Investigations Division (ID) or Department of Investigations (DOI)*
- *Call any hotline number posted in the facility*
- ***Document who you reported it to and exactly when with date and time***

Special reporting for Youthful Inmates (under the age of 18)

If a youthful inmate reports physical or sexual abuse to you of any kind, you may ask the staff to call or you may call yourself the New York State Child Abuse Hotline at 1-800-342-3720. It must be reported; it's the law.

Investigations

Once you report an allegation it will be sent to the following: facility leadership, the PREA compliance manager of the facility, and ID or DOI (who both handle investigations).

You may be asked or later contacted for additional information. All allegations will be followed by a prompt, thorough and objective investigation.

Conclusion

We thank you for working in or volunteering your time in the Department's facility. Only by working together can we eliminate sexual abuse and sexual harassment of inmates. If you have any questions about this or your responsibilities, you may contact the Department's PREA office at any time.

ELIMINATION OF SEXUAL ABUSE AND SEXUAL HARASSMENT-PRISON RAPE ELIMINATION ACT (PREA) TRAINING AND EDUCATION PACKAGE

Acknowledgement of Receipt

I hereby acknowledge receipt of the Elimination of Sexual Abuse and Sexual Harassment-Prison Rape Elimination Act (PREA) Training and Education. I understand that I will be held accountable for acting in accordance with the policy laid out in this package.

_____

Print Name

_____

Signature

_____/_____/_____

Date

Attachment I

Apprenticeship Notice to Bidders

Appendix XII

NOTICE TO BIDDERS - APPRENTICESHIP AGREEMENTS

Please be advised that, pursuant to the authority granted to the City under Labor Law §816-b, the Department of Correction hereby requires that the contractor awarded a contract as a result of this solicitation, and any of its subcontractors with subcontracts worth two million dollars or over, have, prior to entering into such contract or subcontract, apprenticeship agreements appropriate for the type and scope of work to be performed that have been registered with, and approved by, the New York State Commissioner of Labor. In addition, the contractor and its subcontractors will be required to show that such apprenticeship programs have successfully passed the two year Probation period following the initial registration date of such programs with the New York State Department of Labor.

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

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

Attachment J

Procurement and Sourcing Solutions (PASSPort)

For Enrollment Help, please use the link below.

https://www1.nyc.gov/assets/mocs/passport-downloads/pdf/resources-for-vendors/UserManual-Vendors_Beginners_Guide_to_PASSPort.pdf

The Mayor's Office of Contract Services is pleased to announce the Procurement and Sourcing Solutions Portal (PASSPort).

PASSPort is the primary portal to do business with the City. This means that all disclosure information will now be submitted online by vendors in PASSPort. Submitting your disclosure information online in PASSPort will be required for your upcoming contract award and/or future contracting opportunities with the City.

PASSPort Login/Support

Please use the information on **nyc.gov/passport** to login, enroll in training, access training resources, or reach out the MOCS Help Desk (**Contact form**)

PASSPort Training

(Register for Training on the PASSPort website here)

PASSPort Classroom training sessions have begun. Webinar sessions are also available.

- When attending training, please send your primary PASSPort administrator and at least one additional individual to serve as a backup.
- Classroom training is held at our Brooklyn Office **(4 Metrotech)**

Training Materials

PASSPort training materials are hosted on the **Resources page**.

How will PASSPort impact me as a vendor?

- You will now be completing your vendor and principal questionnaires in PASSPort.
- You will be able to easily validate that your business and disclosure information is current and up-to-date in PASSPort and will also will be able to submit changes online.
- You will be able to view your annual contract performance evaluations in PASSPort.

Where can I go for more information or if I have questions?

PASSPort Website: nyc.gov/passport

- Access support materials including PASSPort videos and Frequently Asked Questions.
- Submit any questions to MOCS via the **Contact page**.

Thank you,
The PASSPort Team

ATTACHMENT K

MS4 Permit Compliance Notice for Contractor

ENVIRONMENTAL HEALTH UNIT
MUNICIPAL SEPARATE STORM SEWER (MS4) PERMIT
NOTICE & CERTIFICATION

MS4 PERMIT COMPLIANCE NOTICE FOR CONTRACTOR

Pursuant to the State Pollutant Discharge Elimination System ("SPDES") permit for Municipal Separate Storm Sewer Systems of New York City, SPDES No. NY-0287890 (the "MS4 Permit"),or the most current MS4 permit, the City must provide adequate assurance, through a signed certification statement by any third party entity who contracts with the City to perform certain work within an MS4 Permit area, that its work complies with applicable MS4 Permit requirements. A copy of the MS4 Permit is available at https://www.dec.ny.gov/docs/water_pdf/nycms4permit.pdf.[1]

Attached is a Certification of Compliance with NYC MS4 Permit Requirements ("General Certification"). The Contractor must complete the Certification and submit it to DOC within seven (7) days from the date that DOC notifies the Contractor that it is the apparent low bidder on a competitive sealed bid or the successful proposer on a Request for Proposals.

Note:
The General Certification will list the contract deliverables for which a Certification of Deliverable (boilerplate attached) will be required.

[1] Hard copy of the permit is available from NYC DOC upon request.

