OTSEGO COUNTY INDUSTRIAL DEVELOPMENT AGENCY

RICHFIELD SPRINGS ECO-INDUSTRIAL BUSINESS PARK

PREPARED FOR:
COUNTY OF OTSEGO INDUSTRIAL
DEVELOPMENT AGENCY
189 Main Street, Suite 500



Oneonta, New York 13820

Mission Statement: Assist in the enhancement and diversity of the economy of the County of Otsego by acting in support of projects in the County that create and/or retain jobs and/or promote private sector investment utilizing the statutory powers of the Agency as set forth under the provisions of the laws of the State of New York.

PROJECT PARTIALLY FUNDED WITH FEDERAL FUNDS FROM:
US DEPARTMENT OF COMMERCE
ECONOMIC DEVELOPMENT ADMINISTRATION (EDA)

EDA PROJECT NO.: 01-01-14979



ARCHITECTS | ENGINEERS | SURVEYORS

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PROCUREMENT AND CONTRACTING REQUIREMENTS GROUP

PROCUREMENT AND CONTRACTING REQUIREMENTS

DIVISION 00

INTRODUCTORY INFORMATION

DOCUMENT 00 01 10

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PROCUREMENT AND CONTRACTING REQUIREMENTS GROUP

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END OF SECTION

ADVERTISEMENT FOR BIDS

DOCUMENT 00 II 13

OTSEGO COUNTY INDUSTRIAL DEVELOPMENT AGENCY RICHFIELD SPRINGS ECO-INDUSTRIAL BUSINESS PARK EDA Project No.: 01-01-14979

- I. Sealed bids are requested by the Otsego County Industrial Development Agency for the construction of new infrastructure at the planned Richfield Springs Eco-Industrial Business Park.
- 2. The project involves earthwork, site clearing, water system installation, sanitary sewer installation, construction of a sewer pump station, storm drainage infrastructure, gas and electrical utilities installation. The project will install an access road in the site approximately 1,100 LF long. Water services will be extended from NYS Route 28 and a gravity wastewater collection system will be installed to serve the business park.
- 3. This project will be partially funded with Federal funds from the United States Department of Commerce, Economic Development Administration and therefore is subject to the Federal laws and regulations associated with that program.
- 4. Bids will be received for the following work:
 - A. Contract No. I General Construction Contract
- 5. The work shall be bid on a unit price basis, with the Contract awarded to the lowest responsible Contractor.
- 6. The Plans and Specifications may be obtained and/or reviewed at the following locations:
 - A. Procurement and Contracting Documents: Obtain copy of said documents by contacting Dataflow, Inc., 19 S Washington Street, Binghamton, New York 13903 (Phone 607-772-2001 / Fax 607-772-3595).
 - I. Digital Download: Bid documents can be downloaded for a \$50.00 non-refundable fee payable by credit card from www.godataflow.com.
 - 2. Hard Copy Documents: One (I) set of hard copy bid documents may be obtained by Prime Bidders only.
 - a. Deposit: \$100.00, made payable to Owner.
 - b. Shipping: Documents will be sent UPS Ground upon receipt of a separate, nonrefundable shipping and handling payment of \$25.00 for each set payable to Dataflow, Inc. Bidders have the option to provide Dataflow with Bidder's UPS or FedEx shipping account number to expedite delivery of documents.
 - B. Online Procurement and Contracting Documents: Obtain access by contacting Dataflow, Inc., (607) 772-2001. Online access will be provided to all registered bidders and suppliers.
- 7. Hard copy deposit will be refunded upon return of the documents, including addenda, in good condition within thirty (30) days following bid opening. No sets will be issued to sub-contractors by the Engineer. Contractors who do not submit prime bids will forfeit deposits unless returned three (3) days before bids are opened.

Keystone Associates Advertisement for Bids Architects, Engineers and Surveyors, LLC Project No. 0552.04219.1 00 11 13-1

- 8. A Pre-Bid Conference will be held at 10:30 A.M. local time on February 21, 2023, at the Site Location, Richfield Springs, New York. Bidders are encouraged to attend and participate in the conference.
- 9. Proposals shall be received on March 15, 2023, no later than 2:00 P.M. at the Otsego County Industrial Development Agency, 189 Main Street, Suite 500, Oneonta, New York, 13820. No fax bids accepted. All bids must be in a sealed envelope clearly marked "Otsego County IDA Richfield Springs Eco-Industrial Business Park".
- 10. BID SECURITY: Each proposal shall be accompanied by Bid Security made payable to Owner in an amount of five percent (5%) of Bidder's maximum Bid price and in the form of a certified check, bank money order, or a Bid Bond issued by a surety meeting the requirements of Paragraphs 5.01 and 5.02 of the General Conditions.
- 11. The construction contract will be 406 calendar days from time of Notice-to-Proceed.
- 12. This project is subject to both Davis-Bacon Federal Wage Rates and NYSDOL Prevailing-Wage Rates. Contractor will be required to pay the higher of the two (2) rates for each trade on the project.
- 13. Bidders to meet goals for "Women and Minorities in Construction" set forth in 41 CFR Part 60-4 for the participation of minorities and women in the construction industry.
- 14. Buy American Policy: Bidders are encouraged to use, to the greatest extent practical, iron and aluminum as well as steel, cement, and other manufactured products produced in the United States in every contract, subcontract, purchase order, or sub-award that is chargeable under this Award.
- 15. The contractor will be required to have and maintain an ACTIVE SAMs registration and must not appear on an excluded parties list or be subject to debt offset.
- 16. The Owner reserves the right to waive irregularities and to reject any or all bids.
- 17. The Contractor shall include with his proposal, a signed "Statement of Non-Collusion" in the format contained herein.

INSTRUCTIONS TO BIDDERS

DOCUMENT 00 21 15

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ARTICLE I - DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
 - A. Issuing Office The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the advertisement or invitation to bid may be obtained from the Issuing Office. The deposit will be refunded to each document holder of record who returns a complete set of Bidding Documents in good condition within 30 days after opening of Bids.
- 2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, within five days of Owner's request, Bidder shall submit written evidence such as financial data, previous experience, present commitments, and such other data as may be called for below.
- 3.02 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications. Refer to Bid Form Section 5.01 Relating to Buy American Clause.

ARTICLE 4 – EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

- 4.01 Subsurface and Physical Conditions
 - A. The Supplementary Conditions identify:
 - 1. Those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site.
 - 2. Those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
 - B. Copies of reports and drawings referenced in Paragraph 4.01.A will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.02 of the General Conditions has been identified and established in

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Paragraph 4.02 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

4.02 Underground Facilities

A. Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

4.03 Hazardous Environmental Condition

- A. The Supplementary Conditions identify any reports and drawings known to Owner relating to a Hazardous Environmental Condition identified at the Site.
- B. Copies of reports and drawings referenced in Paragraph 4.03.A will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.06 of the General Conditions has been identified and established in Paragraph 4.06 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
- 4.04 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 4.02, 4.03, and 4.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 4.06 of the General Conditions.
- 4.05 On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.
 - A. Reference is made to Article 7 of the Supplementary Conditions for the identification of the general nature of other work that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) that relates to the Work contemplated by these Bidding Documents. On request, Owner will provide to each Bidder for examination access to or copies of contract documents (other than portions thereof related to price) for such other work.
 - B. Paragraph 6.13.C of the General Conditions indicates that if an Owner safety program exists, it will be noted in the Supplementary Conditions.

- 4.04 It is the responsibility of each Bidder before submitting a Bid to:
 - A. examine and carefully study the Bidding Documents, and the other related data identified in the Bidding Documents;
 - B. visit the Site and become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
 - C. become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work;
 - D. carefully study all: (I) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in Paragraph 4.02 of the Supplementary Conditions as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in the Paragraph 4.06 of the Supplementary Conditions as containing reliable "technical data";
 - E. consider the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (I) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs;
 - F. agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
 - G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
 - H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder; and
 - I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.
- 4.05 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that

Bidder has discovered in the Bidding Documents and the written resolutions thereof by Engineer are acceptable to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

ARTICLE 5 – PRE-BID CONFERENCE

5.01 A pre-Bid conference will be held at 10:30 a.m. local time on February 21, 2023, at the Site Location, Richfield Springs, New York. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

ARTICLE 6 – SITE AND OTHER AREAS

6.01 The Site is identified in the Bidding Documents. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents. Questions received less than ten days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer.

ARTICLE 8 – BID SECURITY

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of five percent (5%) of Bidder's maximum Bid price and in the form of a certified check, bank money order, or a Bid bond (on the form attached) issued by a surety meeting the requirements of Paragraphs 5.01 and 5.02 of the General Conditions.
- 8.02 The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Agreement or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be returned.

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8.03 Bid security of other Bidders whom Owner believes do not have a reasonable chance of receiving the award will be returned within seven days after the Bid opening.

ARTICLE 9 - CONTRACT TIMES

9.01 The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

ARTICLE 10 - LIQUIDATED DAMAGES

10.01 Provisions for liquidated damages, if any, are set forth in the Agreement.

ARTICLE II - SUBSTITUTE AND "OR-EQUAL" ITEMS

11.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or "or-equal" items. Whenever it is specified or described in the Bidding Documents that a substitute or "or-equal" item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS AND OTHERS

- 12.01 If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by Owner. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, without an increase in the Bid.
- 12.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 6.06 of the General Conditions.
- 12.03 Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.

ARTICLE 13 – PREPARATION OF BID

13.01 The Bid Form is included with the Bidding Documents. Additional copies may be obtained from Engineer.

- 13.02 All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternative, adjustment unit price item, and unit price item listed therein. In the case of optional alternatives the words "No Bid," "No Change," or "Not Applicable" may be entered.
- 13.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown.
- 13.04 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.
- 13.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 13.06 A Bid by an individual shall show the Bidder's name and official address.
- 13.07 A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 13.08 All names shall be printed in ink below the signatures.
- 13.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.10 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 14 - BASIS OF BID; COMPARISON OF BIDS

14.01 Unit Price

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule.
- B. The total of all estimated prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accordance with Paragraph 11.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

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Instructions to Bidders

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Project No. 1383.15009

Architects, Engineers and Surveyors, LLC

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14.02 Allowances

A. For cash allowances the Bid price shall include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 11.02.B of the General Conditions.

ARTICLE 15 – SUBMITTAL OF BID

- 15.01 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the following documents:
 - A. Required Bid security in the form of a certified check, bank money order, or a Bid Bond
 - B. Statement of Non-Collusion
 - C. Certification of Non-Segregated Facilities
 - D. Notice of Requirements for Affirmative Action
 - E. Lobbying Restriction Form (Form CD-512)
- 15.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED."

ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BID

- 16.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.
- 16.02 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 – OPENING OF BIDS

17.01 Bids will be opened at the time and place indicated in the Advertisement or Invitation to Bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

- 19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.
- 19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- 19.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 19.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.
- 19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work in accordance with the Contract Documents.
- 19.06 If the Contract is to be awarded, Owner will award the Contract to the Bidder whose Bid is in the best interests of the Project.

ARTICLE 20 – CONTRACT SECURITY AND INSURANCE

20.01 Article 5 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the executed Agreement to Owner, it shall be accompanied by such bonds.

ARTICLE 21 - SIGNING OF AGREEMENT

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement along with the other Contract Documents which are identified in the Agreement as attached thereto. Within 15 days

thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within ten days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

ARTICLE 22 – SALES AND USE TAXES

22.01 Owner is exempt from New York state sales and use taxes on materials and equipment to be incorporated in the Work. Said taxes shall not be included in the Bid. Refer to Paragraph 6.10 of the Supplementary Conditions for additional information.

END OF SECTION

DOCUMENT 00 21 20

SUPPLEMENTARY INSTRUCTIONS TO BIDDERS - EDA REQUIREMENTS

I.I SUMMARY

- A. Documents Include:
 - 1. Supplementary Instructions to Bidders EDA Requirements.
- B. Related Documents:
 - 1. Document 00 21 15 Instructions to Bidders EJCDC.

END OF DOCUMENT

SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

EDA REQUIREMENTS

- A. This project will be partially funded with Federal funds from the United States Department of Commerce, Economic Development Administration and therefore is subject to the Federal laws and regulations associated with that program.
- B. GOALS FOR WOMEN AND MINORITIES IN CONSTRUCTION: Department of Labor regulations set forth at 41 C.F.R. part 60-4 establish goals and timetables for the participation of minorities and women in the construction industry. Those regulations apply to all federally assisted construction contracts in excess of \$10,000. The Recipient shall comply with those regulations and shall obtain compliance with 41 C.F.R. part 60-4 from contractors and subcontractors employed on the project by including such notices, clauses, and provisions in the Solicitations for Offers or Bids as required by 41 C.F.R. part 60-4. The goal for the participation of women in each trade area shall be as follows: from April 1, 1981 until further notice: 6.9 percent.

All changes to this goal, as published in the Federal Register in accordance with the Office of Federal Contract Compliance Programs regulations at 41 C.F.R. § 60-4.6, or any successor regulations, shall hereafter be incorporated by reference into these Specific Award Conditions.

Goals for minority participation shall be as prescribed by Appendix B-80 of the Federal Register notice published October 3, 1980 at 45 Fed. Reg. 65984–65991, or any subsequently published amendments. The Recipient shall include the Standard Federal Equal Employment Opportunity Construction Contract Specifications (or cause them to be included, if appropriate) in all Federally assisted contracts and subcontracts. The goals and timetables for minority and female participation may not be less than those published pursuant to 41 C.F.R. § 60-4.6.

- C. BUY AMERICAN POLICY: Consistent with Executive Order 13858, "Strengthening Buy-American Preferences for Infrastructure Projects," all Contractor(s) are encouraged to use, to the greatest extent practicable, iron and aluminum as well as steel, cement, and other manufactured products produced in the United States in every contract, subcontract, purchase order, or sub-award that is chargeable under this Award.
- D. The contractor will be required to have and maintain an ACTIVE SAMs registration and must not appear on an excluded parties list or be subject to debt offset. EDA will not be able to accept a low bid awarded contractor until their registration is confirmed and can be found on the SAMs database.

BID FORM (UNIT PRICE)

DOCUMENT 00 41 43

Project: OTSEGO COUNTY INDUSTRIAL DEVELOPMENT AGENCY RICHFIELD SPRINGS ECO-INDUSTRIAL BUSINESS PARK

TABLE OF ARTICLES

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ARTICLE I - BID RECIPIENT

1.01 This Bid is submitted to:

County of Otsego Industrial Development Agency 189 Main Street, Suite 500 Oneonta, New York 13820

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
 - A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

Addendum No.	Addendum Date

- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities), if any, which have been identified in SC-4.02, and (2) reports and drawings of Hazardous Environmental Conditions, if any, that have been identified in SC-4.06.

- E. Bidder has obtained and carefully studied (or accepts the consequences for not doing so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.
- F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
- I. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- K. Bidder will submit written evidence of its authority to do business in the state where the Project is located not later than the date of its execution of the Agreement.

ARTICLE 4 – FURTHER REPRESENTATIONS

- **4.01** Bidder further represents that:
 - A. this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation;
 - B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid:
 - C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
 - D. Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

<u>Item No</u>	<u>.</u> <u>Description</u>	<u>Unit</u>	Estimated Quantity	Bid Unit Price	Bid Price
I	Mobilization, Temporary Facilities, and Controls	LS		\$	\$
2	Site Clearing	LS		\$	\$
3	Earthwork	CY		\$	\$
4	Asphalt Concrete Paving	Ton		\$	\$
5	Landscaping	SY		\$	\$
6	Public Water Distribution Systems	LF		\$	\$
7	Sanitary Sewage Systems	LF		\$	\$
8	Sewage Pumping Stations	EA		\$	\$
9	Storm Drainage	LF		\$	\$
	Total of All Bid Prices			(\$)

Unit Prices have been computed in accordance with Paragraph 11.03.C of the General Conditions.

Bidder acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION

- **6.01** Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 14.07.B of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- **6.02** Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the Contract Times.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are attached to and made a condition of this Bid:
 - A. Required Bid security in the form of a certified check, bank money order, or a Bid Bond.
 - B. Statement of Non-Collusion.
 - C. Certification of Non-Segregated Facilities.
 - D. Notice of Requirements for Affirmative Action.
 - E. Lobbying Restriction Form (Form CD-512).

ARTICLE 8 - DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

9.01	This Bid submitted by:	
If Bido	ler is:	
An Inc	<u>dividual</u>	
	Name (typed or printed):	<u> </u>
	By:(Individual's signature)	(SEAL)
	Doing business as:	<u></u>
A Par	tnership	
	Partnership Name:	(SEAL)
	By:(Signature of general partner – attach evidence of authority to sign)	_
	Name (typed or printed):	<u> </u>
A Cor	<u>-poration</u>	
	Corporation Name:	(SEAL)
	State of Incorporation:	
	By:(Signature — attach evidence of authority to sign)	_
	(Signature — attach evidence of authority to sign)	
	Name (typed or printed):	_
	Title:	_ (CORPORATE SEAL)
	Attest	_
	Date of Authorization to do business in New York State is	I

A Joint Venture

Name of Joint Venture:	
First Joint Venturer Name:	(SEAL)
By:(Signature of first joint venture partner – attach ev	
(Signature of first joint venture partner – attach e	vidence of authority to sign)
Name (typed or printed):	
Title:	
Second Joint Venturer Name:	(SEAL)
By:(Signature of second joint venture partner – attack	n evidence of authority to sign)
Name (typed or printed):	
Title:	
(Each joint venturer must sign. The manner of sign corporation that is a party to the joint venture sho	
Bidder's Business Address	
Phone No Fax N	lo
SUBMITTED on, 20_	·
State Contractor License No.	. (If applicable)

DOCUMENT 00 43 13

BID SECURITY FORM

PART I - BID SECURITY FORM

- A. As described in Instruction to Bidders, Bids shall be accompanied by Bid security payable to the Owner in one of the following forms:
 - 1. Bid bond in the amount of a sum no less than five (5) percent of the Bid.
 - 2. Certified check in the amount of five (5) percent of the Bid Price.
 - 3. Cashier's check in the amount of five (5) percent of the Bid Price.

END OF DOCUMENT

BID BOND

Any singular reference to Bidder, Surety, Owner, or other party shall be considered plural where applicable.

DIDDED (AL.			
BIDDER (Name and Address):			
SURETY (Name and Address of Principal Plac	e of Business):		
OVA/NIED (Nieuse end Address)			
OWNER (Name and Address):			
BID			
Bid Due Date:	۸.		
Project (Brief Description Including Location	1):		
BOND			
Bond Number:			
Date (Not later than Bid due date): Penal sum			
(W	ords)	(Figures)	
		ct to the terms printed on the reverse side hereof, by its authorized officer, agent, or representative.	
BIDDER		SURETY	
	(Seal)		(Seal)
Bidder's Name and Corporate Seal	(Seal)	Surety's Name and Corporate Seal	(Seai)
By: Signature and Title		By: Signature and Title	
organical characteristics		(Attach Power of Attorney)	
Attest:		Attest:	
Signature and Title		Signature and Title	
Note: Above addresses are to be used for given	ving required no	tice.	

- I. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Surety's liability.
- 2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
- 3. This obligation shall be null and void if:
 - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2. All Bids are rejected by Owner, or
 - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
- 4. Payment under this Bond will be due and payable upon default by Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
- 5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
- 6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.

- 7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
- 8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
- 9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
- 10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
- 11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

STATEMENT OF CONTRACTOR'S QUALIFICATIONS TO BE SUBMITTED WITH BID PROPOSAL

This statement must be submitted by the Contractor with their proposal. All questions must be answered and the data given must be clear and comprehensive.

١.	Name of Bidder
	Phone No.
2.	Permanent main office address
3.	When organized or began business
4.	If a corporation, where incorporated
5.	How many years has your present firm been engaged in the contracting business?
	Under what name?
6.	Have you ever failed to complete any work awarded to you?
	If so, where and why.
7.	Will you upon request, submit a detailed financial statement and furnish the following information that may be requested by the Owner?
	 Contracts on hand: (Indicate location, client, gross amount of each contract, approximate anticipated dates of completion, A/E name, address and contact person). List of contracts of a similar nature performed within the past two years with location, client, and gross amount, date of completion, E/A name, address, and contact person. List of major equipment owned and available within 10 days of award of this contract. Background and experience of the principal members of your personnel, including officers. Credit available (written evidence). Such statements, if required, shall be notarized and delivered to the owner within three (3) days of written or verbal request. (The Contractor may, at their discretion, elect to submit information as delineated under No. 7 with their
	Bid Proposal.)
8.	The undersigned hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the Owner in certification of the recitals comprising this Statement of Contractor's Qualifications.
Da	ted at,
	NAME OF CONTRACTOR
	BY (signature)
	TITLE

Pursuant to Section 103-d of the General Municipal Law, as amended, THIS NON-COLLUSION CERTIFICATE MUST BE SIGNED by the bidder and accompany bid:

STATEMENT OF NON-COLLUSION

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of knowledge and belief:

- (I) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.
- (2) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor, and
- (3) No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

The foregoing statement is hereby subscribed by the bidder and is hereby affirmed by the bidder as true under the penalties of perjury, and is hereby submitted to:

(D	escribe Project)
	Name of Bidder (e.g. Company Partnership, or Corporation)
	By: Signature of Person Authorized to sign this Statement of Behalf of Bidder.
	Dated:

Note: If in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reason therefor.

CERTIFICATION OF NON-SEGREGATED FACILITIES

By the submission of this bid, the bidder, offeror, or subcontractor certifies that he/she does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. He certified further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The bidder, offeror, applicant, or subcontractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract. As used in this certification, the term "Segregated facilities" means any waiting rooms, work areas, rest rooms, and wash rooms, restaurants, and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreating or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are, in fact, segregated on the basis of race, creed, color, national origin, because of habit, local custom, or otherwise. He further agrees that (except where he has obtained identical certifications from proposed subcontractors for specified time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontractors exceeding \$10,000.00; that he will retain such certifications in his files; and that he will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

NOTE:	The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.
	Name and Title of Signer (Please type)
	Signature

EDA PROJECT SPECIFIC INFORMATION AND FORMS

U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION



EDA CONTRACTING PROVISIONS FOR CONSTRUCTION PROJECTS

These EDA Contracting Provisions for Construction Projects (EDA Contracting Provisions) are intended for use by recipients receiving federal assistance from the U. S. Department of Commerce - Economic Development Administration (EDA). They contain provisions specific to EDA and other federal provisions not normally found in non-federal contract documents. The requirements contained herein must be incorporated into all construction contracts and subcontracts funded wholly or in part with federal assistance from EDA.

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1. **DEFINITIONS**

Agreement – The written instrument that is evidence of the agreement between the Owner and the Contractor overseeing the Work.

Architect/Engineer - The person or other entity engaged by the Recipient to perform architectural, engineering, design, and other services related to the work as provided for in the contract.

Contract – The entire and integrated written agreement between the Owner and the Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

Contract Documents – Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents.

Contractor – The individual or entity with whom the Owner has entered into the Agreement.

Drawings or Plans – That part of the Contract Documents prepared or approved by the Architect/Engineer that graphically shows the scope, extent, and character of the Work to be performed by the Contractor.

EDA - The United States of America acting through the Economic Development Administration of the U.S. Department of Commerce or any other person designated to act on its behalf. EDA has agreed to provide financial assistance to the Owner, which includes assistance in financing the Work to be performed under this Contract. Notwithstanding EDA's role, nothing in this Contract shall be construed to create any contractual relationship between the Contractor and EDA.

Owner – The individual or entity with whom the Contractor has entered into the Agreement and for whom the Work is to be performed.

Project – The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

Recipient – A non-Federal entity receiving a Federal financial assistance award directly from EDA to carry out an activity under an EDA program, including any EDA-approved successor to the entity.

Specifications – That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

Subcontractor – An individual or entity having direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

Work – The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

2. **APPLICABILITY**

The Project to which the construction work covered by this Contract pertains is being assisted by the United States of America through federal assistance provided by the U.S. Department of Commerce - Economic Development Administration (EDA). Neither EDA, nor any of its departments, entities, or employees is a party to this Contract. The following EDA Contracting Provisions are included in this Contract and all subcontracts or related instruments pursuant to the provisions applicable to such federal assistance from EDA.

3. **FEDERALLY REQUIRED CONTRACT PROVISIONS**

- (a) All contracts in excess of the simplified acquisition threshold currently fixed at \$150,000 (see 41 U.S.C. §§ 134 and 1908) must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate.
- (b) All contracts in excess of \$10,000 must address termination for cause and for convenience by the Recipient including the manner by which it will be effected and the basis for settlement.
- (c) All construction contracts awarded in excess of \$10,000 by recipients of federal assistance and their contractors or subcontractors shall contain a provision requiring compliance with Executive Order 11246 of September 24, 1965, *Equal Employment Opportunity*, as amended by Executive Order 11375 of October 13, 1967, and Department of Labor implementing regulations at 41 C.F.R. part 60.
- (d) All prime construction contracts in excess of \$2,000 awarded by Recipients must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. §§ 3141-3148) as supplemented by Department of Labor regulations at 29 C.F.R. part 5. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. § 874 and 40 U.S.C. § 3145) as supplemented by Department of Labor regulations at 29 C.F.R. part 3.
- (e) All contracts awarded by the Recipient in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704 (the Contract Work Hours and Safety Standards Act) as supplemented by Department of Labor regulations at 29 C.F.R. part 5.
- (f) All contracts must include EDA requirements and regulations that involve a requirement on the contractor or sub-contractor to report information to EDA, the Recipient or any other federal agency.

(g) All contracts must include EDA requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract.

- (h) All contracts must include EDA requirements and regulations pertaining to copyrights and rights in data.
- (i) All contracts and subgrants in excess of \$150,000 must contain a provision that requires compliance with all applicable standards, orders, or requirements issued under the Clean Air Act (42 U.S.C. § 7401 et seq.) and the Federal Water Pollution Control Act (Clean Water Act) (33 U.S.C. § 1251 et seq.), and Executive Order 11738, Providing for Administration of the Clean Air Act and the Federal Water Pollution Control Act With Respect to Federal Contracts, Grants, or Loans.
- (j) Contracts must contain mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C.§ 6201).
- (k) Contracts must contain a provision ensuring that contracts are not to be made to parties on the government wide Excluded Parties List System in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 C.F.R. part 180.
- (1) Contracts must contain a provision ensure compliance with the Byrd Anti-Lobbying Amendment (31 U.S.C. § 1352) under which contractors that apply or bid for an award of \$100,000 or more must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. § 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.
- (m) If the Recipient is a state agency or agency of a political subdivision of a state, any contract awarded must contain a provision ensuring compliance with section 6002 of the Solid Waste Disposal Act (42 U.S.C. § 6962), as amended by the Resource Conservation and Recovery Act related to the procurement of recovered materials.

4. **REOUIRED PROVISIONS DEEMED INSERTED**

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion of correction.

5. **INSPECTION BY EDA REPRESENTATIVES**

The authorized representatives and agents of EDA shall be permitted to inspect all work, materials, payrolls, personnel records, invoices of materials, and other relevant data and records.

6. EXAMINATION AND RETENTION OF CONTRACTOR'S RECORDS

- (a) The Owner, EDA, or the Comptroller General of the United States, or any of their duly authorized representatives shall, generally until three years after final payment under this contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this contract for the purpose of making audit, examination, excerpts, and transcriptions.
- (b) The Contractor agrees to include in first-tier subcontracts under this contract a clause substantially the same as paragraph (a) above. "Subcontract," as used in this clause, excludes purchase orders that do not exceed \$10,000.
- (c) The periods of access and examination in paragraphs (a) and (b) above for records relating to (1) appeals under the disputes clause of this contract, (2) litigation or settlement of claims arising from the performance of this contract, or (3) costs and expenses of this contract to which the Owner, EDA, or Comptroller General or any of their duly authorized representatives has taken exception shall continue until disposition of such appeals, litigation, claims, or exceptions.

7. CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in a form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due to the Contractor in accordance with the progress schedule. The Contractor also shall furnish the Owner (a) a detailed estimate giving a complete breakdown of the contract price and (b) periodic itemized estimates of work done for the purpose of making partial payments thereon. The costs employed in making up any of these schedules will be used only to determine the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the contract price.

8. **CONTRACTOR'S TITLE TO MATERIAL**

No materials, supplies, or equipment for the work shall be purchased by the Contractor or by any subcontractor that is subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants and guarantees that he/she has good title to all work, materials, and equipment used by him/her in the Work, free and clear of all liens, claims, or encumbrances.

9. <u>INSPECTION AND TESTING OF MATERIALS</u>

All materials and equipment used in the completion of the Work shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. Materials of construction, particularly those upon which the strength and durability of any structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for intended uses.

10. "OR EOUAL" CLAUSE

Whenever a material, article, or piece of equipment is identified in the Contract Documents by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard. Any material, article, or equipment of other manufacturers and vendors that will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed is, in the opinion of the Architect/Engineer, of equal substance and function. However, such substitution material, article, or equipment shall not be purchased or installed by the Contractor without the Architect/Engineer's written approval.

11. PATENT FEES AND ROYALTIES

- (a) Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device that is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Architect/Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by the Owner in the Contract Documents.
- (b) To the fullest extent permitted by Laws and Regulations, the Contractor shall indemnify and hold harmless the Owner and the Architect/Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

12. CLAIMS FOR EXTRA COSTS

No claims for extra work or cost shall be allowed unless the same was done in pursuance of a written order from the Architect/Engineer approved by the Owner.

13. <u>CONTRACTORS AND SUBCONTRACTORS INSURANCE</u>

(a) The Contractor shall not commence work under this Contract until the Contractor has obtained all insurance reasonably required by the Owner, nor shall the Contractor allow any subcontractor to commence work on his/her subcontract until the insurance required of the subcontractor has been so obtained and approved.

- (b) Types of insurance normally required are:
 - (1) Workers' Compensation
 - (2) Contractor's Public Liability and Property Damage
 - (3) Contractor's Vehicle Liability
 - (4) Subcontractors' Public Liability, Property Damage and Vehicle Liability
 - (5) Builder's Risk (Fire and Extended Coverage)
- (c) **Scope of Insurance and Special Hazards:** The insurance obtained, which is described above, shall provide adequate protection for the Contractor and his/her subcontractors, respectively, against damage claims that may arise from operations under this contract, whether such operations be by the insured or by anyone directly or indirectly employed by him/her and also against any of the special hazards that may be encountered in the performance of this Contract.
- (d) **Proof of Carriage of Insurance:** The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates, and dates of expiration of applicable insurance policies.

14. **CONTRACT SECURITY BONDS**

- (a) If the amount of this Contract exceeds \$150,000, the Contractor shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the Contract price as security for the faithful performance of this Contract and also a payment bond in an amount equal to one hundred percent (100%) of the Contract price or in a penal sum not less than that prescribed by State, Territorial, or local law, as security for the payment of all persons performing labor on the Work under this Contract and furnishing materials in connection with this Contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law. Before final acceptance, each bond must be approved by EDA. If the amount of this Contract does not exceed \$150,000, the Owner shall specify the amount of the payment and performance bonds.
- (b) All bonds shall be in the form prescribed by the Contract Documents except as otherwise provided in applicable laws or regulations, and shall be executed by such sureties as are named in the current list of *Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies* as published in Treasury Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's

authority to act. Surety companies executing the bonds must also be authorized to transact business in the state where the Work is located.

15. <u>LABOR STANDARDS - DAVIS-BACON AND RELATED ACTS</u> (as required by section 602 of PWEDA)

(a) Minimum Wages

- (1) All laborers and mechanics employed or working upon the site of the Work in the construction or development of the Project will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act at 29 C.F.R. part 3, the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at the time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor, which is attached hereto and made a part hereof, regardless of any contractual relationship that may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 C.F.R. § 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 C.F.R. § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates determined under 29 C.F.R. § 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
- (2) (i) Any class of laborers or mechanics to be employed under the Contract, but not listed in the wage determination, shall be classified in conformance with the wage determination. EDA shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (A) The work to be performed by the classification requested is not performed by a classification in the wage determination;
 - (B) The classification is utilized in the area by the construction industry; and
 - (C) The proposed wage rate, including any bona fide fringe benefits, bears a

reasonable relationship to the wage rates contained in the wage determination.

- (ii) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and EDA or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by EDA or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210.
- (iii) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and EDA or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), EDA or its designee shall refer the questions, including the views of all interested parties and the recommendation of EDA or its designee, to the Administrator for determination.
- (iv) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(2)(ii) or (iii) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (3) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (4) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(b) Withholding

EDA or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this Contract or any other federal contract with the same prime Contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper employed or working on the site of the Work in the construction or development of the Project, all or part of the wages required by the Contract, EDA or its designee may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations

have ceased. EDA or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

(c) Payrolls and basic records

- (1) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the Work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the Work in the construction or development of the Project. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 C.F.R. § 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, the plan or program is financially responsible, and the plan or program has been communicated in writing to the laborers or mechanics affected, and provide records that show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (2) (i) For each week in which Contract work is performed, the Contractor shall submit a copy of all payrolls to the Owner for transmission to EDA or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 C.F.R. part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose. It may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402; or downloaded from the U.S. Department of Labor's website at https://www.dol.gov/whd/forms/wh347.pdf. The prime Contractor is responsible for the submission of copies of payrolls by all subcontractors
 - (ii) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:
 - (A) That the payroll for the payroll period contains the information required to be maintained under 29 C.F.R. § 5.5(a)(3)(i) and that such information is correct and complete;

(B) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 C.F.R. part 3; and

- (C) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the Contract.
- (iii) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 15(c)(2)(ii) of this section.
- (iv) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under section 1001 of Title 18 and section 3729 of Title 31 of the U.S. Code.
- (3) The Contractor or subcontractor shall make the records required under paragraph 15(c)(1) of this section available for inspection, copying, or transcription by authorized representatives of EDA or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, EDA or its designee may, after written notice to the Contractor or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 C.F.R. § 5.12.

(d) **Apprentices and Trainees**.

(1) **Apprentices**. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training (Bureau), or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any

apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor is performing construction on a Project in a locality other than that in which its program is registered. the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (2) **Trainees**. Except as provided in 29 C.F.R. § 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program that has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman's hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (3) **Equal employment opportunity**. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity

requirements of Executive Order 11246, *Equal Employment Opportunity*, as amended, and 29 C.F.R. part 30.

- (e) Compliance with Copeland Anti-Kickback Act Requirements. The Contractor shall comply with the Copeland Anti-Kickback Act (18 U.S.C. § 874 and 40 U.S.C. § 3145) as supplemented by Department of Labor regulations (29 C.F.R. part 3, "Contractors and Subcontractors on Public Buildings or Public Works Financed in Whole or in Part by Loans or Grants of the United States"). The Act provides that the Contractor and any subcontractors shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which they are otherwise entitled. The Owner shall report all suspected or reported violations to EDA.
- (f) **Subcontracts**. The Contractor and any subcontractors will insert in any subcontracts the clauses contained in 29 C.F.R. §§ 5.5(a)(1) through (10) and such other clauses as EDA or its designee may require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 C.F.R. § 5.5.
- (g) **Contract termination; debarment**. The breach of the contract clauses in 29 C.F.R. § 5.5 may be grounds for termination of the contract, and for debarment as a Contractor and a subcontractor as provided in 29 C.F.R. § 5.12.
- (h) Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 C.F.R. parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (i) **Disputes concerning labor standards**. Disputes arising out of the labor standards provisions of this Contract shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 C.F.R. parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and EDA or its designee, the U.S. Department of Labor, or the employees or their representatives.

(j) <u>Certification of Eligibility</u>.

- (1)By entering into this Contract, the Contractor certifies that neither it nor any person or firm that has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 C.F.R. § 5.12(a)(1).
- (2) No part of this Contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 C.F.R. § 5.12(a)(1).
- (3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. § 1001.

16. LABOR STANDARDS - CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

- (a) **Overtime requirements**. No Contractor or subcontractor contracting for any part of the Contract work, which may require or involve the employment of laborers or mechanics, shall require or permit any such laborer or mechanic in any workweek in which that person is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (b) Violation; liability for unpaid wages, liquidated damages. In the event of any violation of the clause set forth in paragraph (a) of this section, the Contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a) of this section.
- (c) Withholding for unpaid wages and liquidated damages. EDA or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the Contractor or subcontractor under any such Contract or any other federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b) of this section.
- (d) **Subcontracts**. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (a) through (c) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a) through (c) of this section.

17. **EQUAL EMPLOYMENT OPPORTUNITY**

(a) The Recipient hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 C.F.R. chapter 60, which is paid for in whole or in part with funds obtained from EDA, the following equal opportunity clause:

During the performance of this contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided setting forth the provisions of this nondiscrimination clause.

- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers representatives of the Contractor's commitments hereunder, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965 and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by EDA and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of

this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally-assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.

- (8) The Contractor will include the portion of the sentence immediately preceding paragraph 17(a)(1) and the provisions of paragraphs 17(a)(1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as EDA or the Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event the Contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by EDA or the Secretary of Labor, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.
- (9) The Recipient further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally-assisted construction work. Provided, however, that if the Recipient so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality, or subdivision of such government that does not participate in work on or under the Contract.
- (10)The Recipient agrees that it will assist and cooperate actively with EDA and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish EDA and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist EDA in the discharge of the EDA's primary responsibility for securing compliance.
- (11) The Recipient further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a Contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by EDA or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the Recipient agrees that if it fails or refuses to comply with these undertakings, EDA may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this EDA financial assistance; refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case

to the Department of Justice for appropriate legal proceedings.

- (b) Exemptions to Above Equal Opportunity Clause (41 C.F.R. chapter 60):
 - (1) Contracts and subcontracts not exceeding \$10,000 (other than Government bills of lading, and other than contracts and subcontracts with depositories of Federal funds in any amount and with financial institutions which are issuing and paying agents for U.S. savings bonds and savings notes) are exempt. The amount of the Contract, rather than the amount of the federal financial assistance, shall govern in determining the applicability of this exemption.
 - (2) Except in the case of subcontractors for the performance of construction work at the site of construction, the clause shall not be required to be inserted in subcontracts below the second tier.
 - (3) Contracts and subcontracts not exceeding \$10,000 for standard commercial supplies or raw materials are exempt.

18. <u>CONTRACTING WITH SMALL, MINORITY AND WOMEN'S BUSINESSES</u>

- (a) If the Contractor intends to let any subcontracts for a portion of the work, the Contractor shall take affirmative steps to assure that small, minority and women's businesses are used when possible as sources of supplies, equipment, construction, and services.
- (b) Affirmative steps shall consist of:
 - (1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
 - (2) Ensuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;
 - (3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises;
 - (4) Establishing delivery schedules, where the requirements of the contract permit, which encourage participation by small and minority businesses and women's business enterprises;
 - (5) Using the services and assistance of the U.S. Small Business Administration, the Minority Business Development Agency of the U.S. Department of Commerce, and State and local governmental small business agencies;
 - (6) Requiring each party to a subcontract to take the affirmative steps of this section; and

(7) The Contractor is encouraged to procure goods and services from labor surplus area firms

19. HEALTH, SAFETY, AND ACCIDENT PREVENTION

- (a) In performing this contract, the Contractor shall:
 - (1) Ensure that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to their health and/or safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation;
 - (2) Protect the lives, health, and safety of other persons;
 - (3) Prevent damage to property, materials, supplies, and equipment; and
 - (4) Avoid work interruptions.
- (b) For these purposes, the Contractor shall:
 - (1) Comply with regulations and standards issued by the Secretary of Labor at 29 C.F.R. part 1926. Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 3701 3708); and
 - (2) Include the terms of this clause in every subcontract so that such terms will be binding on each subcontractor.
- (c) The Contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this Contract resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment, and shall report this data in the manner prescribed by 29 C.F.R. part 1904.
- (d) The Owner shall notify the Contractor of any noncompliance with these requirements and of the corrective action required. This notice, when delivered to the Contractor or the Contractor's representative at the site of the Work, shall be deemed sufficient notice of the noncompliance and corrective action required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to take corrective action promptly, the Owner may issue an order stopping all or part of the Work until satisfactory corrective action has been taken. The Contractor shall not base any claim or request for equitable adjustment for additional time or money on any stop order issued under these circumstances.
- (e) The Contractor shall be responsible for its subcontractors' compliance with the provisions of this clause. The Contractor shall take such action with respect to any subcontract as EDA, or the Secretary of Labor shall direct as a means of enforcing such provisions.

20. <u>CONFLICT OF INTEREST AND OTHER PROHIBITED INTERESTS</u>

(a) No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept, or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the Project, shall become directly or indirectly interested personally in this Contract or in any part hereof.

- (b) No officer, employee, architect, attorney, engineer, or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the Project, shall become directly or indirectly interested personally in this Contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the Project.
- (c) The Contractor may not knowingly contract with a supplier or manufacturer if the individual or entity who prepared the Contract Documents has a corporate or financial affiliation with the supplier or manufacturer.
- (d) The Owner's officers, employees, or agents shall not engage in the award or administration of this Contract if a conflict of interest, real or apparent, may be involved. Such a conflict may arise when: (i) the employee, officer or agent; (ii) any member of their immediate family; (iii) their partner or (iv) an organization that employs, or is about to employ, any of the above, has a financial interest in the Contractor. The Owner's officers, employees, or agents shall neither solicit nor accept gratuities, favors, or anything of monetary value from the Contractor or subcontractors
- (e) If the Owner finds after a notice and hearing that the Contractor, or any of the Contractor's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise) to any official, employee, or agent of the Owner or EDA in an attempt to secure this Contract or favorable treatment in awarding, amending, or making any determinations related to the performance of this Contract, the Owner may, by written notice to the Contractor, terminate this Contract. The Owner may also pursue other rights and remedies that the law or this Contract provides. However, the existence of the facts on which the Owner bases such findings shall be an issue and may be reviewed in proceedings under the dispute resolution provisions of this Contract.
- (f) In the event this Contract is terminated as provided in paragraph (e) of this section, the Owner may pursue the same remedies against the Contractor as it could pursue in the event of a breach of this Contract by the Contractor. As a penalty, in addition to any other damages to which it may be entitled by law, the Owner may pursue exemplary damages in an amount (as determined by the Owner) which shall not be less than three nor more than ten times the costs the Contractor incurs in providing any such gratuities to any such officer or employee.

21. **RESTRICTIONS ON LOBBYING**

(a) This Contract, or subcontract is subject to 31 U.S.C. § 1352, regarding lobbying restrictions. The section is explained in the common rule, 15 C.F.R. part 28 (55 FR 6736-6748, February 26, 1990). Each bidder under this Contract or subcontract is generally prohibited from using federal funds for lobbying the Executive or Legislative Branches of the Federal Government in connection with this EDA Award.

- (b) **Contract Clause Threshold**: This Contract Clause regarding lobbying must be included in each bid for a contract or subcontract exceeding \$100,000 of federal funds at any tier under the EDA Award.
- (c) **Certification and Disclosure**: Each bidder of a contract or subcontract exceeding \$100,000 of federal funds at any tier under the federal Award must file Form CD-512, *Certification Regarding Lobbying Lower Tier Covered Transactions*, and, if applicable, Standard Form-LLL, *Disclosure of Lobbying Activities*, regarding the use of any nonfederal funds for lobbying. Certifications shall be retained by the Contractor or subcontractor at the next higher tier. All disclosure forms, however, shall be forwarded from tier to tier until received by the Recipient of the EDA Award, who shall forward all disclosure forms to EDA.
- (d) **Continuing Disclosure Requirement**: Each Contractor or subcontractor that is subject to the Certification and Disclosure provision of this Contract Clause is required to file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by such person. Disclosure forms shall be forwarded from tier to tier until received by the Recipient of the EDA Award, who shall forward all disclosure forms to EDA.
- (e) Indian Tribes, Tribal Organizations, or Other Indian Organizations: Indian tribes, tribal organizations, or any other Indian organizations, including Alaskan Native organizations, are excluded from the above lobbying restrictions and reporting requirements, but only with respect to expenditures that are by such tribes or organizations for lobbying activities permitted by other federal law. An Indian tribe or organization that is seeking an exclusion from Certification and Disclosure requirements must provide EDA with the citation of the provision or provisions of federal law upon which it relies to conduct lobbying activities that would otherwise be subject to the prohibitions in and to the Certification and Disclosure requirements of 31 U.S.C. § 1352, preferably through an attorney's opinion. Note, also, that a non-Indian subrecipient, contractor, or subcontractor under an award to an Indian tribe, for example, is subject to the restrictions and reporting requirements.