ENVIRONMENTAL HEALTH UNIT
MUNICIPAL SEPARATE STORM SEWER (MS4) PERMIT
NOTICE & CERTIFICATION

REQUIRED FROM CONTRACTOR
WITHIN SEVEN (7) DAYS AFTER CONTRACT AWARD

General Certification at Commencement of Contract

[insert contract number and title]

[The Contractor/Consultant, name, Address and Telephone Number] certifies that throughout the term of the Contract referenced above (the "Contract"), *[the Contractor/Consultant]* shall perform all Services/Work in compliance with all applicable requirements of the NYC MS4 Permit. The Permit is available at https://www.dec.ny.gov/docs/water_pdf/nycms4permit.pdf. A paper copy of the permit is available from the Construction Management Unit of the New York City Department of Correction ("DOC").

[The Contractor/Consultant] further shall ensure that a separate certification ("Certification of Deliverable") accompanies each Contract Deliverable identified DOC as requiring such certification, including but not limited to the following:

- *[insert name/brief description of deliverable]*
- *[add bullets of deliverables as necessary]*

Such Certification of Deliverable(s) shall state that *[the Contractor/Consultant]* performed all Services/Work associated with providing the Deliverable(s) in compliance with all requirements of the NYC MS4 Permit.

Authorized Representative (print name)	Title
Signature	Date

ENVIRONMENTAL HEALTH UNIT
MUNICIPAL SEPARATE STORM SEWER (MS4) PERMIT
NOTICE & CERTIFICATION

CERTIFICATION REQUIRED FROM CONTRACTOR WITH COMPLETION OF EACH DELIVERABLE

OR ANNUALLY IF DELIVERABLE NOT COMPLETED WITHIN ONE CALENDAR YEAR

Certification of Deliverable

[insert contract number and title]

By this Certification, *the Contractor/Consultant [Name, Address and Telephone Number of the Contractor/Consultant]* certifies that *the Contractor/Consultant* performed all Services/Work associated with providing *[name of the Deliverable]*, pursuant to this Contract *[name]*, dated *[date]*, in accordance with all requirements of the NYC MS4 Permit.

Authorized Representative (print name)	Title
Signature	Date

Note:
For a contract under which the Contractor will not complete a deliverable subject to certification within a Calendar Year (CY), the Contractor must provide the Certification of Deliverable annually as to the work completed during the previous CY.

Attachment L

Conflict of Interest Disclosure and Compliance

Mayor's Office of Contract Services

Bill de Blasio
Mayor

Lisette Camilo
City Chief Procurement Officer and Director of Contract Services

253 Broadway, 9th Floor
New York, NY 10007

212 788 0001 tel
212 788 0049 fax

Conflict of Interest Disclosure and Compliance Certification

A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS CERTIFICATION, AND/OR THE FAILURE TO CONDUCT APPROPRIATE DUE DILIGENCE IN VERIFYNG THE INFORMATION THAT IS THE SUBJECT MATTER OF THIS CERTIFICATION, MAY RESULT IN RENDERING THE VENDOR NON-RESPONSIBLE FOR THE PURPOSE OF CONTRACT AWARD, AND A MATERIALLY FALSE STATEMENT WILLFULLY OR FRAUDULENTLY MADE IN CONNECTION WITH THIS CERTIFICATION MAY SUBJECT THE PERSON MAKING THE FALSE STATEMENT TO CRIMINAL CHARGES.

No Conflict of Interest: Except as otherwise fully disclosed below (attach additional pages as needed), the Vendor affirms, to the best of its knowledge, information and belief, that no City Elected Official, nor any person associated with any City Elected Official, is an employee, Director or Trustee, Officer or consultant to/of, or has any financial interest, direct or indirect, in the organization, or has received or will receive any financial benefit, directly or indirectly, from the organization or from this funding. For purposes of this certification, "associated" persons include: a spouse, domestic partner, child, parent or sibling of a City Elected Official; a person with whom a City Elected Official has a business or other financial relationship, including but not limited to employees of a City Elected Official and/or a spouse, domestic partner, child, parent or sibling of such employees; and each firm in which a City Elected Official has a present or potential interest.

NOTE: *THE VENDOR IS ENCOURAGED TO DISCLOSE ANY CONNECTION TO A CITY ELECTED OFFICIAL THAT COULD CREATE AN APPEARANCE OF A CONFLICT OF INTEREST, REGARDLESS OF WHETHER IT MEETS THE LISTED DEFINITIONS.*

Incorporation: Vendor is incorporated under NYS Not-for-Profit Corp. Law (√ one) □ Yes □ No *(explain* below)

Explain corporate status if you are <u>not</u> incorporated under NPCL:

NOTE: *INFORMATION CONCERNING THE VENDOR'S CORPORATE STATUS WILL BE USED BY THE CITY TO VERIFY COMPLIANCE WITH APPLICABLE REQUIREMENTS FOR CHARITIES REGISTRATION, PAYMENT OF TAXES AND OTHER LEGAL MANDATES AND THIS CONTRACT WILL NOT BE ENTERED INT0 UNLESS THE VENDOR IS IN COMPLIANCE.*

_____ _____
Name of Vendor Signature of Authorized Official/Date

_____ _____
Vendor's Address Print Name/Title of Signer

_____ _____
City, State, Zip Code Vendor's EIN

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

_____
Notary Public

Printed on paper containing 30% post-consumer material.

CONTRACT NO.

_____

_____

CITY OF NEW YORK
DEPARTMENT OF CORRECTION

FOR FURNISHING ALL LABOR AND MATERIAL NECESSARY AND REQUIRED FOR:

North Infirmary Command (NIC) Main Building
Roof Replacement
Rikers Island, NY

PROCUREMENT IDENTIFICATION NUMBER

PIN 072201918CPD

EPIN 07220B0001

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