22. HISTORICAL AND ARCHAEOLOGICAL DATA PRESERVATION

The Contractor agrees to facilitate the preservation and enhancement of structures and objects of historical, architectural or archaeological significance and when such items are found and/or unearthed during the course of project construction. Any excavation by the Contractor that uncovers an historical or archaeological artifact shall be immediately reported to the Owner and a representative of EDA. Construction shall be temporarily halted pending the notification process and further directions issued by EDA after consultation with the State Historic

Preservation Officer (SHPO) for recovery of the items. *See* the National Historic Preservation Act of 1966 (54 U.S.C. § 300101 *et seq.*, formerly at 16 U.S.C. § 470 *et seq.*) and Executive Order No. 11593 of May 31, 1971.

23. **CLEAN AIR AND WATER**

Applicable to Contracts in Excess of \$150,000

- (a) **Definition**. "Facility" means any building, plant, installation, structure, mine, vessel, or other floating craft, location, or site of operations, owned, leased, or supervised by the Contractor or any subcontractor, used in the performance of the Contract or any subcontract. When a location or site of operations includes more than one building, plant, installation, or structure, the entire location or site shall be deemed a facility except when the Administrator, or a designee, of the United States Environmental Protection Agency (EPA) determines that independent facilities are collocated in one geographical area.
- (b) In compliance with regulations issued by the EPA, 2 C.F.R. part 1532, pursuant to the Clean Air Act, as amended (42 U.S.C. § 7401 *et seq.*); the Federal Water Pollution Control Act, as amended (33 U.S.C. § 1251 *et seq.*); and Executive Order 11738, the Contractor agrees to:
 - (1) Not utilize any facility in the performance of this contract or any subcontract which is listed on the Excluded Parties List System, part of the System for Award Management (SAM), pursuant to 2 C.F.R. part 1532 for the duration of time that the facility remains on the list;
 - (2) Promptly notify the Owner if a facility the Contractor intends to use in the performance of this contract is on the Excluded Parties List System or the Contractor knows that it has been recommended to be placed on the List;
 - (3) Comply with all requirements of the Clean Air Act and the Federal Water Pollution Control Act, including the requirements of section 114 of the Clean Air Act and section 308 of the Federal Water Pollution Control Act, and all applicable clean air and clean water standards; and
 - (4) Include or cause to be included the provisions of this clause in every subcontract and take such action as EDA may direct as a means of enforcing such provisions.

24. <u>USE OF LEAD-BASED PAINTS ON RESIDENTIAL STRUCTURES</u>

(a) If the work under this Contract involves construction or rehabilitation of residential structures over \$5,000, the Contractor shall comply with the Lead-based Paint Poisoning Prevention Act (42 U.S.C. § 4831). The Contractor shall assure that paint or other surface coatings used in a residential property does not contain lead equal to or in excess of 1.0 milligram per square centimeter or 0.5 percent by weight or 5,000 parts per million (ppm) by weight. For purposes of this section, "residential property" means a dwelling unit, common areas, building exterior surfaces, and any surrounding land, including outbuildings, fences and play equipment affixed to the land, belonging to an owner and available for use by residents, but not

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including land used for agricultural, commercial, industrial or other non-residential purposes, and not including paint on the pavement of parking lots, garages, or roadways.

(b) As a condition to receiving assistance under PWEDA, recipients shall assure that the restriction against the use of lead-based paint is included in all contracts and subcontracts involving the use of federal funds.

25. **ENERGY EFFICIENCY**

The Contractor shall comply with all standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. § 6201) for the State in which the Work under the Contract is performed.

26. **ENVIRONMENTAL REQUIREMENTS**

When constructing a Project involving trenching and/or other related earth excavations, the Contractor shall comply with the following environmental constraints:

- (1) **Wetlands**. When disposing of excess, spoil, or other construction materials on public or private property, the Contractor shall not fill in or otherwise convert wetlands.
- (2) **Floodplains**. When disposing of excess, spoil, or other construction materials on public or private property, the Contractor shall not fill in or otherwise convert 100 year floodplain areas delineated on the latest Federal Emergency Management Agency (FEMA) Floodplain Maps, or other appropriate maps, i.e., alluvial soils on Natural Resource Conservation Service (NRCS) Soil Survey Maps.
- (3) **Endangered Species**. The Contractor shall comply with the Endangered Species Act, which provides for the protection of endangered and/or threatened species and critical habitat. Should any evidence of the presence of endangered and/or threatened species or their critical habitat be brought to the attention of the Contractor, the Contractor will immediately report this evidence to the Owner and a representative of EDA. Construction shall be temporarily halted pending the notification process and further directions issued by EDA after consultation with the U.S. Fish and Wildlife Service.

27. <u>DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSIONS</u>

As required by Executive Orders 12549 and 12689, *Debarment and Suspension*, 2 C.F.R. Part 180 and implemented by the Department of Commerce at 2 C.F.R. part 1326, for prospective participants in lower tier covered transactions (except subcontracts for goods or services under the \$25,000 small purchase threshold unless the subrecipient will have a critical influence on or substantive control over the award), the Contractor agrees that:

(1) By entering into this Contract, the Contractor and subcontractors certify, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared Economic Development Administration
Contracting Provisions for Construction Projects

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ineligible, or voluntarily excluded from participation in this Contract by any federal department or agency.

(2) Where the Contractor or subcontractors are unable to certify to any of the statements in this certification, the Contractor or subcontractors shall attach an explanation to this bid.

See also 2 C.F.R. part 180 and 2 C.F.R. § 200.342.

28. EDA PROJECT SIGN

The Contractor shall supply, erect, and maintain in good condition a Project sign according to the specifications provided by EDA. To the extent practical, the sign should be a free standing sign. Project signs shall not be located on public highway rights-of-way. Location and height of signs will be coordinated with the local agency responsible for highway or street safety in the Project area, if any possibility exists for obstructing vehicular traffic line of sight. Whenever the EDA site sign specifications conflict with State law or local ordinances, the EDA Regional Director will permit such conflicting specifications to be modified so as to comply with State law or local ordinance.

29. BUY AMERICA

To the greatest extent practicable, contractors are encouraged to purchase Americanmade equipment and products with funding provided under EDA financial assistance awards.

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246 AND 41 CFR PART 60-4)

The following Notice shall be included in, and shall be a part of all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of \$10,000.

The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for minority participation for each trade	Goals for female participation for each trade	
	1.2 %	6.9%	

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is:

State of	New York
County of	Otsego
City of	Richfield Springs

CERTIFICATION REGARDING LOBBYING LOWER TIER COVERED TRANSACTIONS

Applicants should review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, "New Restrictions on Lobbying."

LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief. that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

AWARD NUMBER AND/OR PROJECT NAME

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

above applicable certification.			

PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

NAME OF APPLICANT

SIGNATURE DATE

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EDA PROJECT SIGN

The Contractor shall supply, erect, and maintain in good condition a project sign according to the specifications set forth below:

EDA SITE SIGN SPECIFICATIONS

Size: 4' x 8' x 3/4"

Materials: Exterior grade/MDO plywood (APA rating A-B)

Supports: 4" x 4" x 12' posts with 2" x 4" cross branching

<u>Erection:</u> Posts shall be set a minimum of three feet deep in concrete footings that are at least 12"

in diameter.

Paint: Outdoor enamel

<u>Colors:</u> Jet Black, Blue (PMS300), and Gold (PMS7406). Specifically, on white background the

following will be placed:

The U. S. Department of Commerce seal in blue, black, and gold;

"EDA" in blue;

"U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT

ADMINISTRATION" in black;

"In partnership with" in blue;

(Actual name of the) "EDA Grant Recipient" in black;

Lettering: Specific fonts are named below; positioning will be as shown on the attached illustration.

"U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT

ADMINISTRATION" use Bank Gothic Medium - BANK GOTHIC MED

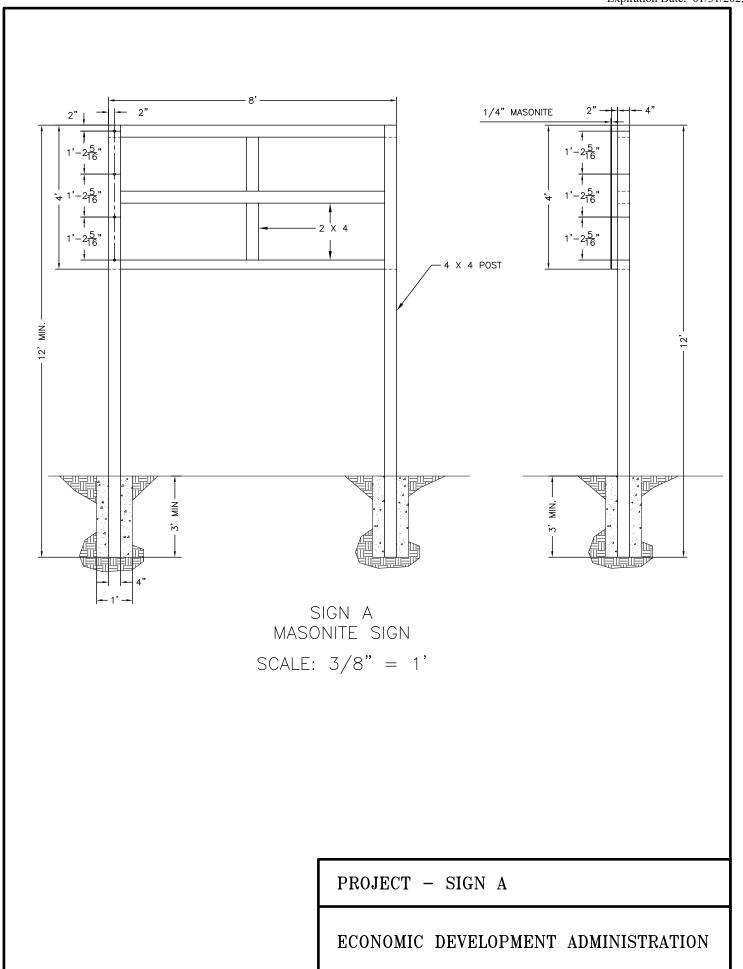
"In partnership with" use Univers TM 55 Oblique - *Univers 55*

(Name of) "EDA Grant Recipient" use Univers TM Extra Black 85 Univers 85

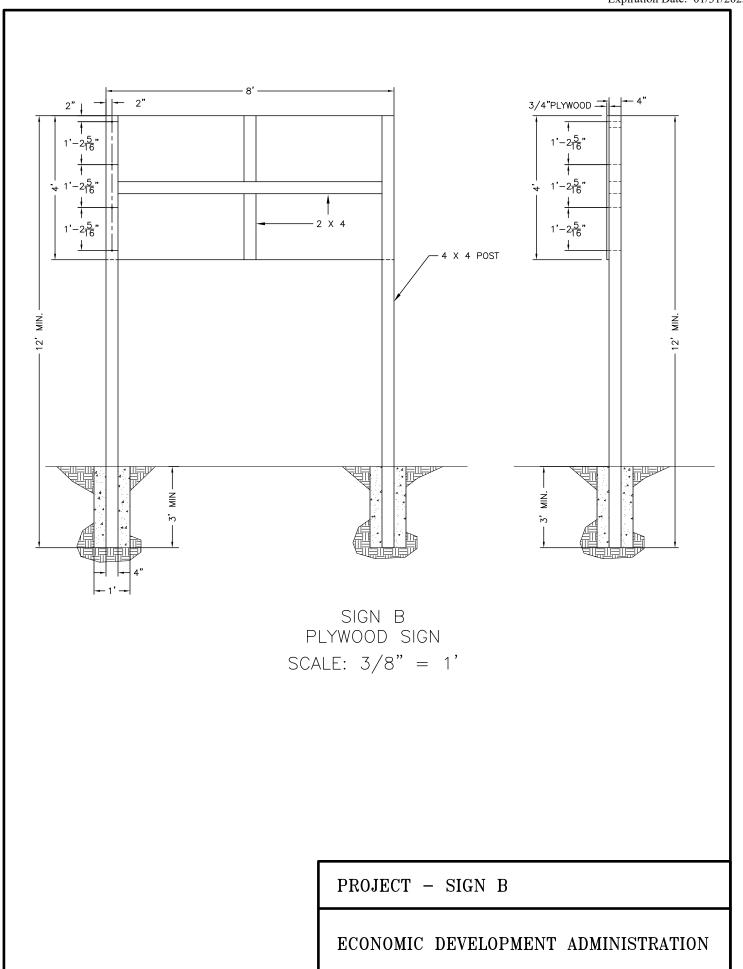
Project signs will not be erected on public highway rights-of-way. If any possibility exists for obstruction to traffic line of sight, the location and height of the sign will be coordinated with the agency responsible for highway or street safety in the area.

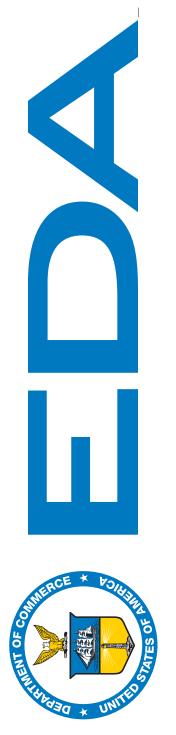
The EDA Regional Director may permit modifications to these specifications if they conflict with state law or local ordinances.

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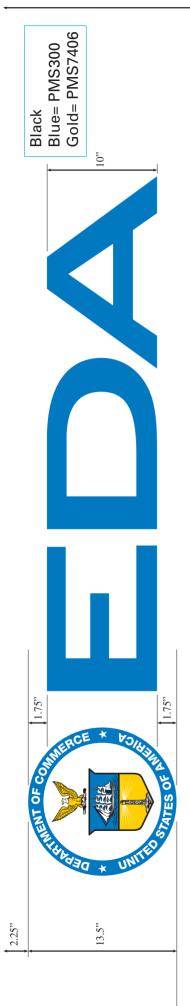




U.S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION

In partnership with

<EDA Grant Recipient Name>



U.S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION

2.0,

4.0,

3.0"

3.0%

In partnership with

48;

<EDA Grant Recipient Name>

3.75"

15.0"

..96

Notice of Award

			Dated
Project:		Owner:	Owner's Contract No.:
Contract:			Engineer's Project No.:
Bidder:			
Bidder's Address:	(send Certified Mail, Return Receipt Rec	uested)	
	notified that your Bid dated ded a Contract for	for the above Contra	act has been considered. You are the Successful Bidder
	(Indicat	e total Work, alternates or section	ons or Work awarded.)
The Cor	ntract Price of your Contract	is	
Dollar	s (\$).		
(Insert approp	riate data if Unit Prices are use	d. Change language for Cost-Plu	us contracts.)
	copies of each of the propose	d Contract Documents (exce	ept Drawings) accompany this Notice of Award.
s	sets of the Drawings will be d	elivered separately or otherw	vise made available to you immediately.
You mus	st comply with the following (conditions precedent within [15] days of the date you receive this Notice of Award.
1.	Deliver to the Owner [] fully executed counterpar	rts of the Contract Documents.
2.			ntract security [Bonds] as specified in the Instructions to ph 5.01) [and Supplementary Conditions (Paragraph SC-
3.	Other conditions preceden	t:	
	o comply with these condition of the con		will entitle Owner to consider you in default, annul this
Within t		th the above conditions, Owr	ner will return to you one fully executed counterpart of
		Owner	
		By:Authorized Signature	
		Title	
Copy to Engir	neer		

AGREEMENT FORM (STIPULATED PRICE)

THIS AGREEMENT is by and between:
(Owner) and
(Contractor)
Owner and Contractor, in consideration of the mutual covenants set forth herein, agree as follows:
ARTICLE I - WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

The project involves earthwork, site clearing, water system installation, sanitary sewer installation, construction of a sewer pump station, storm drainage infrastructure, gas and electrical utilities installation. The project will install an access road in the site approximately 1,100 LF long. Water services will be extended from NYS Route 28 and a gravity wastewater collection system will be installed to serve the business park.

ARTICLE 2 - THE PROJECT

2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

OTSEGO COUNTY INDUSTRIAL DEVELOPMENT AGENCY RICHFIELD SPRINGS ECO-INDUSTRIAL BUSINESS PARK

ARTICLE 3 - ENGINEER

3.01 The Project has been designed by

Keystone Associates Engineers, Architects and Surveyors, LLC 58 Exchange Street
Binghamton, New York 13820

(Engineer), who is to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 - CONTRACT TIMES

4.01 Time of the Essence

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 Days to Achieve Substantial Completion and Final Payment

A. The Work will be substantially completed within <u>406</u> calendar days after the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within <u>437</u> calendar days after the date when the Contract Times commence to run.

4.03 Liquidated Damages

A. Contractor and Owner recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner \$500.00 for each day that expires after the time specified in Paragraph 4.02 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner \$500.00 for each day that expires after the time specified in Paragraph 4.02 for completion and readiness for final payment until the Work is completed and ready for final payment.

ARTICLE 5 - CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraph 5.01.A below:

A. For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of that item as indicated in this paragraph 5.01.A: (See Contractor's Bid, attached hereto as an exhibit, for individual bid items).

As provided in Paragraph 11.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in Paragraph 9.07 of the General Conditions. Unit prices have been computed as provided in Paragraph 11.03 of the General Conditions.

TOTAL OF ALL		\$
ESTIMATED PRICES	(words)	(numerals)

B. All specific cash allowances are included in the above price and have been computed in accordance with paragraph 11.02 of the General Conditions.

ARTICLE 6 - PAYMENT PROCEDURES

6.01 Submittal and Processing of Payments

A. Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 Progress Payments; Retainage

A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the <u>21st</u> day of each month during performance of the Work as provided in Paragraphs 6.02.A.I and 6.02.A.2 below. All such payments will be measured by the schedule of values established as provided in Paragraph 2.07.A of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements:

- I. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with Paragraph 14.02 of the General Conditions:
 - a. **95** percent of Work completed (with the balance being retainage); and
 - b. **95** percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- 2. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to <u>95</u> percent of the Work completed, less such amounts as Engineer shall determine in accordance with Paragraph 14.02.B.5 of the General Conditions.

6.03 Final Payment

A. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 14.07.

ARTICLE 7 - INTEREST

7.01 All moneys not paid when due as provided in Article 14 of the General Conditions shall not bear interest.

ARTICLE 8 - CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Agreement Contractor makes the following representations:
- A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
- B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities), if any, which have been identified in the Supplementary Conditions as provided in Paragraph 4.02 of the General Conditions and (2) reports and drawings of a Hazardous Environmental Condition, if any, at the Site which has been identified in the Supplementary Conditions as provided in Paragraph 4.06 of the General Conditions.
- E. Contractor has obtained and carefully studied (or assumes responsibility for doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto.
- F. Contractor does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has correlated the information known to Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.

- I. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 9 - CONTRACT DOCUMENTS

9.01 Contents

A.	The	Contract Documents consist of the following:
	١.	This Agreement (pages I to, inclusive).
	2.	Performance bond (pages to, inclusive).
	3.	Payment bond (pages to, inclusive).
	4.	Other bonds (pages to, inclusive).
		a (pages to, inclusive).
		b (pages to, inclusive).
		c (pages to, inclusive).
	5.	General Conditions (pages to, inclusive).
	6.	Supplementary Conditions (pages to, inclusive).
	7.	Specifications as listed in the table of contents of the Project Manual.
[or	8.] the	Drawings consisting of sheets with each sheet bearing the following general title: Drawings listed on attached sheet index.
	9.	Addenda (numbers to, inclusive).
	10.	Exhibits to this Agreement (enumerated as follows):
		a. Contractor's Bid (pages to, inclusive).
		b. Documentation submitted by Contractor prior to Notice of Award (pages to, inclusive).
		c
Agr		The following which may be delivered or issued on or after the Effective Date of the ent and are not attached hereto:
		a. Notice to Proceed (pages to, inclusive).
		b. Work Change Directives.
		c. Change Order(s).

- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
 - C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

ARTICLE 10 - MISCELLANEOUS

10.01 Terms

A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 Assignment of Contract

A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 Successors and Assigns

A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement in duplicate. One counterpart each has been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or identified by Owner and Contractor or on their behalf.

This Agreement will be effective on, (which is the Effective Date of the Agreement).			
OWNER:	CONTRACTOR:		
By:	By:		
Title:	Title:		
[CORPORATE SEAL]	[CORPORATE SEAL]		
Attest:	Attest:		
Title:	Title:		
Address for giving notices:	Address for giving notices:		
	License No.:		
(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents	(Where applicable)		
authorizing execution of Owner-Contractor Agreement.)	Agent for service or process:		
	(If Contractor is a corporation or a partnership, attach evidence of authority to sign.)		

Notice to Proceed

		Dated
Project:	Owner:	Owner's Contract No.:
Contract:	1	Engineer's Project No.:
Contractor:		
Contractor's Address: [send Certified Mail, Return Receipt Requ	ested]	
	_	
before that date, you are to start perfor Article 4 of the Agreement, the date of S [(or) the number of days to ach readiness for final payment is]. Before you may start any Work and Owner must each deliver to the	ming your obligations unubstantial Completion is_ieve Substantial Complet at the Site, Paragraph 2 other (with copies to E	re contract will commence to run on On or der the Contract Documents. In accordance with, and the date of readiness for final payment is ion is, and the number of days to achieve, and the following provides that you engineer and other identified additional insureds) and maintain in accordance with the Contract
Documents. Also, before you may start any V	Vork at the Site, you mus	it [add other requirements]:
		
		Owner
	Given by:	
		Authorized Signature
		Title
		Date

EJCDC No. C-550 (2002 Edition)
Prepared by the Engineers' Joint Contract Documents Committee and endorsed by the
Associated General Contractors of America and the Construction Specifications Institute.

Copy to Engineer

PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):	SURETY (Name and Address of Principal Place of Business):
OWNER (Name and Address):	
CONTRACT Date: Amount: Description (Name and Location):	
BOND Bond Number: Date (Not earlier than Contract Date): Amount: Modifications to this Bond Form: Surety and Contractor, intending to be legally bound hereby, this Performance Bond to be duly executed on its behalf by it	, subject to the terms printed on the reverse side hereof, do each cause
CONTRACTOR AS PRINCIPAL Company:	SURETY
Signature: (Seal) Name and Title:	Surety's Name and Corporate Seal (Seal)
(Space is provided below for signatures of additional	By: Signature and Title (Attach Power of Attorney)
parties, if required.)	Attest:
CONTRACTOR AS PRINCIPAL Company:	SURETY
Signature: (Seal) Name and Title:	Surety's Name and Corporate Seal By:
	Signature and Title (Attach Power of Attorney) Attest: Signature and Title:

EJCDC No. C-610 (2002 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.

- 1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.
- 2. If Contractor performs the Contract, Surety and Contractor have no obligation under this Bond, except to participate in conferences as provided in Paragraph 3.1.
- 3. If there is no Owner Default, Surety's obligation under this Bond shall arise after:
 - 3.1. Owner has notified Contractor and Surety, at the addresses described in Paragraph 10 below, that Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with Contractor and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Contractor and Surety agree, Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Contractor Default; and
 - 3.2. Owner has declared a Contractor Default and formally terminated Contractor's right to complete the Contract. Such Contractor Default shall not be declared earlier than 20 days after Contractor and Surety have received notice as provided in Paragraph 3.1; and
 - 3.3. Owner has agreed to pay the Balance of the Contract Price to:
 - 1. Surety in accordance with the terms of the Contract;
 - Another contractor selected pursuant to Paragraph 4.3 to perform the Contract.
- 4. When Owner has satisfied the conditions of Paragraph 3, Surety shall promptly and at Surety's expense take one of the following actions:
 - 4.1. Arrange for Contractor, with consent of Owner, to perform and complete the Contract; or
 - 4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
 - 4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and Contractor selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by Owner resulting from Contractor Default; or
 - 4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
 - After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or
 - Deny liability in whole or in part and notify Owner citing reasons therefor.
- 5. If Surety does not proceed as provided in Paragraph 4 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 4.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.

- 6. After Owner has terminated Contractor's right to complete the Contract, and if Surety elects to act under Paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of Surety to Owner shall not be greater than those of Contractor under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To a limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:
 - 6.1. The responsibilities of Contractor for correction of defective Work and completion of the Contract;
 - 6.2. Additional legal, design professional, and delay costs resulting from Contractor's Default, and resulting from the actions or failure to act of Surety under Paragraph 4; and
 - 6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or nonperformance of Contractor.
- 7. Surety shall not be liable to Owner or others for obligations of Contractor that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Owner or its heirs, executors, administrators, or successors.
- 8. Surety hereby waives notice of any change, including changes of time, to Contract or to related subcontracts, purchase orders, and other obligations.
- 9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after Contractor Default or within two years after Contractor ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- 10. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the address shown on the signature page.
- II. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions.

- 12.1 Balance of the Contract Price: The total amount payable by Owner to Contractor under the Contract after all proper adjustments have been made, including allowance to Contractor of any amounts received or to be received by Owner in settlement of insurance or other Claims for damages to which Contractor is entitled, reduced by all valid and proper payments made to or on behalf of Contractor under the Contract.
- 12.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 12.3. Contractor Default: Failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
- 12.4. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY – Name, Address and Telephone Surety Agency or Broker
Owner's Respresentative (engineer or other party)

PAYMENT BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):		SURETY (Name and Address of Principal Place of Business):	
OWNER (Name and Address):			
CONTRACT Date: Amount: Description (Name and Location):			
BOND Bond Number: Date (Not earlier than Contract Date): Amount: Modifications to this Bond Form:			
Surety and Contractor, intending to be legally bouthis Payment Bond to be duly executed on its behavior		subject to the terms printed on the reverse side hereof, do thorized officer, agent, or representative.	each cause
CONTRACTOR AS PRINCIPAL Company:		SURETY	
Signature: Name and Title:	(Seal)	Surety's Name and Corporate Seal By: Signature and Title	(Seal)
(Space is provided below for signatures of parties, if required.)	additional	(Attach Power of Attorney) Attest:	
		Signature and Title	_
CONTRACTOR AS PRINCIPAL Company:		SURETY	
Signature: Name and Title:	(Seal)	Surety's Name and Corporate Seal By:	(Seal)
		Signature and Title (Attach Power of Attorney) Attest: Signature and Title:	

EJCDC No. C-615 (2002 Edition)
Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.

- I. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.
- 2. With respect to Owner, this obligation shall be null and void if Contractor:
 - 2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and
 - 2.2. Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and Surety (at the addresses described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens, or suits to Contractor and Surety, and provided there is no Owner Default.
- 3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.
- 4. Surety shall have no obligation to Claimants under this Bond until:
 - 4.1. Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the addresses described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.
 - 4.2. Claimants who do not have a direct contract with Contractor:
 - Have furnished written notice to Contractor and sent a copy, or notice thereof, to Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials or equipment were furnished or supplied, or for whom the labor was done or performed; and
 - Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which Contractor had indicated the claim will be paid directly or indirectly; and
 - 3. Not having been paid within the above 30 days, have sent a written notice to Surety and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.
- 5. If a notice by a Claimant required by Paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.
- 6. When a Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at Surety's expense take the following actions:
 - 6.1. Send an answer to that Claimant, with a copy to Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.
 - 6.2. Pay or arrange for payment of any undisputed amounts.
- 7. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety.

- 8. Amounts owed by Owner to Contractor under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work
- 9. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
- 10. Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.
- II. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (I) on which the Claimant gave the notice required by Paragraph 4.1 or Paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (I) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- 12. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.
- 13. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common law bond.
- 14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. DEFINITIONS

- 15.1. Claimant: An individual or entity having a direct contract with Contractor, or with a first-tier subcontractor of Contractor, to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 15.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 15.3. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY – Name, Address and Telephone Surety Agency or Broker:

Owner's Representative (engineer or other party):

DOCUMENT 00 62 16

CERTIFICATE OF INSURANCE

PART I - CERTIFICATE OF INSURANCE

- A. The acceptable Certificate of Insurance for this contract will be the ACORD Certificate of Insurance Form 25-S (1/95) with AIA G715 supplemental attachment. Copies of these documents are included for informational purposes only.
- B. The contractor shall, upon execution of the Agreement with the Owner, submit the Certificate of Insurance prior to commencement of work as described in Article 5 of the General Conditions.
- C. The limits and types of liability, naming the Owner and project as insured are as shown in the Supplementary Conditions. Company should be A rated by Best's Guide or better and licensed in New York as a "Domestic" carrier.

END OF DOCUMENT



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

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

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

th	is certificate does not confer rights t	o the	cert	ificate holder in lieu of su).			
PRO	DUCER				CONTACT NAME:					
					PHONE FAX (A/C, No, Ext): (A/C, No):					
					E-MAIL ADDRESS:					
					ADDICE		LIBER(S) AFFOR	DING COVERAGE		NAIC #
					INSURER(S) AFFORDING COVERAGE NAIC #					NAIC#
INSL	RFD				INSURER A:					
					INSURER B:					
					INSURE					
					INSURE	RD:				
					INSURE	RE:				
					INSURE	RF:				
				NUMBER:	·			REVISION NUMBER:		
IN C	HIS IS TO CERTIFY THAT THE POLICIES IDICATED. NOTWITHSTANDING ANY RE ERTIFICATE MAY BE ISSUED OR MAY XCLUSIONS AND CONDITIONS OF SUCH	QUIF PERT	REMEI	NT, TERM OR CONDITION THE INSURANCE AFFORDI	OF ANY	Y CONTRACT THE POLICIES	OR OTHER I	DOCUMENT WITH RESPEC	OT TO	WHICH THIS
INSR LTR	TYPE OF INSURANCE	ADDL	SUBR WVD	POLICY NUMBER		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s	
	COMMERCIAL GENERAL LIABILITY					,, = =,	,,,,	EACH OCCURRENCE	\$	
	CLAIMS-MADE OCCUR							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	
	52 52 5555/							MED EXP (Any one person)	\$	
								PERSONAL & ADV INJURY	\$	
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE	\$	
	POLICY PRO- LOC							PRODUCTS - COMP/OP AGG	\$	
								PRODUCTS - COMP/OP AGG	\$	
	OTHER: AUTOMOBILE LIABILITY							COMBINED SINGLE LIMIT	\$	
	ANY AUTO							(Ea accident) BODILY INJURY (Per person)	\$	
	OWNED SCHEDULED							BODILY INJURY (Per accident)	\$	
	AUTOS ONLY AUTOS NON-OWNED						PROPERTY DAMAGE			
	AUTOS ONLY AUTOS ONLY							(Per accident)	\$	
									\$	
	UMBRELLA LIAB OCCUR							EACH OCCURRENCE	\$	
	EXCESS LIAB CLAIMS-MADE							AGGREGATE	\$	
	DED RETENTION\$							DED OTH	\$	
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N							PER OTH- STATUTE ER		
	ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?	N/A						E.L. EACH ACCIDENT	\$	
	(Mandatory in NH) If yes, describe under							E.L. DISEASE - EA EMPLOYEE	\$	
	DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT	\$	
DES	CRIPTION OF OPERATIONS / LOCATIONS / VEHIC	LES (#	CORD	101, Additional Remarks Schedul	le, may be	e attached if more	e space is require	ed)		
CE	PTIEICATE HOLDED				CANC	ELLATION				
UE	RTIFICATE HOLDER			1	CANC	ELLATION				
					SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.					
					AUTHO	RIZED REPRESE	NTATIVE			

DOCUMENT 00 62 76

PROJECT FORMS

I.I ADMINISTRATIVE FORMS

- A. Administrative Forms: Additional administrative forms are specified in Division 01 General Requirements.
- B. Copies of EJCDC standard forms may be obtained from The Engineers Joint Contract Documents Committee (EJCDC®); http://www.ejcdc.org.
- C. Copies of AIA standard forms may be obtained from the American Institute of Architects; http://www.aia.org.

D. Payment Forms:

- I. Schedule of Values Form: A breakdown found acceptable to the Engineer and Owner.
- 2. Payment Application: EJCDC No. C-620 (latest Edition), "Contractor's Application for Payment", in its' entirety.
- 3. Partial Waiver of Lien to be submitted with progress payments.
- 4. Form of Contractor's Affidavit: AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
- 5. Form of Affidavit of Release of Liens: AIA Document G706A, "Contractor's Affidavit of Payment of Release of Liens."
- 6. Form of Consent of Surety: AIA Document G707, "Consent of Surety to Final Payment."

E. Information and Modification Forms:

- I. Form for Field Order: EJCDC No. C-942, "Field Order".
- 2. Form for Change Directive: EJCDC No. C-940, "Work Change Directive".
- 3. Change Order Form: ECJCD No. C-941, "Change Order".
- 4. Form for Certificate of Substantial Completion: EJCDC C-625, "Certificate of Substantial Completion".
- 5. Contractor's Certificate and Release: "Contractor's Certificate and Release" Form.
- 6. Form for Requests for Information (RFIs): "Request for Information (RFI)"; Section 01 30 00 Administrative Requirements.

END OF DOCUMENT

Contractor's Application For Payment No.

	Application Period:	Application Date:
To (Owner):	From (Contractor):	Via (Engineer)
Project:	Contract:	
Owner's Contract No.:	Contractor's Project No.:	Engineer's Project No.:

APPLICATION FOR PAYMENT

Change Order Summary

	1. ORIGINAL CONTRACT PRICE \$	2. Net change by Change Orders\$	3. CURRENT CONTRACT PRICE (Line I \pm 2)	4. TOTAL COMPLETED AND STORED TO DATE	(Column F on Progress Estimate)	5. RETAINAGE:	a. % x \$ Work Completed \$	b % x \$ Stored Material \$	c. Total Retainage (Line 5a + Line 5b)	6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5c)	7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application)	8. AMOUNT DUE THIS APPLICATION\$	9. BALANCE TO FINISH, PLUS RETAINAGE	(Column G on Progress Estimate + Line 5 above) \$	
		Deductions													
Citatige Order Summary		Additions													
	Approved Change Orders	Number									TOTALS		NET CHANGE BY	CHANGE ORDERS	

CONTRACTOR'S CERTIFICATION

The undersigned Contractor certifies that: (1) all previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Applications for Payment; (2) title of all Work, materials and equipment incorporated in said Work or otherwise acceptable to Owner indemnifying Owner against any such Liens, security interest o encumbrances); and (3) all Work covered by this Application for Payment is in accordance with the listed in or covered by this Application for Payment will pass to Owner at time of payment free an clear of all Liens, security interests and encumbrances (except such as are covered by a Bon Contract Documents and is not defective.

(Line 8 or other - attach explanation of other amount)

Payment of:

EJCDC No. C-620 (2002 Edition)
Prepared by the Engineers' Joint Contract Documents Committee and endorsed by the Associated General Contractors of America and the Construction Specifications Institute.

Date:

B X:

Page I of 3

Contractor's Application

Progress Estimate

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		ш		4)	
::a		ш		Materials Presently Stored (not in C or D)	
Application Number:	Application Date:	oleted	О	This Period	
		Work Completed	O	From Previous Application (C + D)	
		В		Scheduled Value	
		٧	ltem	Description	Totals
For (contract):	Application Period:			Specification Section No.	

Contractor's Application

Progress Estimate

		ŋ	Balance to	Finish (B - F)	
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			and	+ D,	
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For (contract):	Application Period:			Bid Item No.	
For	Арр			_	

Contractor's Application

Stored Material Summary

For (contract):				Application Number:			
Application Period:	riod:			Application Date:			
∢	В	O	۵	Е	ъ.		G
	Shop Drawing		Stored Previously	Stored this Month	Incorporated in	Work	
Invoice No.	Transmittal No.	Materials Description	Date Amount (Month/Year) (\$)	Amount (\$) Subtotal	Date (Month/Year) Amo	Amount (\$)	Materials Remaining in Storage (\$) (D + E - F)
		Totals					

PARTIAL WAIVER OF LIEN

Owner:	
Project:	
Contractor:	
Requisition #:	
Date of Requisition:	
The undersigned Contractor for	nd valuable consideration received by it hereby waives the
requisition, with respect to the above d covenants and agrees that it shall not in any the above designated project, or any part th	re work, labor or materials furnished to the date of this designated project. The undersigned Contractor further way claim or file a mechanic's or lien against the premises of hereof, or against any fund applicable thereto for any of the ished by it in connection with the improvement of said
This lien waiver is executed and delivered sand materials furnished to the date of the ab	simultaneous with or after payment of the labor performed pove requisition.
IN WITNESS WHEREOF, we have set our 20	hand and seal this day of,
	By(Authorized Signature and Title)

(Affix Corporate Seal)

Field Order

No. ____

Date of Issuance:		Effective Da	te:
Project:	Owner:		Owner's Contract No.:
Contract:			Date of Contract:
Contractor:			Engineer's Project No.:
changes in the Work without changes in Contra Times is required, please notify the Engineer imme	ct Price or Cor	ntract Times. If you co	with General Conditions Paragraph 9.05A., for minor consider that a change in Contract Price or Contract Work.
Reference: (Specification See	ction(s))		(Drawing(s) / Detail(s))
Description:			
		—	
Attachments:			
		Engineer:	
Receipt Acknowledged by (Contractor):			ate:
Copy to Owner			

Work Change Directive

No. ____

Date of Issuance:			Effective Date:	
Project:		Owner:	Owner's Co	ntract No.:
Contract:			Date of Con	tract:
Contractor:			Engineer's Pr	roject No.:
You are directed to pr	oceed promptly with	the following change(s	s):	
Item No.	Description			
Attachments (list docu	ments supporting cha	ange):		
Purpose for Work Cha	inge Directive:			
Authorization	for Work described here	in to proceed on the bas	is of Cost of the Work due t	0:
☐ Nonagree	ement on pricing of prop	osed change.		
Necessity	to expedite Work desc	ribed herein prior to agre	eeing to changes on Contract	Price and Contract Time.
Estimated change in C	ontract Price and Co	ntract Times:		
Contract Price \$	(ir	ncrease/decrease)	Contract Time	days (increase/decrease)
If the change involves an ir	ncrease, the estimated an	nounts are not to be exce	eeded without further author	ization.
Recommended for Approval by	Engineer:			Date
Authorized for Owner by:				Date
Accepted for Contractor by:				Date
	E 113			
Approved by Funding Agency (if	applicable):			Date:

Page I of I

Change Order

No. ____ Date of Issuance: Effective Date: Project: Owner: Owner's Contract No.: Date of Contract: Contract: Engineer's Project No.: Contractor: The Contract Documents are modified as follows upon execution of this Change Order: Description: **Attachments (list documents supporting change): CHANGE IN CONTRACT PRICE: CHANGE IN CONTRACT TIMES:** Original Contract Times: Working ☐ Calendar days **Original Contract Price:** Substantial completion (days or date): Ready for final payment (days or date): [Increase] [Decrease] from previously [Increase] [Decrease] from previously approved Change Orders approved Change Orders No. to No. No. to No. : Substantial completion (days): Ready for final payment (days): Contract Price prior to this Change Order: Contract Times prior to this Change Order: Substantial completion (days or date): Ready for final payment (days or date): [Increase] [Decrease] of this Change Order: [Increase] [Decrease] of this Change Order: Substantial completion (days or date): Ready for final payment (days or date): Contract Price incorporating this Change Contract Times with all approved Change Orders: Substantial completion (days or date): Ready for final payment (days or date): _____ RECOMMENDED: ACCEPTED: ACCEPTED: By: Engineer (Authorized Signature) Owner (Authorized Signature) Contractor (Authorized Signature) Date: Date: Date: Approved by Funding Agency (if applicable):

EJCDC C-941 Change Order

Data.

Certificate of Substantial Completion

Project:	
Owner:	Owner's Contract No.:
Contract:	Engineer's Project No.:
This [tentative] [definitive] Certificate of Sub	estantial Completion applies to:
\square All Work under the Contract Documents:	\Box The following specified portions of the Work:
Date of Sub	ostantial Completion
Contractor, and Engineer, and found to be subst of the Project or portion thereof designated commencement of applicable warranties require A [tentative] [definitive] list of items to be com-	been inspected by authorized representatives of Owner, tantially complete. The Date of Substantial Completion above is hereby declared and is also the date of ed by the Contract Documents, except as stated below. pleted or corrected is attached hereto. This list may not
Contractor to complete all Work in accordance	tems on such list does not alter the responsibility of the with the Contract Documents.
_	ntractor for security, operation, safety, maintenance, be as provided in the Contract Documents except as
☐ Amended Responsibilities	□ Not Amended
Owner's Amended Responsibilities:	
Contractor's Amended Responsibilities:	

he following documents are attache	ed to and made part of this Certificate:
	an acceptance of Work not in accordance with the Contract tractor's obligation to complete the Work in accordance with the
Executed by Engineer	Date
Accepted by Contractor	Date
Accepted by Owner	Date

CONTRACTOR'S CERTIFICATE AND RELEASE

TO:				(OWNER)
REFER	ENCE CONTRACT NO		ENTERED INTO THE	DAY
	OF	, 20	,	BETWEEN THE
				(OWNER)
	OF			
	AND			(CONTRACTOR),
	OF			
	FOR THE			
	OF THE			
	LOCATED IN THE CITY O)F		
	of \$ The undersigned further ceare outstanding and unsettle	ertifies that ract and duly	approved Change Order and addition to the amount set wing items which he claims are to the Contractor:	nd modifications the balance t forth in Paragraph 1, there te just and due and owing by
3.	or equipment and no claim performance of this cont	ers numbered thereof, and ms of labore ract, and th	d	has been performed in laims for materials, supplies d wages arising out of the by the Contractor and all

FROM: (CONTRACTOR)

4.	Except for the amounts stated under Paragraphs 1 and 2 hereof, the undersigned has received from all sums of money payable to the undersigned under or
	pursuant to the above mentioned contract or any modification or change thereof.
5.	That in consideration of the payment of the amount stated in Paragraph I hereof the undersigned does hereby release from any and all claims arising under or by virtue of this contract, except the amount listed in Paragraph 2 hereof; provided, however, that it for any reason does not pay in full the amount stated in Paragraph I hereof, said deduction shall not affect the validity of this release, but the amount stated deducted will release upon payment thereof. The Contractor further certifies that upon the payment of the amount listed in Paragraph 2 hereof, and of any amount which may be deducted from Paragraph I hereof, he will release from any and all claims of any nature whatsoever arising out of said contract of modification thereof, and will execute such further releases or assurances as may request.
IN	WITNESS WHEREOF, the undersigned has signed and sealed this instrument this day of, 20
	(SEAL)
	(Signature and Title of Officer)
	, being first duly sworn on oath, deposed and says, first, that he is the of the, second, that he has read the foregoing
cer	rtificate by him subscribed as of the
	Subscribed and sworn to before me this day of, 20
	My commission expires (Date)
	(Notary)

REQUEST FOR INFORMATION

TO:	RFI NO.:
PROJECT:	
	CONTRACT:
Contractor requests the following interpr	retation:
	DETAIL: SPEC. NO./PARA.:
REQUEST:	
CONTRACTOR RECOMMENDATION	(the Contractor may provide a recommended solution):
Signature:	Date:
Contractor:	
RECEIVER'S RECOMMENDATIONS:	

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By







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AMERICAN COUNCIL OF ENGINEERING COMPANIES

AMERICAN SOCIETY OF CIVIL ENGINEERS

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The Associated General Contractors of America



Construction Specifications Institute

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American Society of Civil Engineers 1801 Alexander Bell Drive, Reston, VA 20191-4400

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
- 1. Addenda--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
- 2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
- 3. Application for Payment--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- 4. Asbestos--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
- 5. *Bid--*The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 6. *Bidder*--The individual or entity who submits a Bid directly to Owner.
- 7. Bidding Documents--The Bidding Requirements and the proposed Contract Documents (including all Addenda).
- 8. Bidding Requirements--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.
- 9. Change Order--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract

Times, issued on or after the Effective Date of the Agreement.

- 10. Claim--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
- 11. Contract--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
- 12. Contract Documents-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
- 13. Contract Price--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).
- 14. Contract Times--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.
- 15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.
- 16. Cost of the Work--See Paragraph 11.01.A for definition.
- 17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
- 18. Effective Date of the Agreement--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 19. *Engineer*--The individual or entity named as such in the Agreement.
- 20. Field Order--A written order issued by Engineer which requires minor changes in the Work but

which does not involve a change in the Contract Price or the Contract Times.

- 21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.
- 22. Hazardous Environmental Condition--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
- 23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- 24. Laws and Regulations; Laws or Regulations-Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
- 26. *Milestone--*A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
- 27. Notice of Award--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
- 28. *Notice to Proceed-*-A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.
- 29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
 - 30. PCBs--Polychlorinated biphenyls.
- 31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

- 32. *Progress Schedule--*A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
- 33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
- 34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
- 35. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.
- 37. Resident Project Representative--The authorized representative of Engineer who may be assigned to the Site or any part thereof.
- 38. Samples--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 39. Schedule of Submittals--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
- 40. Schedule of Values--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
- 41. Shop Drawings--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
- 42. *Site--*Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.
- 43. *Specifications*--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and

workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

- 44. Subcontractor--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.
- 45. Substantial Completion--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.
- 47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.
- 48. Supplier--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.
- 49. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 50. *Unit Price Work*--Work to be paid for on the basis of unit prices.
- 51. Work--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 52. Work Change Directive--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be

performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered", "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the "reasonable." "suitable," "acceptable." "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. Defective

- 1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents, or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
 - c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been

assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide

- 1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
- 2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
- 3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied.
- F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 Delivery of Bonds and Evidence of Insurance

- A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. Evidence of Insurance: Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 Copies of Documents

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:
- 1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;
 - 2. a preliminary Schedule of Submittals; and
- 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 Preconstruction Conference

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 *Initial Acceptance of Schedules*

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

- 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
- 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
- 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 Intent

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.
- C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 Reference Standards

- A. Standards, Specifications, Codes, Laws, and Regulations
- 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regula-

tions in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies

- 1. Contractor's Review of Contract Documents Before Starting Work: Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.
- 2. Contractor's Review of Contract Documents During Performance of Work: If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.
- 3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any

conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

- a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
- b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;

- 2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or
- 3. Engineer's written interpretation or clarification.

3.05 Reuse of Documents

- A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:
- 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or
- 2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaption by Engineer.
- B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 Electronic Data

- A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party..
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or

construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 Subsurface and Physical Conditions

- A. *Reports and Drawings:* The Supplementary Conditions identify:
- 1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and
- 2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:
- 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
- 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
- 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 Differing Subsurface or Physical Conditions

- A. *Notice:* If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:
- 1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or

- 2. is of such a nature as to require a change in the Contract Documents; or
- 3. differs materially from that shown or indicated in the Contract Documents; or
- 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents:

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. Engineer's Review: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. Possible Price and Times Adjustments

- 1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
 - b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.
- 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:
 - a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
 - b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, explo-

ration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

- c. Contractor failed to give the written notice as required by Paragraph 4.03.A.
- 3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

- 1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and
- 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all such information and data,
 - b. locating all Underground Facilities shown or indicated in the Contract Documents,
 - c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and
 - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. Not Shown or Indicated

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 Reference Points

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 Hazardous Environmental Condition at Site

A. Reports and Drawings: Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the general

accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

- 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
- 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
- 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.
- D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.
- E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is

agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

- F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.
- G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners. employees, agents, consultants, subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

5.01 Performance, Payment, and Other Bonds

- A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.
- B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.
- C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 Licensed Sureties and Insurers

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 Certificates of Insurance

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

5.04 Contractor's Liability Insurance

- A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:
- 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts:
- 2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
- 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
- 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:
 - a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or
 - b. by any other person for any other reason;
- 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
- 6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.
- B. The policies of insurance required by this Paragraph 5.04 shall:
- 1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and

any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

- 2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
 - 3. include completed operations insurance;
- 4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;
- 5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);
- 6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and
- 7. with respect to completed operations insurance, and any insurance coverage written on a claimsmade basis, remain in effect for at least two years after final payment.
 - a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 Owner's Liability Insurance

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

- A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
- 1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;
- 2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;
- 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
- 4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
- 5. allow for partial utilization of the Work by Owner;
 - 6. include testing and startup; and
- 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.
- B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and

subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.
- D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.
- E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

5.07 Waiver of Rights

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, employees, agents, consultants subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:
- 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
- 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 Receipt and Application of Insurance Proceeds

- A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order .
- B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary

shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 Acceptance of Bonds and Insurance; Option to Replace

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 Partial Utilization, Acknowledgment of Property Insurer

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 Supervision and Superintendence

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or received from the superintendent shall be binding on Contractor.

6.02 Labor; Working Hours

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 Services, Materials, and Equipment

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used,

cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 Progress Schedule

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.
- 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
- 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 Substitutes and "Or-Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.
- 1. "Or-Equal" Items: If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

- 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,
- 3) it has a proven record of performance and availability of responsive service; and
- b. Contractor certifies that, if approved and incorporated into the Work:
- 1) there will be no increase in cost to the Owner or increase in Contract Times, and
- 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

- a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.
- b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.
- c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.
- d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
- 1) shall certify that the proposed substitute item will:
 - a) perform adequately the functions and achieve the results called for by the general design,
 - b) be similar in substance to that specified, and
 - c) be suited to the same use as that specified;

2) will state:

- a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;
- b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
- c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

- a) all variations of the proposed substitute item from that specified, and
- b) available engineering, sales, maintenance, repair, and replacement services;
- 4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,
- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.
- C. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.

- D. Special Guarantee: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- E. Engineer's Cost Reimbursement: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- F. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.
- 6.06 Concerning Subcontractors, Suppliers, and Others
- A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.
- B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued . No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

- C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:
- 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor
- 2. shall anything in the Contract Documents create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.
- E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.
- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an approagreement between Contractor Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer,, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed

by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 Patent Fees and Royalties

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, employees, agents, partners. consultants subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 Permits

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 Laws and Regulations

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

- B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas

- 1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
- 2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
- 3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or

arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

- B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. Cleaning: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. Loading Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 Record Documents

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
- 1. all persons on the Site or who may be affected by the Work;
- 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

- 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
- C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 Safety Representative

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 Hazard Communication Programs

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 Shop Drawings and Samples

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings

- a. Submit number of copies specified in the General Requirements.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.
- 2. Samples: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals.
 - a. Submit number of Samples specified in the Specifications.
 - b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.
- B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals , any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures

- 1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:
 - a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;
 - c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and
 - d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.
- 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.
- 3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review

- 1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular

means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.18 *Continuing the Work*

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
- 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's

obligation to perform the Work in accordance with the Contract Documents:

- 1. observations by Engineer;
- 2. recommendation by Engineer or payment by Owner of any progress or final payment;
- 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
- 4. use or occupancy of the Work or any part thereof by Owner;
- 5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;
 - 6. any inspection, test, or approval by others; or
 - 7. any correction of defective Work by Owner.

6.20 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, employees, agents, partners, consultants subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

- C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:
- 1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
- 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 Delegation of Professional Design Services

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.
- B. If professional design services certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 - OTHER WORK AT THE SITE

7.01 Related Work at Site

- A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:
- 1. written notice thereof will be given to Contractor prior to starting any such other work; and
- 2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.
- B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.
- C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
- 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
- 2. the specific matters to be covered by such authority and responsibility will be itemized; and
- 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 Legal Relationships

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.
- C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 Replacement of Engineer

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 Furnish Data

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 Lands and Easements; Reports and Tests

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

8.06 Insurance

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 Inspections, Tests, and Approvals

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 Limitations on Owner's Responsibilities

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 Undisclosed Hazardous Environmental Condition

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 Evidence of Financial Arrangements

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's

obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 Owner's Representative

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 Visits to Site

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 Project Representative

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as

provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 Authorized Variations in Work

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 Rejecting Defective Work

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 Shop Drawings, Change Orders and Payments

- A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.
- B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.
- C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.
- D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 Determinations for Unit Price Work

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 Decisions on Requirements of Contract Documents and Acceptability of Work

- A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question
- B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.
- C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.
- D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 Limitations on Engineer's Authority and Responsibilities

- A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of

construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 Authorized Changes in the Work

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).
- B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 Unauthorized Changes in the Work

A.Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:
- 1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;
- 2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
- 3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 Notification to Surety

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 Claims

- A. Engineer's Decision Required: All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.
- B. *Notice:* Written notice stating the general nature of each Claim, shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to

submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

- C. Engineer's Action: Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:
 - 1. deny the Claim in whole or in part,
 - 2. approve the Claim, or
- 3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.
- D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.
- E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.
- F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 Cost of the Work

A. Costs Included: The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the

Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.

- 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
- 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
- 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.
- 4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
 - 5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's

employees incurred in discharge of duties connected with the Work.

- b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
- c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.

- i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.
- B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:
- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.
- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.
- C. Contractor's Fee: When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.
- D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. Cash Allowances

1. Contractor agrees that:

- a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
- b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. Contingency Allowance

- 1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover

Contractor's overhead and profit for each separately identified item.

- D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:
- 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
- 2. there is no corresponding adjustment with respect any other item of Work; and
- 3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
- 1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or
- 2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or
- 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

- C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:
 - 1. a mutually acceptable fixed fee; or
- 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
 - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
 - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 Change of Contract Times

- A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 *Delays*

- A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.
- B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times , or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- C If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.
- D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.
- E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 Notice of Defects

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 Access to Work

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 Tests and Inspections

- A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
- 1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;
- 2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and
- 3. as otherwise specifically provided in the Contract Documents.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials,

mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

- E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.
- F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 Uncovering Work

- A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.
- B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.
- C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.
- D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 Owner May Stop the Work

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 Correction or Removal of Defective Work

A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 Correction Period

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

- 1. repair such defective land or areas; or
- 2. correct such defective Work; or

- 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
- 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and

Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 Owner May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.
- C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 Schedule of Values

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 Progress Payments

A. Applications for Payments

- 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
- 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
- 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

- 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated:
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
- 3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or
 - b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
- 4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

- d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or
- e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
- 5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
 - d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment

- 1. Owner may refuse to make payment of the full amount recommended by Engineer because:
 - a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
 - b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - c. there are other items entitling Owner to a set-off against the amount recommended; or

- d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.
- 2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.
- 3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

14.03 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 Substantial Completion

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.
- B. Promptly after Contractor's notification, , Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within

said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

- D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.
- E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

14.05 Partial Utilization

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions
- 1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
- 2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
- 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons

therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 Final Inspection

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 Final Payment

A. Application for Payment

- 1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.
- 2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;
 - b. consent of the surety, if any, to final payment;
 - c. a list of all Claims against Owner that Contractor believes are unsettled; and
 - d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and

equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

- B. Engineer's Review of Application and Acceptance
- 1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and , will be paid by Owner to Contractor.

14.08 Final Completion Delayed

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such

payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 Waiver of Claims

- A. The making and acceptance of final payment will constitute:
- 1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and
- 2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 Owner May Suspend Work

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 Owner May Terminate for Cause

- A. The occurrence of any one or more of the following events will justify termination for cause:
- 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);
- 2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
- 3. Contractor's disregard of the authority of Engineer; or

- 4. Contractor's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:
- 1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),
- 2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and
- 3. complete the Work as Owner may deem expedient.
- C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.
- D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.
- E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.
- F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
- 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
- 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
- 3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
- 4. reasonable expenses directly attributable to termination.
- B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a

Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

- A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.
- B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.
- C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:
- 1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or
- 2. agrees with the other party to submit the Claim to another dispute resolution process, or
- 3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 - MISCELLANEOUS

17.01 Giving Notice

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

- 1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or
- 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 Computation of Times

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 Cumulative Remedies

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other

provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 Controlling Law

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 Headings

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract Funding Agency Edition (No. C-710, 2002 Edition) and other provisions of the Contract Documents as indicated below. All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions will have the meanings indicated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

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SC-1.01.A.4. Add the following language to the end of Paragraph 1.01.A.4:

The Application for Payment form to be used on this Project is EJCDC No. C-620. The Owner must approve all Applications for Payment before payment is made.

SC-1.01.A.10. Add the following language to the end of Paragraph 1.01.A.10:

The Change Order form to be used on this Project is EJCDC No. C-941. Owner approval is required before Change Orders are effective.

SC-1.01.A.18. Add the words "or Plans" after the word "Drawings".

SC-2.02.A. Delete Paragraph 2.02.A in its entirety and insert the following in its place:

A. Owner shall furnish to Contractor up to five printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

SC-2.03.A. Delete Paragraph 2.03.A in its entirety and insert the following in its place:

A. The Contract Times will commence to run on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement.

SC-4.02. Delete Paragraph 4.02A and 402.B in their entirety and insert the following in their place:

A. No reports or exploration or tests of subsurface conditions at or contiguous to the Site were relied upon in preparation of Drawings and Specifications.

SC-4.06. Add the following new paragraphs immediately after Paragraph 4.06.A:

1. No reports or drawings relating to Hazardous Environmental Conditions identified at the site have been utilized by the Engineer in preparation of the Contract Drawings.

SC-5.03. Add the following new paragraph immediately after Paragraph 5.03.B:

C. Failure of the Owner to demand such certificates or other evidence of full compliance with these insurance requirements or failure of the Owner to identify a deficiency from evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

SC-5.04. Add the following new paragraph immediately after Paragraph 5.04.B:

- C. The limits of liability for insurance required by Paragraph 5.04 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:
 - 1. Workers' Compensation, and related coverages under Paragraphs 5.04.A.1 and A.2 of the General Conditions.

(a) State: Statutory (b) Applicable Federal: Statutory

(e.g., Longshoremen's)

(c) Employer's Liability \$1,000,000

2. Contractor's General Liability under Paragraphs 5.04.A.3 through A.6 of the General Conditions which shall include completed operations and product liability coverages and eliminate the exclusion with respect to property under the care, custody, and control of the Contractor:

(a) General Aggregate \$2,000,000

(b) Products - Completed

Operations Aggregate \$2,000,000 (c) Personal and Advertising Injury \$1,000,000

(d) Each Occurrence (Bodily

Injury and Property Damage) \$1,000,000

(e) Property Damage Liability

Insurance will Provide Explosion,

Collapse, and Underground

Coverages Where Applicable.

(f) Excess or Umbrella Liability

(1) General Aggregate \$5,000,000(2) Each Occurrence \$5,000,000

3. Automobile Liability under Paragraph 5.04.A.6 of the General Conditions:

(a) Bodily Injury:

Each Person \$1,000,000 Each Accident \$1,000,000

(b) Property Damage:

Each Accident \$1,000,000 Combined Single Limit of \$1,000,000

4. The Contractual Liability coverage required by Paragraph 5.04.B.4 of the General Conditions shall provide coverage for not less than the following amounts:

(c) Bodily Injury:

Each Person \$2,000,000 Each Accident \$2,000,000

(d) Property Damage:

Each Accident \$2,000,000 Annual Aggregate \$2,000,000

5. The policy shall name the OWNER, ENGINEER and any subsidiaries and affiliated companies of each as additional insureds.

SC-6.02. Add the follow new paragraph immediately after Paragraph 6.02.B:

C. The applicable provisions for compliance with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) shall apply as supplemented by Department of Labor regulations (29 CFR Part 5).

SC-6.05.C. Amend the paragraph by making two subparagraphs under the title C. Engineer's Evaluation. The paragraph text is retitled, 6.05.C.2 After Effective Date of Agreement. A new paragraph is added before this paragraph to read as follows:

1. During Bidding. The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, or "or-equal" materials and equipment as defined in paragraph 6.05 of the General Conditions, approved by the Engineer and identified by Addendum. The materials and equipment described in the Bidding Documents establish a standard of required type, function, and quality to be met by any proposed "or-equal" item. Request for Engineer's clarification of materials and equipment considered "or-equal" prior to the Effective Date of the Agreement must be received by the Engineer at least 10 days prior to the date for receipt of Bids. Each request shall conform to the requirements of Paragraph 6.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon the Bidder, at the cost of the Bidder. Engineer's decision of approval or disapproval of a proposed item will be final. If Engineer approves any proposed "or-equal" item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

SC-6.06. Add a new paragraph immediately after paragraph 6.06.G:

H. The Contractor shall not award work valued at more than fifty (50%) percent of the Contract Price to Subcontractor(s), without prior written approval of the Owner.

SC-6.10. Add a new paragraph immediately after paragraph 6.10.A:

- B. Owner is exempt from payment of sales and compensating use taxes of the State of New York and of cities and counties thereof on all materials to be incorporated into the Work.
 - 1. Owner will furnish the required certificates of tax exemption to Contractor for use in the purchase of supplies and materials to be incorporated into the Work.
 - 2. Owner's exemption does not apply to construction tools, machinery, equipment, or other property purchased by or leased by Contractor, or to supplies or materials not incorporated into the Work.

SC-6.12.A. Add a new paragraph immediately after paragraph 6.12.A.:

Contractor shall provide in triplicate (one (1) copy each for Otsego County Industrial Development Agency, one (1) copy for Village of Richfield Springs, and one (1) copy for Town of Richfield), electronic copy of all Record Documents, shop drawings, warranty and other pertinent information on a compact disk to the Owner prior to Application of Final Payment. Each copy shall include a thumb drive that has pdf of all documentation.

SC-6.17. Amend all paragraphs and subparagraphs:

A. All reference to "Engineer" shall be changed to say "Construction Project Representative".

SC-7.02.A.1. Delete paragraphs 7.02.A.1-3 in their entirety and insert the following in their place:

1. The Prime Contractor shall have the authority and be responsible for coordination of the activities among subcontractors on the Site to ensure a safe, efficient working environment. This authority covers scheduling delivery of materials, storage of materials, sequencing of construction involving different crafts, resolving interface issues between crafts, scheduling testing, and all other aspects of the Work that do not impact the design or function of the Work.

SC-9. Amend the Article and all paragraphs under Article 9.

A. All reference to "Engineer" shall be changed to say "Construction Project Representative".

SC-14.02.A.3. Add the following language at the end of paragraph 14.02.A.3:

No payments will be made that would deplete the retainage, place in escrow any funds that are required for retainage, or invest the retainage for the benefit of the Contractor.

SC-14.02.C.1. Delete paragraph 14.02.C.1 in its entirety and insert the following in its place:

1. The Application for Payment with Engineer's recommendations will be presented to the Owner for consideration. If the Owner finds the Application for Payment acceptable, the recommended amount less any reduction under the provisions of Paragraph 14.02.D will become due within 60 days of the last business day of the month, and the Owner will make payment to the Contractor.

SC-14.07.C. Delete Paragraph 14.07.A. in its entirety and insert the following in its place:

1. Sixty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor.

END OF SECTION

DOCUMENT 00 73 43

WAGE RATE REQUIREMENTS

PART I - PREVAILING WAGE RATES

- A. The PRC number is attached and can be used by all prospective bidders to see the appropriate wage rates for the project by following the link in the Prevailing Wage Schedule Links: View of Previously Requested Prevailing Wage Schedule using PRC#. The previously obtained PRC number is simply entered into this site to see all applicable wage rates for the specific project.
- B. The Project or Program to which the construction work covered by this Contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.
- C. If Federal Davis-Bacon wage rates differ from New York State prevailing wage rates, then the higher of the two rates shall be paid.

PART 2 - LABOR LAW 220-H - OSHA TRAINING

- A. All laborers, workers, and mechanics working on a public works project valued at \$250,000 or more must be certified as having successfully completed the OSHA 10-hour Construction Safety and Health Course. Only those people working under the Prevailing Wage Standards are required to have the training.
- B. DOL requires contractors and subcontractors to attach a copy of proof of completion of the OSHA 10-hour course with the first certified payroll submitted to the contracting agency and on each succeeding payroll where any new or additional employee is first listed.
 - 1. Proof of completion may include but not limited to:
 - a. Copies of bona fide course completion card;
 - b. Training roster, attendance record, or other documentation from the certified trainer pending the issuance of the card;
 - c. Other valid proof (although, no example of other valid proof was offered).
 - 2. A certification by the employer attesting that all employees have completed such a course is not sufficient proof that the course has been completed.

END OF DOCUMENT

FEDERAL MINIMUM WAGE REQUIREMENTS

"General Decision Number: NY20230037 01/13/2023

Superseded General Decision Number: NY20220037

State: New York

Construction Types: Heavy and Highway

County: Otsego County in New York.

BUILDING CONSTRUCTION PROJECTS (does not include residential construction consisting of single family homes and apartments up to and including 4 stories) HEAVY AND HIGHWAY CONSTRUCTION **PROJECTS**

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:

- . Executive Order 14026 generally applies to the contract.
 - The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.

If the contract was awarded on . Executive Order 13658 or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:

- generally applies to the contract.
- The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number Publication Date 01/06/2023

01/13/2023

ASBE0030-001 05/01/2022

Rates Fringes

Asbestos/Insulator Worker includes application of all materials, protective coverings, coatings and finishings to all types of

1/26/23, 3:45 PM		
mechanical systems. Also the application of firestopping material to openings and penetrations in walls, floors, ceilings, curtain walls and all lead abatement HAZARDOUS MATERIAL HANDLER SCOPE OF WORK: DUTIES LIMITED TO preparation, wetting, stripping, removal, scrapping, vacuuming, bagging, and disposing of all insulation materials, whether they contain asbestos or not from		24.29
mechanical system		24.29
BOIL0197-001 01/01/2021		
	Rates	Fringes
BOILERMAKER		26.00
BRNY0003-017 07/01/2022		
BINGHAMTON CHAPTER		
	Rates	Fringes
CEMENT MASON	•	23.10
CARP0277-020 07/01/2022		
	Rates	Fringes
CARPENTER	.\$ 34.13	25.30
FOOTNOTE:		
a. Paid Holidays: New Year's Day, Labor Day, Thanksgiving a		, Independence
ELEC0043-004 06/01/2022		
REMAINDER OF COUNTY		
	Rates	Fringes
CABLE SPLICER		30.43
ELEC0236-002 06/01/2022		30.43
TOWNSHIPS OF DECATUR AND WORCES	STER	
		Fringes
ELECTRICIAN		30.59
ELEC0325-001 06/01/2022		
BUTTERNUT, HARTWICK, LAURENS, MA ONEONTA, OTEGO, UNADILLA AND WES		MORRIS,
	Rates	Fringes
CABLE SPLICER	.\$ 43.54	30.09 29.90
ELEC1249-003 05/04/2020		
	Rates	Fringes

SAM.gov 1/26/23, 3:45 PM

ELECTRICIAN (LINE CONSTRUCTION: LIGHTING AND TRAFFIC SIGNAL Including any and all Fiber Optic Cable necessary for Traffic Signal Systems, Traffic Monitoring systems and Road Weather information systems) Flagman.....\$ 27.72 Groundman (Truck Driver)....\$ 36.96 Groundman Truck Driver

6.75%+33.90 6.75%+33.90 (tractor trailer unit).....\$ 39.27 6.75%+33.90

Lineman & Technician.....\$ 46.20 6.75%+33.90 Mechanic.....\$ 36.96 6.75%+33.90

FOOTNOTE:

a. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, plus President's Day, Good Friday, Decoration Day, Election Day for the President of the United States and Election Day for the Governor of the State of New York, provided the employee works the day before or the day after the holiday.

ELEC1249-004 05/03/2021

Rates Fringes

ELECTRICIAN (Line Construction)

Overhead and underground distribution and maintenance work and all overhead and underground transmission line work including any and all fiber optic ground wire, fiber optic shield wire or any other like product by any other name manufactured for the dual purpose of ground fault protection and fiber optic capabilities :

7%+34.40 Flagman.....\$ 32.82 Groundman digging machine operator.....\$ 49.23 7%+34.40 Groundman truck driver (tractor trailer unit)....\$ 46.50 7%+34.40 Groundman Truck driver....\$ 43.76 7%+34.40 Lineman and Technician....\$ 54.70 7%+35.40 Mechanic.....\$ 43.76 7%+34.40 Substation: Cable Splicer..... \$ 60.17 7%+35.40 Flagman.....\$ 32.82 7%+34.40 Ground man truck driver....\$ 43.76 7%+34.40 Groundman digging machine operator....\$ 49.23 7%+34.40 Groundman truck driver (tractor trailer unit)....\$ 46.50 7%+34.40 Lineman & Technician.....\$ 54.70 7%+35.40 Mechanic.....\$ 43.76 7%+34.40 Switching structures; railroad catenary installation and

https://sam.gov/wage-determination/NY20230037/1

maintenance, third rail type underground fluid or gas filled transmission conduit and cable installations (including any and all fiber optic ground product by any other name manufactured for the dual purpose of

ground fault protection and fiber optic capabilities), pipetype cable installation and maintenance jobs or projects, and maintenance bonding of rails; Pipetype cable installation Cable Splicer..... \$ 61.62 7%+35.40 Flagman.....\$ 33.61 7%+34.40 Groundman Digging Machine Operator..... \$ 50.42 7%+34.40 Groundman Truck Driver (tractor-trailer unit)....\$ 47.62 7%+34.40 Groundman Truck Driver....\$ 44.82 7%+34.40 Lineman & Technician.....\$ 56.02 7%+35.40 7%+34.40 Mechanic.....\$ 44.82

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, Good Friday, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and Election Day for the President of the United States and Election Day for the Governor of New York State, provided the employee works two days before or two days after the holiday.

ELEC1249-008 01/01/2022

ı	Rates	Fringes
ELECTRICIAN (Line		
Construction)		
TELEPHONE, CATV		
FIBEROPTICS CABLE AND		
EQUIPMENT		
Cable splicer\$	36.28	3%+5.14
Groundman\$	18.25	3%+5.14
Installer Repairman-		
Teledata		
Lineman/Technician-		
Equipment Operator\$	34.43	3%+5.14
Tree Trimmer\$		3%+10.23

a. New Year's Day, President's Day, Good Friday, Decoration Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving, Christmas Day.

.....

Rates Fringes
Elevator Constructor.......\$ 53.02 37.335+a+b

FOOTNOTE:

a.Vacation: 6%/under 5 years based on regular hourly rate for all hours worked. 8%/over 5 years based on regular hourly rate for all hours worked.

b. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day; the Friday after Thanksgiving Day; and Christmas Day.

ENGI0158-028 07/01/2022

HEAVY & HIGHWAY

	Rates	Fringes
Power equipment operators:		
GROUP 1	\$ 49.42	29.55
GROUP 2	\$ 48.51	29.55
GROUP 3	\$ 45.94	29.55
GROUP 4	\$ 53.42	29.55

^{*} ELEV0035-002 01/01/2023

GROUP	5\$	52.42	29.55
GROUP	6\$	51.42	29.55
GROUP	7\$	51.03	29.55

POWER EQUIPMENT OPERATOR CLASSIFICATIONS (HEAVY & HIGHWAY):

1/26/23, 3:45 PM

GROUP 1: Asphalt Curb Machine, Self Propelled, Slipform, Automated Concrete Spreader (CMI Type), Automatic Fine Grader, Backhoe (Except Tractor Mounted, Rubber Tired), Backhoe Excavator Full Swing (CAT 212 or similar type), Back Filling Machine, Belt Placer (CMI Type), Blacktop Plant (Automated), Boom truck , Cableway, Caisson Auger, Central Mix Concrete Plant (Automated), Concrete Curb Machine, Self Propelled, Slipform, Concrete Pump, Crane, Cherry Picker, Derricks (steel erection), Dragline, Overhead Crane (Gantry or Straddle type), Pile Driver, Truck Crane, Directional Drilling Machine, Dredge, Dual Drum Paver, Excavator (All Purpose Hydraulically Operated) (Gradall or Similar), Front End Loader (4 cu. yd. and Over), Head Tower (Sauerman or Equal), Hoist (Two or Three Drum), Holland Loader, Maintenance Engineer, Mine Hoist, Mucking Machine or Mole Pavement Breaker(SP) Wertgen; PB-4 and similar type, Power Grader, Profiler (over 105 H.P.) Quad 9, Quarry Master (or equivalent), Scraper, Fireman, Form Tamper, Grout Pump, Gunite Machine, Hammers (Hydraulic self-propelled), Hydra-Spiker, ride-on, Hydraulic Pump (jacking system), Hydro-Blaster (Water), Mulching Machine, Oiler, Parapet Concrete or Pavement, Shovel, Side Boom, Slip Form Paver, Tractor Drawn, BeltType Loader, Truck or Trailer Mounted Log , Chipper (Self Feeder), Tug Operator (Manned Rented Equipment Excluded), Tunnel Shovel

GROUP 2: Asphalt Paver, Backhoe (Tractor Mounted, Rubber Tired), Bituminous Recycler Machine, Bituminous Spreader and Mixer, Blacktop Plant (NonAutomated), Blast or Rotary Drill (Truck or Tractor Mounted), Boring Machine, Cage Hoist. Central Mix Plant (NonAutomated) and All Concrete Batching Plants, Cherry Picker (5 tons capacity and under), Concrete Paver (Over 16S), Crawler Drill, Self-contained, Crusher, Diesel Power Unit, Drill Rigs, Tractor Mounted, Front End Loader (Under 4 cu. yd.), Greaseman/Lubrication Engineer, HiPressure Boiler (15 lbs. and over), Hoist (One Drum), Hydro-Axe, Kolman Plant Loader and Similar Type Loaders, L.C.M. Work Boat Operator, Locomotive Mixer (for stabilized base selfpropelled), Monorail Machine, Plant Engineer, Profiler (105 H.P. and under), Grinder, Post Hole Digger and Post Driver, Power Broom (towed), Power Heaterman, Power Sweeper, Revinius Widener, Roller (Grade and Fill), Scarifier, ride-on, Shell Winder, Skid steer loader (Bobcat or similar), Span-Saw, ride-on, Steam Cleaner, Pug Mill, Pump Crete Ready Mix Concrete Plant Refrigeration Equipment (for soil stabilization)Road Widener, Roller (all above subgrade), Sea Mule, Self-contained Ride-on Rock Drill, Excluding Air-Track Type Drill, Skidder, Tractor with Dozer and/or Pusher, Trencher. Tugger Hoist, Vermeer saw (ride on, any size or type), Winch, Winch Cat

GROUP 3: A Frame Winch Hoist on Truck , Articulated Heavy Hauler, Aggregate Plant, Asphalt or Concrete Grooving, Machine (ride on), Ballast Regulator, Ride-on Boiler (used in conjunction with production), Bituminous Heater, self-propelled, Boat (powered), Cement and Bin Operator, Compressors, Dust Collectors, Fork Lift, Generators, Pumps, Welding Machines, Light Plants, Heaters (hands-off equipment), Concrete Pavement Spreader and Finisher, Concrete Paver or Mixer (16S and under), Concrete Saw (self-propelled), Conveyor, Deck Hand, Directional Drill Machine Locator, Drill, (Core), Drill, (Well,) Farm Tractor with accessories, Fine Grade Machine, Tamper, ride-on, Tie Extractor, ride-on, Tie Handler, ride-on, Tie Inserter, ride-on, Tie Spacer, ride-on, Tire Repair, Track Liner, ride-on, Tractor, Tractor (with towed accessories), Vibratory Compactor, Vibro Tamp, Well Point

GROUP 5: Cranes 50 tons and over

GROUP 6: Cranes 49 tons and below

GROUP 7: Master Mechanic

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day

IRON0012-008 07/01/2019

OTSEGO COUNTY (Townships of Butternuts, Laurens, Maryland, Milford, Morris, Oneonta, Otego, Unadilla, Worcester)

	Rates	Fringes
Ironworkers:		
Sheeter, Bucker-up	\$ 31.80	28.59
Sheeter	\$ 31.80	28.59
Structural, Ornamental,		
Rodman, Machinery, Mover,	,	
Rigger, Fence Erector,		
Reinforcing, Stone		
Derrickmen	\$ 31.55	28.59

IRON0440-001 07/01/2022

REMANINDER OF COUNTY

Rates Fringes

 ${\tt IRONWORKER}$

Structural, Ornamental, Rodman, Machinery Mover, Rigger, Fence Erector, Reinforcement, and Stone

LAB00017-006 06/01/2022

Rates	Fringes
1:\$ 36.45	28.55+a
2:\$ 36.45	28.55+a
3:\$ 39.80	28.55+a
4:\$ 44.45	28.55+a
	1:\$ 36.45 2:\$ 36.45 3:\$ 39.80

FOOTNOTES:

a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, Washington's Birthday, Election Day, Veterans Day provided the employee works one day in the calendar week during which the holiday occurs.

GROUP 1: Flagperson, gateperson

GROUP 2: General laborers, chuck tender, handling and distributing drinking water, distributing all tools and supplies of laborers, nipper, powder carrier, magazine tender, warehouse laborers, concrete man, vibrator man, mason tender, mortar man, spraying, brushing and covering of concrete for curing and preservative purposes, traffic striper, scaffold builder, concrete crub and sidewalk form setter, permanent traffic striping and reflective devices, placing and maintenance of all flares, cones, lights, signs, barricades, traffic patterns, and all temporary reflective type materials for traffic control, custodial work, traffic directors, temporary heat or light tenders, tool room, dewatering pump men, pitman, dumpmen, snow

removal and firewatch, asphalt man, joint setter, signal person, pipelayer, pipe lining and relining, wellpoints, conduit and duct layer, wire puller, rip rap and dry stone layer, steel rod carrier, core drill, rock splitter, Hilti gun air or electric, jackhammer, bush hammer pavement breaker, chipping operators, power tool operator, sprayer and nozzle man on mulching and seeding machine, all guard rail and fence, all seeding and sod laying, all landscape work, grade checker, all bridge work, walk behind self-propellled power saw, grinder groover or similar type machine, walk behind tamper and roller of all types, sheeting and shoring coming under laborers jurisdiction, bit grinder, operator of form pin puller and drivers, sandblasting, joint and jet sealer, filling and wiring baskets for gabion walls, permanent sign man, median barrier, sta-wall or similar type product chain saw operator, railroad track laborer, waterproofer, pre-stressed and pre-cast concrete brick block and stone pavers, power toolds used to perform work usually done by laborers, power buggy and pumpcrete operator, fireproof, plaster and acoustic pump, asbestos, toxic, bio-remediation, phyto-remediation, lead or hazardous materials abatement when protective clothing and equipment is not required, power brush cutter, retention liners, artificial turf, retaining walls, walk behind surface planer, welding related to laborers work, remote controlled equipment normally operated by laborers, all technician work including but not limited to titching, seaming, heat welding, fireproof sprayer, mmortar mixer, concrete finisher, form setter for concrete curbs and flatwork. Gunite nozzle man, stone cutters, granite stone layer, manhole, catch basin or inlet installing, laser men. Ground man on milling machine

GROUP 3: Ingersoll Rand heavy duty crawler master type HCMZ, any drill using 4"" or larger bit, asbestos, toxic, bio-remediation, phyto-remediation, lead or hazardous material abatement when protective cloting and equipment is required, all working formen including grade, pipe, concrete, clearing, blacktop, drill, paving and blaster etc., Hydraulic drill or similar, forklift for masonry only, Blaster and asphald screedman.

GROUP 4: Asbestos, toxic, lead or hazardous material abatement foreman.

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PAIN0004-006 05/01/2022

	Rates	Fringes
Painters:		
Bridges	\$ 41.06	29.59
Epoxy-Brush & Roller	\$ 27.00	18.58
Painters and Tapers	\$ 25.90	18.58
Spray EpoxySpray Work/Steeple Jack	\$ 27.40	18.58
(over 100 ft) Structural Scaffold (Over	\$ 26.90	18.58
39 ft)Structural Steel	\$ 26.50	18.58
(buildings) Spray Work Toothpick Staging (Over 25	\$ 26.50	18.58
ft)	\$ 26.50	18.58
PAIN0677-003 05/01/2022		
	Rates	Fringes
GLAZIER	\$ 26.05	23.39

PLUM0112-009 05/01/2022

Rates Fringes

PLUMBER (Including

Steamfitting)

NORTHERN ZONE

Townships of Cherry

Valley, Exeter,

Middlefield, Otsego,

Plainfield, Rickfield,

Roseboom, Springfield.....\$ 39.25 31.35

SOUTHERN ZONE

Remaining Townships......\$ 38.23 30.89

ROOF0203-001 06/01/2021

Rates Fringes

ROOFER.....\$ 28.05 17.79

SFNY0669-001 04/01/2022

Rates Fringes

SPRINKLER FITTER......\$ 40.81 25.91

SHEE0112-004 05/01/2022

Rates Fringes

Sheet metal worker...........\$ 34.44 20.98

TEAM0317-003 07/01/2019

FOOTNOTES:

PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; Christmas Day provided employee has worked the working day before and the working day after the holiday.

Work on Hazardous Waste Sites Receive additional \$1.50/hr.

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Pickups, panel trucks, flatboy material trucks (straight jobs), single-axle dump trucks, dupsters, receivers, greasers, truck tiremen, tandems and batch trucks, semi-trailers, low-boy trucks, asphalt distributor trucks, & agitator, mixer trucks & dumpcrete type vehicles, fuel trucks

GROUP 2: Specialized earth moving equipment-euclid type, or similar off-highway equipment, where not self loaded, straddle (ross) carrier, and self-contained concrete mobile unit, off-highway tandem back-dump, twin engine euipment and double-hitched equipment where not self loaded.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their

own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted. $\,$

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union

average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISIO"

NEW YORK STATE MINIMUM WAGE REQUIREMENTS

Kathy Hochul, Governor

County of Otsego IDA

Mark Parker, Senior Engineer Keystone Associates LLC 58 Exchange Street Binghamton NY 13901 Schedule Year Date Requested PRC#

2022 through 2023 10/06/2022 2022011418

Roberta Reardon, Commissioner

Location

Richfield Springs Eco-Industrial Business Park

Project ID#

Project Type General Construction

PREVAILING WAGE SCHEDULE FOR ARTICLE 8 PUBLIC WORK PROJECT

Attached is the current schedule(s) of the prevailing wage rates and prevailing hourly supplements for the project referenced above. A unique Prevailing Wage Case Number (PRC#) has been assigned to the schedule(s) for your project.

The schedule is effective from July 2022 through June 2023. All updates, corrections, posted on the 1st business day of each month, and future copies of the annual determination are available on the Department's website www.labor.ny.gov. Updated PDF copies of your schedule can be accessed by entering your assigned PRC# at the proper location on the website.

It is the responsibility of the contracting agency or its agent to annex and make part, the attached schedule, to the specifications for this project, when it is advertised for bids and /or to forward said schedules to the successful bidder(s), immediately upon receipt, in order to insure the proper payment of wages.

Please refer to the "General Provisions of Laws Covering Workers on Public Work Contracts" provided with this schedule, for the specific details relating to other responsibilities of the Department of Jurisdiction.

Upon completion or cancellation of this project, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

NOTICE OF COMPLETION / CANCELLATION OF PROJECT		
Date Completed:	Date Cancelled:	
Name & Title of Representative:		

Phone: (518) 457-5589 Fax: (518) 485-1870 W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

General Provisions of Laws Covering Workers on Article 8 Public Work Contracts

Introduction

The Labor Law requires public work contractors and subcontractors to pay laborers, workers, or mechanics employed in the performance of a public work contract not less than the prevailing rate of wage and supplements (fringe benefits) in the locality where the work is performed.

Responsibilities of the Department of Jurisdiction

A Department of Jurisdiction (Contracting Agency) includes a state department, agency, board or commission: a county, city, town or village; a school district, board of education or board of cooperative educational services; a sewer, water, fire, improvement and other district corporation; a public benefit corporation; and a public authority awarding a public work contract.

The Department of Jurisdiction (Contracting Agency) awarding a public work contract MUST obtain a Prevailing Rate Schedule listing the hourly rates of wages and supplements due the workers to be employed on a public work project. This schedule may be obtained by completing and forwarding a "Request for wage and Supplement Information" form (PW 39) to the Bureau of Public Work. The Prevailing Rate Schedule MUST be included in the specifications for the contract to be awarded and is deemed part of the public work contract.

Upon the awarding of the contract, the law requires that the Department of Jurisdiction (Contracting Agency) furnish the following information to the Bureau: the name and address of the contractor, the date the contract was let and the approximate dollar value of the contract. To facilitate compliance with this provision of the Labor Law, a copy of the Department's "Notice of Contract Award" form (PW 16) is provided with the original Prevailing Rate Schedule.

The Department of Jurisdiction (Contracting Agency) is required to notify the Bureau of the completion or cancellation of any public work project. The Department's PW 200 form is provided for that purpose.

Both the PW 16 and PW 200 forms are available for completion online.

Hours

No laborer, worker, or mechanic in the employ of a contractor or subcontractor engaged in the performance of any public work project shall be permitted to work more than eight hours in any day or more than five days in any week, except in cases of extraordinary emergency. The contractor and the Department of Jurisdiction (Contracting Agency) may apply to the Bureau of Public Work for a dispensation permitting workers to work additional hours or days per week on a particular public work project.

There are very few exceptions to this rule. Complete information regarding these exceptions is available on the "Request for a dispensation to work overtime" form (PW30) and "4 Day / 10 Hour Work Schedule" form (PW 30.1).

Wages and Supplements

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12240; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website www.labor.ny.gov.

Upon receiving the original schedule, the Department of Jurisdiction (Contracting Agency) is REQUIRED to provide complete copies to all prime contractors who in turn MUST, by law, provide copies of all applicable county schedules to each subcontractor and obtain from each subcontractor, an affidavit certifying such schedules were received. If the original schedule expired, the contractor may obtain a copy of the new annual determination from the NYSDOL website www.labor.nv.gov.

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website www.labor.ny.gov.

Payrolls and Payroll Records

Every contractor and subcontractor MUST keep original payrolls or transcripts subscribed and affirmed as true under penalty of perjury. As per Article 6 of the Labor law, contractors and subcontractors are required to establish, maintain, and preserve for not less than six (6) years, contemperaneous, true, and accurate payroll records. At a minimum, payrolls must show the following information for each person employed on a public work project: Name, Address, Last 4 Digits of Social Security Number, Classification(s) in which the worker was employed, Hourly wage rate(s) paid, Supplements paid

or provided, and Daily and weekly number of hours worked in each classification.

The filing of payrolls to the Department of Jurisdiction is a condition of payment. Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury. The Department of Jurisdiction (Contracting Agency) shall collect, review for facial validity, and maintain such payrolls.

In addition, the Commissioner of Labor may require contractors to furnish, with ten (10) days of a request, payroll records sworn to as their validity and accuracy for public work and private work. Payroll records include, but are not limited to time cards, work description sheets, proof that supplements were provided, cancelled payroll checks and payrolls. Failure to provide the requested information within the allotted ten (10) days will result in the withholding of up to 25% of the contract, not to exceed \$100,000.00. If the contractor or subcontractor does not maintain a place of business in New York State and the amount of the contract exceeds \$25,000.00, payroll records and certifications must be kept on the project worksite.

The prime contractor is responsible for any underpayments of prevailing wages or supplements by any subcontractor.

All contractors or their subcontractors shall provide to their subcontractors a copy of the Prevailing Rate Schedule specified in the public work contract as well as any subsequently issued schedules. A failure to provide these schedules by a contractor or subcontractor is a violation of Article 8, Section 220-a of the Labor Law.

All subcontractors engaged by a public work project contractor or its subcontractor, upon receipt of the original schedule and any subsequently issued schedules, shall provide to such contractor a verified statement attesting that the subcontractor has received the Prevailing Rate Schedule and will pay or provide the applicable rates of wages and supplements specified therein. (See NYS Labor Laws, Article 8. Section 220-a).

Determination of Prevailing Wage and Supplement Rate Updates Applicable to All Counties

The wages and supplements contained in the annual determination become effective July 1st whether or not the new determination has been received by a given contractor. Care should be taken to review the rates for obvious errors. Any corrections should be brought to the Department's attention immediately. It is the responsibility of the public work contractor to use the proper rates. If there is a question on the proper classification to be used, please call the district office located nearest the project. Any errors in the annual determination will be corrected and posted to the NYSDOL website on the first business day of each month. Contractors are responsible for paying these updated rates as well, retroactive to July 1st.

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. To the extent possible, the Department posts rates in its possession that cover periods of time beyond the July 1st to June 30th time frame covered by a particular annual determination. Rates that extend beyond that instant time period are informational ONLY and may be updated in future annual determinations that actually cover the then appropriate July 1st to June 30th time period.

Withholding of Payments

When a complaint is filed with the Commissioner of Labor alleging the failure of a contractor or subcontractor to pay or provide the prevailing wages or supplements, or when the Commissioner of Labor believes that unpaid wages or supplements may be due, payments on the public work contract shall be withheld from the prime contractor in a sufficient amount to satisfy the alleged unpaid wages and supplements, including interest and civil penalty, pending a final determination.

When the Bureau of Public Work finds that a contractor or subcontractor on a public work project failed to pay or provide the requisite prevailing wages or supplements, the Bureau is authorized by Sections 220-b and 235.2 of the Labor Law to so notify the financial officer of the Department of Jurisdiction (Contracting Agency) that awarded the public work contract. Such officer MUST then withhold or cause to be withheld from any payment due the prime contractor on account of such contract the amount indicated by the Bureau as sufficient to satisfy the unpaid wages and supplements, including interest and any civil penalty that may be assessed by the Commissioner of Labor. The withholding continues until there is a final determination of the underpayment by the Commissioner of Labor or by the court in the event a legal proceeding is instituted for review of the determination of the Commissioner of Labor.

The Department of Jurisdiction (Contracting Agency) shall comply with this order of the Commissioner of Labor or of the court with respect to the release of the funds so withheld.

Summary of Notice Posting Requirements

The current Prevailing Rate Schedule must be posted in a prominent and accessible place on the site of the public work project. The prevailing wage schedule must be encased in, or constructed of, materials capable of withstanding adverse weather conditions and be titled "PREVAILING RATE OF WAGES" in letters no smaller than two (2) inches by two (2) inches.

The "Public Work Project" notice must be posted at the beginning of the performance of every public work contract, on each job site.

Every employer providing workers. compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers. Compensation Board in a conspicuous place on the jobsite.

Every employer subject to the NYS Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers, notices furnished by the State Division of Human Rights.

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the NYS Department of Labor.

Apprentices

Employees cannot be paid apprentice rates unless they are individually registered in a program registered with the NYS Commissioner of Labor. The allowable ratio of apprentices to journeyworkers in any craft classification can be no greater than the statewide building trade ratios promulgated by the Department of Labor and included with the Prevailing Rate Schedule. An employee listed on a payroll as an apprentice who is not registered as above or is performing work outside the classification of work for which the apprentice is indentured, must be paid the prevailing journeyworker's wage rate for the classification of work the employee is actually performing.

NYSDOL Labor Law, Article 8, Section 220-3, require that only apprentices individually registered with the NYS Department of Labor may be paid apprenticeship rates on a public work project. No other Federal or State Agency of office registers apprentices in New York State.

Persons wishing to verify the apprentice registration of any person must do so in writing by mail, to the NYSDOL Office of Employability Development / Apprenticeship Training, State Office Bldg. Campus, Bldg. 12, Albany, NY 12240 or by Fax to NYSDOL Apprenticeship Training (518) 457-7154. All requests for verification must include the name and social security number of the person for whom the information is requested.

The only conclusive proof of individual apprentice registration is written verification from the NYSDOL Apprenticeship Training Albany Central office. Neither Federal nor State Apprenticeship Training offices outside of Albany can provide conclusive registration information.

It should be noted that the existence of a registered apprenticeship program is not conclusive proof that any person is registered in that program. Furthermore, the existence or possession of wallet cards, identification cards, or copies of state forms is not conclusive proof of the registration of any person as an apprentice.

Interest and Penalties

In the event that an underpayment of wages and/or supplements is found:

- Interest shall be assessed at the rate then in effect as prescribed by the Superintendent of Banks pursuant to section 14-a of the Banking Law, per annum from the date of underpayment to the date restitution is made.
- A Civil Penalty may also be assessed, not to exceed 25% of the total of wages, supplements, and interest due.

Debarment

Any contractor or subcontractor and/or its successor shall be ineligible to submit a bid on or be awarded any public work contract or subcontract with any state, municipal corporation or public body for a period of five (5) years when:

- Two (2) willful determinations have been rendered against that contractor or subcontractor and/or its successor within any consecutive six (6) year period.
- There is any willful determination that involves the falsification of payroll records or the kickback of wages or supplements.

Criminal Sanctions

Willful violations of the Prevailing Wage Law (Article 8 of the Labor Law) may be a felony punishable by fine or imprisonment of up to 15 years, or both.

Discrimination

No employee or applicant for employment may be discriminated against on account of age, race, creed, color, national origin, sex, disability or marital status.

No contractor, subcontractor nor any person acting on its behalf, shall by reason of race, creed, color, disability, sex 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 (NYS Labor Law, Article 8, Section 220-e(a)).

No contractor, subcontractor, nor any person acting on its behalf, shall in any manner, discriminate against or intimidate any employee on account of race, creed, color, disability, sex, or national origin (NYS Labor Law, Article 8, Section 220-e(b)).

The Human Rights Law also prohibits discrimination in employment because of age, marital status, or religion.

There may be deducted from the amount payable to the contractor under the contract a penalty of \$50.00 for each calendar day during which such person was discriminated against or intimidated in violation of the provision of the contract (NYS Labor Law, Article 8, Section 220-e(c)).

The contract may be cancelled or terminated by the State or municipality. All monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of the anti-discrimination sections of the contract (NYS Labor Law, Article 8, Section 220-e(d)).

Every employer subject to the New York State Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers notices furnished by the State Division of Human Rights.

Workers' Compensation

In accordance with Section 142 of the State Finance Law, the contractor shall maintain coverage during the life of the contract for the benefit of such employees as required by the provisions of the New York State Workers' Compensation Law.

A contractor who is awarded a public work contract must provide proof of workers' compensation coverage prior to being allowed to begin work.

The insurance policy must be issued by a company authorized to provide workers' compensation coverage in New York State. Proof of coverage must be on form C-105.2 (Certificate of Workers' Compensation Insurance) and must name this agency as a certificate holder.

If New York State coverage is added to an existing out-of-state policy, it can only be added to a policy from a company authorized to write workers' compensation coverage in this state. The coverage must be listed under item 3A of the information page.

The contractor must maintain proof that subcontractors doing work covered under this contract secured and maintained a workers' compensation policy for all employees working in New York State.

Every employer providing worker's compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

Unemployment Insurance

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the New York State Department of Labor.

B	OF NEW
(3)	EXCELSION
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Kathy Hochul,	Governor	
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County of Otsego IDA

Mark Parker, Senior Engineer Keystone Associates LLC 58 Exchange Street Binghamton NY 13901 Schedule Year Date Requested PRC#

2022 through 2023 10/06/2022 2022011418

Roberta Reardon, Commissioner

Location

Eco-Industrial Business Park

Project ID#

Project Type General Construction

Notice of Contract Award

New York State Labor Law, Article 8, Section 220.3a requires that certain information regarding the awarding of public work contracts, be furnished to the Commissioner of Labor. One "Notice of Contract Award" (PW 16, which may be photocopied), **MUST** be completed for **EACH** prime contractor on the above referenced project.

Upon notifying the successful bidder(s) of this contract, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

Contractor Information All information must be supplied

Federal Employer Identification N	umber:	
Name:		
City: Amount of Contract: Approximate Starting Date: Approximate Completion Date:	Sta	te: Zip: Contract Type: [] (01) General Construction [] (02) Heating/Ventilation [] (03) Electrical [] (04) Plumbing [] (05) Other :

Phone: (518) 457-5589 Fax: (518) 485-1870 W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240

Social Security Numbers on Certified Payrolls:

The Department of Labor is cognizant of the concerns of the potential for misuse or inadvertent disclosure of social security numbers. Identity theft is a growing problem and we are sympathetic to contractors' concern regarding inclusion of this information on payrolls if another identifier will suffice.

For these reasons, the substitution of the use of the last four digits of the social security number on certified payrolls submitted to contracting agencies on public work projects is now acceptable to the Department of Labor. This change does not affect the Department's ability to request and receive the entire social security number from employers during its public work/ prevailing wage investigations.

Construction Industry Fair Play Act: Required Posting for Labor Law Article 25-B § 861-d

Construction industry employers must post the "Construction Industry Fair Play Act" notice in a prominent and accessible place on the job site. Failure to post the notice can result in penalties of up to \$1,500 for a first offense and up to \$5,000 for a second offense. The posting is included as part of this wage schedule. Additional copies may be obtained from the NYS DOL website, https://dol.ny.gov/public-work-and-prevailing-wage

If you have any questions concerning the Fair Play Act, please call the State Labor Department toll-free at 1-866-435-1499 or email us at: dol.misclassified@labor.ny.gov.

Worker Notification: (Labor Law §220, paragraph a of subdivision 3-a)

Effective June 23, 2020

This provision is an addition to the existing wage rate law, Labor Law §220, paragraph a of subdivision 3-a. It requires contractors and subcontractors to provide written notice to all laborers, workers or mechanics of the *prevailing wage and supplement rate* for their particular job classification *on each pay stub**. It also requires contractors and subcontractors to *post a notice* at the beginning of the performance of every public work contract *on each job site* that includes the telephone number and address for the Department of Labor and a statement informing laborers, workers or mechanics of their right to contact the Department of Labor if he/she is not receiving the proper prevailing rate of wages and/or supplements for his/her job classification. The required notification will be provided with each wage schedule, may be downloaded from our website *www.labor.ny.gov* or be made available upon request by contacting the Bureau of Public Work at 518-457-5589. *In the event the required information will not fit on the pay stub, an accompanying sheet or attachment of the information will suffice.

(12.20)

To all State Departments, Agency Heads and Public Benefit Corporations IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

Budget Policy & Reporting Manual

B-610

Public Work Enforcement Fund

effective date December 7, 2005

1. Purpose and Scope:

This Item describes the Public Work Enforcement Fund (the Fund, PWEF) and its relevance to State agencies and public benefit corporations engaged in construction or reconstruction contracts, maintenance and repair, and announces the recently-enacted increase to the percentage of the dollar value of such contracts that must be deposited into the Fund. This item also describes the roles of the following entities with respect to the Fund:

- New York State Department of Labor (DOL),
- The Office of the State of Comptroller (OSC), and
- State agencies and public benefit corporations.

2. Background and Statutory References:

DOL uses the Fund to enforce the State's Labor Law as it relates to contracts for construction or reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law. State agencies and public benefit corporations participating in such contracts are required to make payments to the Fund.

Chapter 511 of the Laws of 1995 (as amended by Chapter 513 of the Laws of 1997, Chapter 655 of the Laws of 1999, Chapter 376 of the Laws of 2003 and Chapter 407 of the Laws of 2005) established the Fund.

3. Procedures and Agency Responsibilities:

The Fund is supported by transfers and deposits based on the value of contracts for construction and reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law, into which all State agencies and public benefit corporations enter.

Chapter 407 of the Laws of 2005 increased the amount required to be provided to this fund to .10 of one-percent of the total cost of each such contract, to be calculated at the time agencies or public benefit corporations enter into a new contract or if a contract is amended. The provisions of this bill became effective August 2, 2005.

To all State Departments, Agency Heads and Public Benefit Corporations IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

OSC will report to DOL on all construction-related ("D") contracts approved during the month, including contract amendments, and then DOL will bill agencies the appropriate assessment monthly. An agency may then make a determination if any of the billed contracts are exempt and so note on the bill submitted back to DOL. For any instance where an agency is unsure if a contract is or is not exempt, they can call the Bureau of Public Work at the number noted below for a determination. Payment by check or journal voucher is due to DOL within thirty days from the date of the billing. DOL will verify the amounts and forward them to OSC for processing.

For those contracts which are not approved or administered by the Comptroller, monthly reports and payments for deposit into the Public Work Enforcement Fund must be provided to the Administrative Finance Bureau at the DOL within 30 days of the end of each month or on a payment schedule mutually agreed upon with DOL.

Reports should contain the following information:

- Name and billing address of State agency or public benefit corporation;
- State agency or public benefit corporation contact and phone number;
- Name and address of contractor receiving the award;
- Contract number and effective dates;
- Contract amount and PWEF assessment charge (if contract amount has been amended, reflect increase or decrease to original contract and the adjustment in the PWEF charge); and
- Brief description of the work to be performed under each contract.

Checks and Journal Vouchers, payable to the "New York State Department of Labor" should be sent to:

Department of Labor Administrative Finance Bureau-PWEF Unit Building 12, Room 464 State Office Campus Albany, NY 12240

Any questions regarding billing should be directed to NYSDOL's Administrative Finance Bureau-PWEF Unit at (518) 457-3624 and any questions regarding Public Work Contracts should be directed to the Bureau of Public Work at (518) 457-5589.



Required Notice under Article 25-B of the Labor Law

Attention All Employees, Contractors and Subcontractors: You are Covered by the Construction Industry Fair Play Act

The law says that you are an employee unless:

- You are free from direction and control in performing your job, and
- You perform work that is not part of the usual work done by the business that hired you, and
- You have an independently established business.

Your employer cannot consider you to be an independent contractor unless all three of these facts apply to your work.

It is against the law for an employer to misclassify employees as independent contractors or pay employees off the books.

Employee Rights: If you are an employee, you are entitled to state and federal worker protections. These include:

- Unemployment Insurance benefits, if you are unemployed through no fault of your own, able to work, and otherwise qualified,
- Workers' compensation benefits for on-the-job injuries,
- Payment for wages earned, minimum wage, and overtime (under certain conditions),
- Prevailing wages on public work projects,
- The provisions of the National Labor Relations Act, and
- A safe work environment.

It is a violation of this law for employers to retaliate against anyone who asserts their rights under the law. Retaliation subjects an employer to civil penalties, a private lawsuit or both.

Independent Contractors: If you are an independent contractor, you must pay all taxes and Unemployment Insurance contributions required by New York State and Federal Law.

Penalties for paying workers off the books or improperly treating employees as independent contractors:

• **Civil Penalty** First offense: Up to \$2,500 per employee

Subsequent offense(s): Up to \$5,000 per employee

• Criminal Penalty First offense: Misdemeanor - up to 30 days in jail, up to a \$25,000 fine

and debarment from performing public work for up to one year.

Subsequent offense(s): Misdemeanor - up to 60 days in jail or up to a \$50,000 fine and debarment from performing public work for up to 5

years.

If you have questions about your employment status or believe that your employer may have violated your rights and you want to file a complaint, call the Department of Labor at (866) 435-1499 or send an email to dol.misclassified@labor.ny.gov. All complaints of fraud and violations are taken seriously. You can remain anonymous.

Employer Name:

New York State Department of Labor Bureau of Public Work

Attention Employees

THIS IS A: PUBLIC WORK PROJECT

If you are employed on this project as a worker, laborer, or mechanic you are entitled to receive the prevailing wage and supplements rate for the classification at which you are working.

Chapter 629 of the Labor Laws of 2007: These wages are set by law and must be posted at the work site. They can also be found at:

https://dol.ny.gov/public-work-and-prevailing-wage

If you feel that you have not received proper wages or benefits, please call our nearest office.*

Albany	(518) 457-2744	Patchogue	(631) 687-4882
Binghamton	(607) 721-8005	Rochester	(585) 258-4505
Buffalo	(716) 847-7159	Syracuse	(315) 428-4056
Garden City	(516) 228-3915	Utica	(315) 793-2314
New York City	(212) 932-2419	White Plains	(914) 997-9507
Newburgh	(845) 568-5156		

* For New York City government agency construction projects, please contact the Office of the NYC Comptroller at (212) 669-4443, or www.comptroller.nyc.gov – click on Bureau of Labor Law.

Contractor Name:		
Project Location:		

Requirements for OSHA 10 Compliance

Article 8 §220-h requires that when the advertised specifications, for every contract for public work, is \$250,000.00 or more the contract must contain a provision requiring that every worker employed in the performance of a public work contract shall be certified as having completed an OSHA 10 safety training course. The clear intent of this provision is to require that all employees of public work contractors, required to be paid prevailing rates, receive such training "prior to the performing any work on the project."

The Bureau will enforce the statute as follows:

All contractors and sub contractors must attach a copy of proof of completion of the OSHA 10 course to the first certified payroll submitted to the contracting agency and on each succeeding payroll where any new or additional employee is first listed.

Proof of completion may include but is not limited to:

- Copies of bona fide course completion card (Note: Completion cards do not have an expiration date.)
- Training roster, attendance record of other documentation from the certified trainer pending the issuance of the card.
- · Other valid proof

**A certification by the employer attesting that all employees have completed such a course is not sufficient proof that the course has been completed.

Any questions regarding this statute may be directed to the New York State Department of Labor, Bureau of Public Work at 518-457-5589.

WICKS

Public work projects are subject to the Wicks Law requiring separate specifications and bidding for the plumbing, heating and electrical work, when the total project's threshold is \$3 million in Bronx, Kings, New York, Queens and, Richmond counties; \$1.5 million in Nassau, Suffolk and Westchester counties; and \$500,000 in all other counties.

For projects below the monetary threshold, bidders must submit a sealed list naming each subcontractor for the plumbing, HVAC and electrical and the amount to be paid to each. The list may not be changed unless the public owner finds a legitimate construction need, including a change in specifications or costs or the use of a Project Labor Agreement (PLA), and must be open to public inspection.

Allows the state and local agencies and authorities to waive the Wicks Law and use a PLA if it will provide the best work at the lowest possible price. If a PLA is used, all contractors shall participate in apprentice training programs in the trades of work it employs that have been approved by the Department of Labor (DOL) for not less than three years. They shall also have at least one graduate in the last three years and use affirmative efforts to retain minority apprentices. PLA's would be exempt from Wicks, but deemed to be public work subject to prevailing wage enforcement.

The Commissioner of Labor shall have the power to enforce separate specification requirement s on projects, and may issue stop-bid orders against public owners for non-compliance.

Other new monetary thresholds, and similar sealed bidding for non-Wicks projects, would apply to certain public authorities including municipal housing authorities, NYC Construction Fund, Yonkers Educational Construction Fund, NYC Municipal Water Finance Authority, Buffalo Municipal Water Finance Authority, Westchester County Health Care Association, Nassau County Health Care Corp., Clifton-Fine Health Care Corp., Erie County Medical Center Corp., NYC Solid Waste Management Facilities, and the Dormitory Authority.

Contractors must pay subcontractors within a 7 days period.

(07.19)

Introduction to the Prevailing Rate Schedule

Information About Prevailing Rate Schedule

This information is provided to assist you in the interpretation of particular requirements for each classification of worker contained in the attached Schedule of Prevailing Rates.

Classification

It is the duty of the Commissioner of Labor to make the proper classification of workers taking into account whether the work is heavy and highway, building, sewer and water, tunnel work, or residential, and to make a determination of wages and supplements to be paid or provided. It is the responsibility of the public work contractor to use the proper rate. If there is a question on the proper classification to be used, please call the district office located nearest the project. District office locations and phone numbers are listed below.

Prevailing Wage Schedules are issued separately for "General Construction Projects" and "Residential Construction Projects" on a county-by-county basis.

General Construction Rates apply to projects such as: Buildings, Heavy & Highway, and Tunnel and Water & Sewer rates.

Residential Construction Rates generally apply to construction, reconstruction, repair, alteration, or demolition of one family, two family, row housing, or rental type units intended for residential use.

Some rates listed in the Residential Construction Rate Schedule have a very limited applicability listed along with the rate. Rates for occupations or locations not shown on the residential schedule must be obtained from the General Construction Rate Schedule. Please contact the local Bureau of Public Work office before using Residential Rate Schedules, to ensure that the project meets the required criteria.

Payrolls and Payroll Records

Contractors and subcontractors are required to establish, maintain, and preserve for not less that six (6) years, contemporaneous, true, and accurate payroll records.

Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury.

Paid Holidays

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

Overtime

At a minimum, all work performed on a public work project in excess of eight hours in any one day or more than five days in any workweek is overtime. However, the specific overtime requirements for each trade or occupation on a public work project may differ. Specific overtime requirements for each trade or occupation are contained in the prevailing rate schedules.

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.

The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Supplemental Benefits

Particular attention should be given to the supplemental benefit requirements. Although in most cases the payment or provision of supplements is straight time for all hours worked, some classifications require the payment or provision of supplements, or a portion of the supplements, to be paid or provided at a premium rate for premium hours worked. Supplements may also be required to be paid or provided on paid holidays, regardless of whether the day is worked. The Overtime Codes and Notes listed on the particular wage classification will indicate these conditions as required.

Effective Dates

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. The rate listed is valid until the next effective rate change or until the new annual determination which takes effect on July 1 of each year. All contractors and subcontractors are required to pay the current prevailing rates of wages and supplements. If you have any questions please contact the Bureau of Public Work or visit the New York State Department of Labor website (www.labor.ny.gov) for current wage rate information.

Apprentice Training Ratios

The following are the allowable ratios of registered Apprentices to Journey-workers.

For example, the ratio 1:1,1:3 indicates the allowable initial ratio is one Apprentice to one Journeyworker. The Journeyworker must be in place on the project before an Apprentice is allowed. Then three additional Journeyworkers are needed before a second Apprentice is allowed. The last ratio repeats indefinitely. Therefore, three more Journeyworkers must be present before a third Apprentice can be hired, and so on.

Please call Apprentice Training Central Office at (518) 457-6820 if you have any questions.

Title (Trade)	Ratio
Boilermaker (Construction)	1:1,1:4
Boilermaker (Shop)	1:1,1:3
Carpenter (Bldg.,H&H, Pile Driver/Dockbuilder)	1:1,1:4
Carpenter (Residential)	1:1,1:3
Electrical (Outside) Lineman	1:1,1:2
Electrician (Inside)	1:1,1:3
Elevator/Escalator Construction & Modernizer	1:1,1:2
Glazier	1:1,1:3
Insulation & Asbestos Worker	1:1,1:3
Iron Worker	1:1,1:4
Laborer	1:1,1:3
Mason	1:1,1:4
Millwright	1:1,1:4
Op Engineer	1:1,1:5
Painter	1:1,1:3
Plumber & Steamfitter	1:1,1:3
Roofer	1:1,1:2
Sheet Metal Worker	1:1,1:3
Sprinkler Fitter	1:1,1:2

If you have any questions concerning the attached schedule or would like additional information, please contact the nearest BUREAU of PUBLIC WORK District Office or write to:

New York State Department of Labor Bureau of Public Work State Office Campus, Bldg. 12 Albany, NY 12240

District Office Locations:	Telephone #	FAX#
Bureau of Public Work - Albany	518-457-2744	518-485-0240
Bureau of Public Work - Binghamton	607-721-8005	607-721-8004
Bureau of Public Work - Buffalo	716-847-7159	716-847-7650
Bureau of Public Work - Garden City	516-228-3915	516-794-3518
Bureau of Public Work - Newburgh	845-568-5287	845-568-5332
Bureau of Public Work - New York City	212-932-2419	212-775-3579
Bureau of Public Work - Patchogue	631-687-4882	631-687-4902
Bureau of Public Work - Rochester	585-258-4505	585-258-4708
Bureau of Public Work - Syracuse	315-428-4056	315-428-4671
Bureau of Public Work - Utica	315-793-2314	315-793-2514
Bureau of Public Work - White Plains	914-997-9507	914-997-9523
Bureau of Public Work - Central Office	518-457-5589	518-485-1870

Otsego County General Construction

Boilermaker 10/01/2022

JOB DESCRIPTION Boilermaker

DISTRICT 1

ENTIRE COUNTIES

Albany, Broome, Chenango, Columbia, Delaware, Essex, Fulton, Greene, Hamilton, Herkimer, Montgomery, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Tioga, Warren, Washington

WAGES

Per hour

07/01/2022 01/01/2023 01/01/2024 Additional Additional

Boilermaker \$ 39.34 + \$1.30 + \$1.30

SUPPLEMENTAL BENEFITS

Per hour

07/01/2022

Journeyperson \$ 25.65 + 1.24*

OVERTIME PAY

See (B, E, Q, V) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 15, 25) on HOLIDAY PAGE

Note: When a holiday falls on Sunday, the day observed by the State or Nation shall be observed, and when Christmas Day and New Year's fall on Saturday, Friday will be observed as the holiday.

6th

7th

REGISTERED APPRENTICES

2nd

Wages per hour

1st

(1/2) year terms at the following percentage of Journeyman's wage.

3rd

65%	65%	70%	75%	80%	85%	90%	95%
Supplemen	tal Benefits pe	er hour					

1st	2nd	3rd	4th	5th	6th	7th	8th
19.15	19.15	20.08	21.00	21.93	22.87	23.79	24.72
+1.24*	+1.24*	+1.24*	+1.24*	+1.24*	+1.24*	+1.24*	+1.24*

5th

4th

1-197

Carpenter - Building	10/01/2022
Carpenter - Building	10/01/2022

JOB DESCRIPTION Carpenter - Building

DISTRICT 2

8th

ENTIRE COUNTIES

Chenango, Delaware, Otsego

WAGES

07/01/2022	07/01/2023	07/01/2024	07/01/2025
0770 172022		*****	Additional
0.04 EE			
\$ 31.55	\$ 1.10	\$ 1.10	\$ 1.00
31.55	1.10	1.10	1.00
31.55	1.10	1.10	1.00
31.55	1.10	1.10	1.00
31.55	1.10	1.10	1.00
61.25	0.00	0.00	0.00
32.55	1.10	1.10	1.00
32.55	1.10	1.10	1.00
	31.55 31.55 31.55 61.25 32.55	Additional \$ 31.55 \$ 1.10 31.55 1.10 31.55 1.10 31.55 1.10 31.55 1.10 61.25 0.00 32.55 1.10	Additional Additional \$ 31.55 \$ 1.10 \$ 1.10 31.55 1.10 1.10 31.55 1.10 1.10 31.55 1.10 1.10 31.55 1.10 1.10 61.25 0.00 0.00 32.55 1.10 1.10

NOTE ADDITIONAL AMOUNTS PAID FOR THE FOLLOWING WORK LISTED BELOW (per hour worked):

- Pile Drivers/Dock Builders shall receive \$0.25 per hour over the journeyman's rate of pay when performing piledriving/dock building work.
- Certified welders shall receive \$1.00 per hour over the journeyman's rate of pay when the employee is required to be certified and performs DOT or ABS specified welding work

^{*} This portion of the benefit is NOT subject to the SAME PREMIUM as shown for overtime.

^{*} This portion of the benefit is NOT subject to the SAME PREMIUM as shown for overtime.

- When an employee performs work within a contaminated area on a State and/or Federally designated hazardous waste site, and where relevant State and/or Federal regulations require employees to be furnished and use or wear required forms of personal protection, then the employee shall receive his regular hourly rate plus \$1.50 per hour.
- Depth pay for Divers based upon deepest depth on the day of the dive (per diem payment):

0' to 80' no additional fee

81'to 100' additional \$.50 per foot 101'to 150' additional \$0.75 per foot 151'and deeper additional \$1.25 per foot

- Penetration pay for Divers based upon deepest penetration on the day of the dive (per diem payment):

0' to 50' no additional fee

51' to 100' additional \$.75 per foot

101' and deeper additional \$1.00 per foot

- Diver rates applies to all hours worked on dive day.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$23.24

OVERTIME PAY

See (B, E, *E2, Q) on OVERTIME PAGE

* Note - Saturday is also payable at straight time if the employee misses work, except where a doctor's or hospital verification of illness is produced Monday through Friday when work was available to the employee.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

Note: Any holiday which occurs on Sunday shall be observed the following Monday. If Christmas falls on a Saturday, it shall be observed on the prior Friday.

REGISTERED APPRENTICES

CARPENTER APPRENTICES

Wages per hour (1040 hour terms at the following percentage of journeyman's base wage):

 1st
 2nd
 3rd
 4th
 5th

 55%
 60%
 65%
 70%
 80%

Supplemental Benefits per hour:

\$ 12.40 \$ 12.40 \$ 15.05 \$ 15.05

PILEDRIVER/DOCK BUILDER APPRENTICES

Wages per hour (1300 hour terms at the following percentage of journeyman's base wage):

1st 2nd 3rd 4th 55%* 60%* 70%* 80%*

*Pile Driver/Dock Builder apprentices shall receive an additional \$0.25 per hour worked when performing piledriving/dock building work.

Supplemental Benefits per hour:

\$ 12.40 \$ 12.40 \$ 15.05 \$ 15.05

LINOLEUM, RESILIENT TILE, AND CARPET LAYER APPRENTICES

Wages per hour (1300 hour terms at the following percentage of journeyman's base wage):

1st 2nd 3rd 4th 55% 60% 70% 80%

Supplemental Benefits per hour:

\$ 12.40 \$ 12.40 \$ 15.05 \$ 15.05

ADDITIONAL AMOUNTS PAID PER HOUR WORKED TO APPRENTICES FOR SPECIFIC TYPES OF WORK PERFORMED:

- Certified welders shall receive \$1.00 per hour over the apprentices rate of pay when the apprentice is required to be certified and performs DOT or ABS specified welding work
- When an apprentice performs work within a contaminated area on a State and/or Federally designated hazardous waste site, and where relevant State and/or Federal regulations require the apprentice to be furnished and use or wear required forms of personal protection, then the apprentice shall receive his regular hourly rate plus \$1.50 per hour.

2-277 CDO Bldg

Carpenter - Building / Heavy&Highway

10/01/2022

JOB DESCRIPTION Carpenter - Building / Heavy&Highway ENTIRE COUNTIES

DISTRICT 2

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

PARTIAL COUNTIES

Orange: The area lying on Northern side of Orange County demarcated by a line drawn from the Bear Mountain Bridge continuing west to the Bear Mountain Circle, continue North on 9W to the town of Cornwall where County Road 107 (also known as Quaker Rd) crosses under 9W, then east on County Road 107 to Route 32, then north on Route 32 to Orrs Mills Rd, then west on Orrs Mills Rd to Route 94, continue west and south on Route 94 to the Town of Chester, to the intersection of Kings Highway, continue south on Kings Highway to Bellvale Rd, west on Bellvale Rd to Bellvale Lakes Rd, then south on Bellvale Lakes Rd to Kain Rd, southeast on Kain Rd to Route 17A, then north and southeast along Route 17A to Route 210, then follow Route 210 to NJ Border.

WAGES

Wages per hour:	07/01/2022	07/01/2023	07/01/2024
		Additional	Additional
Carpenter - ONLY for			
Artificial Turf/Synthetic			
Sport Surface	\$ 33.08	\$ 2.25*	\$2.25*

^{*}To be allocated at a later date

Note - Does not include the operation of equipment. Please see Operating Engineers rates.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 25.45

OVERTIME PAY

See (B, E, Q, X) on OVERTIME PAGE

HOLIDAY

Paid: See (5) on HOLIDAY PAGE
Overtime: See (5, 6, 16) on HOLIDAY PAGE

Notes:

When a holiday falls upon a Saturday, it shall be observed on the preceding Friday. Whan a holiday falls upon a Sunday, it shall be observed on the following Monday.

An employee taking an unexcused day off the regularly scheduled day before or after a paid Holiday shall not receive Holiday pay.

REGISTERED APPRENTICES

Wages per hour (1300 hour terms at the following percentage of Journeyman's wage):

 1st
 2nd
 3rd
 4th

 65%
 70%
 75%
 80%

Supplemental Benefits per hour:

 1st term
 \$ 16.97

 2nd term
 17.41

 3rd term
 19.40

 4th term
 19.84

2-42AtSS

Carpenter - Heavy&Highway 10/01/2022

JOB DESCRIPTION Carpenter - Heavy&Highway DISTRICT 2

ENTIRE COUNTIES

Chenango, Herkimer, Madison, Oneida, Otsego

WAGES

Per hour	07/01/2022	05/01/2023	05/01/2024
		Additional	Additional
Carpenter	\$ 34.88	\$ 4.25*	\$ 4.25*
Piledriver	34.88	4.25*	4.25*
Diver-Wet Day	59.88	4.25*	4.25*
Diver-Dry Day	35.88	4.25*	4.25*
Diver-Tender	35.88	4.25*	4.25*

^{*}To be allocated at a later date.

NOTE ADDITIONAL AMOUNTS PAID FOR THE FOLLOWING WORK LISTED BELOW (per hour worked):

- When project owner mandates a single irregular work shift, the employee will receive an additional \$3.00 per hour. A single irregular work shift can start any time from 5:00 p.m. to 1:00 a.m.
- State or Federal designated hazardous site, requiring protective gear shall be an additional \$2.50 per hour.
- Certified welders when required to perform welding work will receive an additional \$2.50 per hour.

ADDITIONAL NOTES PERTAINING TO DIVERS/TENDERS:

- Divers and Tenders shall receive one and one half (1 1/2) times their regular diver and tender rate of pay for Effluent and Slurry diving.
- Divers and tenders being paid at the specified rate for Effluent and Slurry diving shall have all overtime rates based on the specified rate plus the appropriate overtime rates (one and one half or two times the specified rate for Slurry and Effluent divers and tenders).
- The pilot of an ADS or submersible will receive one and one-half (1 1/2) times the Diver-Wet Day Rate for time submerged.
- All crew members aboard a submersible shall receive the Diver-Wet Day rate.
- Depth pay for Divers based upon deepest depth on the day of the dive (per diem payment):

0' to 50' no additional fee

51'to 100' additional \$.50 per foot 101'to 150' additional \$0.75 per foot 151'and deeper additional \$1.25 per foot

- Penetration pay for Divers based upon deepest penetration on the day of the dive (per diem payment):

0' to 50' no additional fee

51' to 100' additional \$.75 per foot

101' and deeper additional \$1.00 per foot

- Diver rates applies to all hours worked on dive day.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Friday, provided the project duration is more than forty (40) hours.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 25.45

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

- In the event a Holiday falls on a Saturday, the Friday before will be observed as a Holiday. If a Holiday falls on a Sunday, then Monday will be observed as a Holiday. Employee must work scheduled work day before and after the Holiday.
- The employee must work their scheduled workday before and their scheduled workday after the holiday to receive holiday pay.

REGISTERED APPRENTICES

CAPRENTER APPRENTICES

Wages per hour (1040 hour terms at the following percentage of journeyman's base wage):

 1st
 2nd
 3rd
 4th
 5th

 65%
 70%
 75%
 80%
 85%

Supplemental Benefits per hour:

\$ 16.97 \$ 17.41 \$ 19.40 \$ 19.84 \$ 20.28

PILEDRIVER/DOCKBUILDER APPRENTICES

Wages per hour (1300 hour terms at the following percentage of journeyman's base wage):

1st 2nd 3rd 4th 65% 70% 80% 85%

Supplemental Benefits per hour:

\$ 16.97 \$ 17.41 \$ 19.84 \$ 20.28

NOTE ADDITIONAL AMOUNTS PAID PER HOUR WORKED TO APPRENTICES FOR SPECIFIC TYPES OF WORK PERFORMED:

- When project owner mandates a single irregular work shift, the employee will receive an additional \$3.00 per hour. A single irregular work shift can start any time from 5:00 p.m. to 1:00 a.m.
- State or Federal designated hazardous site, requiring protective gear shall be an additional \$2.50 per hour.
- Certified welders when required to perform welding work will receive an additional \$2.50 per hour.

2-277HH-CHMOO

<u>Electrician</u> 10/01/2022

JOB DESCRIPTION Electrician

DISTRICT 6

ENTIRE COUNTIES

Cortland, Herkimer, Madison, Oneida, Oswego

PARTIAL COUNTIES

Cayuga: Townships of Ira, Locke, Sempronius, Sterling, Summerhill and Victory.

Chenango: Only the Townships of Columbus, New Berlin and Sherburne. Onondaga: Entire County except Townships of Elbridge and Skaneateles.

Otsego: Only the Townships of Plainfield, Richfield, Springfield, Cherry Valley, Roseboom, Middlefield, Otsego, Exeter, Edmeston,

Burlington, Pittsfield and New Lisbon. Tompkins: Only the Township of Groton.

Wayne: Only the Townships of Huron, Wolcott, Rose and Butler.

WAGES

Per hour:	07/01/2022	06/01/2023 Additional
Electrician	\$ 42.00	\$ 3.00*
Teledata	42.00	
Cable Splicer	46.20	

^{*}To be allocated at a later date.

NOTE: Additional premiums for the following work listed:

- Additional \$2.00 per hour for work performed over 35 feet above the ground, floor, or roof levels or where work is required in tunnels, shafts, or under compressed air 35 feet below the ground level.
- Additional \$2.50 per hour for working over 50 feet above or below ground, floor, or roof level. This includes work on ladders, "toothpicks", scaffolds, boatswain chairs, towers, smokestacks or other open structures, or mechanical lifts used over 60 feet.

NOTES

THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF EIGHT (8) HOURS FOR AT LEAST FIVE (5) DAYS DURATION WHICH MAY HAVE BEEN WORKED. WHEN TWO (2) SHIFTS OR THREE (3) SHIFTS ARE WORKED:

1ST SHIFT 8:00AM - 4:30PM: See rates posted above

2ND SHIFT 4:30 PM - 1:00 AM: Add 15% to rates posted above 3RD SHIFT 12:30 AM - 9:00 AM: Add 25% to rates posted above

Occupied Conditions: When necessary to perform alteration and/or renovation work and owner mandates (due to occupied conditions) prevent the work from being performed during "normal" working hours (defined as between 6:00 a.m. and 4:30 p.m. Monday through Friday), alternate hours may be worked, provided: 1) The hours are established for a minimum of five (5) days duration or the length of the job, whichever is shorter; and 2) An entire work scope within a job-site area is performed utilizing the varied hours. If these conditions are satisfied, all hours worked Monday through Friday of a shift that starts before or ends after the "normal" hours, shall be paid at the appropriate rate plus fifteen percent (15%). However, the following restrictions shall apply:

- 1) "Alternate" hours shall consist of a minimum of eight consecutive hours per day
- 2) Hours worked in excess of eight (8) hours per day, Monday through Friday, shall be paid at a rate of one and one-half times the applicable rate (day-shift + 15%)
- 3) Hours worked on Saturday shall be paid at time and one-half the applicable rate.
- 4) Hours worked on Sundays and Holidays shall be paid at double the straight time rate.
- 5) Work of a new construction nature may not be worked under these conditions.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour: 07/01/2022

Journeyman \$ 29.17 plus

*3% of hourly wage paid

*NOTE: The 3% is based on the hourly wage paid, straight time or premium rate.

OVERTIME PAY

See (B,E**,Q) on OVERTIME PAGE

** Double Time after 10 hrs. on Saturday.

NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

NOTE: If any of the above holidays fall on Saturday, Friday shall be observed as the holiday. If any of the above holidays fall on Sunday, Monday shall be observed as the holiday.

REGISTERED APPRENTICES

WAGES per hour: Hourly terms at the following percentage of Journeyman's wage.

1st period 40% (0-1000 hrs.)	\$ 16.80
2nd period 45% (1001-2000)	18.90
3rd period 50% (2001-3500)	21.00
4th period 60% (3501-5000)	25.20
5th period 70% (5001-6500)	29.40
6th Period 80% (6501-8000)	33.60

SUPPLEMENTAL BENEFITS per hour:

1st period	\$ 13.09 plus *3% of hourly wage paid
2nd period	\$ 13.09 plus *3% of hourly wage paid
3rd period	\$ 26.55 plus *3% of hourly wage paid
4th period	\$ 27.07 plus *3% of hourly wage paid
5th period	\$ 27.60 plus *3% of hourly wage paid
6th period	\$ 28.12 plus *3% of hourly wage paid

^{*}NOTE: The 3% is based on the hourly wage paid, straight time rate or premium rate.

6-43

Electrician 10/01/2022

JOB DESCRIPTION Electrician

DISTRICT 1

ENTIRE COUNTIES

Albany, Columbia, Fulton, Hamilton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

Greene: Portion of the County North of a line following the South limits of the City of Catskill in a westerly direction from the Hudson River to State Highway 23A. Then continuing on 23A to the road following the Little West Kill and continuing along this road to Delaware County. Otsego: Only the Towns of Decatur and Worchester

WAGES

Per hour

	07/01/2022	06/01/2023
Electrician	\$ 45.00	\$ 47.12
Audio/Sound	45.00	47.12
Video	45.00	47.12
Tele-Data	45.00	47.12
Solar/ Photovoltaic	45.00	47.12

Notes: An additional 5% above rate for work over 30' above floor and requires use of a safety harness when working on tooth picks, structural steel, temporary platforms, swing scaffolds & boatswain chairs. All OSHA approved lifts are excluded.

An additional 10% above rate on towers & smoke stacks over 100' high.

An additional 20% above rate in shafts over 25' deep or tunnels over 50' long that are under construction.

An additional 5% above rate when Journeymen are required to work as Lead(Pb) cable splicers.

An additional 10% above rate when Journeymen Welders are required to have ASME verification.

SUPPLEMENTAL BENEFITS

Per hour

Journeyman \$ 29.24 \$ 29.29 +3% of wage +3% of wage

OVERTIME PAY

See (B, *E, Q) on OVERTIME PAGE

* DOUBLE TIME AFTER 10 HOURS ON SATURDAY

For Projects Bid on or Prior to 05/31/2019

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SHIFTS OF AT LEAST A FIVE (5) DAY

DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1st Shift 8:00 AM to 4:30 PM **REGULAR RATE**

2nd Shift 4:30 PM to 1:00 AM **REGULAR RATE PLUS 10%** 3rd Shift 12:30 AM to 9:00 AM **REGULAR RATE PLUS 15%**

For Projects Bid on or After 06/01/2019

1st Shift 8:00 AM to 4:30 PM REGULAR RATE

2nd Shift 4:30 PM to 1:00 AM **REGULAR RATE PLUS 17.3%** 3rd Shift 12:30 AM to 9:00 AM **REGULAR RATE PLUS 31.4%**

For Projects Bid on or After 09/01/2019

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SINGLE IRREGULAR SHIFTS OF AT

LEAST A FIVE (5) DAY DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1st Shift 8:00 AM to 4:30 PM REGULAR RATE

2nd Shift 4:30 PM to 1:00 AM **REGULAR RATE PLUS 17.3%** 3rd Shift 12:30 AM to 9:00 AM **REGULAR RATE PLUS 31.4%**

HOLIDAY

See (1) on HOLIDAY PAGE Paid: See (5, 6) on HOLIDAY PAGE Overtime:

Note: If the holiday falls on Saturday, it shall be celebrated on Friday. If the holiday falls on Sunday, it shall be celebrated on Monday.

REGISTERED APPRENTICES

Wages per hour

Terms at the following percentage of Journeyman's wage.

0-6mo	6-12mo	2nd yr	3rd yr	4th yr	5th yr
40%	45%	50%	60%	70%	80%

Notes: An additional 5% above rate for work over 30' above floor and requires use of a safety harness when working on tooth picks, structural steel, temporary platforms, swing scaffolds & boatswain chairs. All OSHA approved lifts are excluded.

An additional 10% above rate on towers & smoke stacks over 100' high.

An additional 20% above rate in shafts over 25' deep or tunnels over 50' long that are under construction.

Supplemental Benefits per hour worked

Apprentices indentured on or before 12/31/2018

\$ 14.66* 0-12 month term 2-5th year term 29.24*

Apprentices indentured on or after 01/01/2019

0-12 month term \$ 14.66* 2nd year term 23.52* 3rd year term 24.66* 4th year term 25.81* 5th year term 29.24*

*Plus additional 3% of wage

1-236

DISTRICT 2

10/01/2022 Electrician

JOB DESCRIPTION Electrician

ENTIRE COUNTIES

Broome

PARTIAL COUNTIES

Chenango: Entire County except the Townships of Columbus, New Berlin and Sherburne.

Delaware: Only the Townships of Davenport, Delhi, Deposit, Franklin, Hamden, Masonville, Meredith, Sidney, Tompkins and Walton Townships and that portion of Colchester and Hancock Townships north of the east branch of the Delaware River.

Otsego: Only the Townships of Butternuts, Hartwick, Laurens, Maryland, Milford, Morris, Oneonta, Otego, Unadilla and Westford. Tioga: Only the Townships of Berkshire, Newark Valley, Owego, Richford and Tioga.

WAGES

Per hour: 07/01/2022

Electrician (base wage) \$ 37.29 Cable Splicer 43.54

ADDITIONAL AMOUNTS FOR SPECIFIC TYPES OF JOBSITE CONDITIONS (amount subject to any overtime premiums):

Additional \$ 0.50 per hour when required to work underground, such as in tunnels for roads, railroads, or water.

Additional \$ 0.50 per hour when required to work at a height of 40 feet above the ground or roof level.

SHIFT WORK / SINGLE IRREGULAR WORK SHIFT:

When shift work or a single irregular work shift is mandated in the job specifications or by the contracting agency, the following journeyman hourly rates apply. The starting hours of a shift may be adjusted up to two (2) hours in order to meet the needs of the contracting agency.

Between the hours

of 8:00AM and 4:30PM \$ 37.29

Between the hours

of 4:30PM and 1:00AM 43.74

Between the hours

of 12:30AM and 9:00AM 49.00

TEMPORARY HEAT:

On any job requiring temporary heat outside the regular working hours, where electrical power is used pertaining to this heat, it shall be manned on a shift work basis by an electrician at the base wage plus 25%.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 28.78 plus 3% of wage

OVERTIME PAY

See (B, *E, Q) on OVERTIME PAGE

*Double time after 8 hours on Saturday.

NOTE: WAGE CAP...Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, *8, 16) on HOLIDAY PAGE

When a dated holiday falls on a Saturday it shall be celebrated on Friday. When a dated holiday falls on a Sunday, it shall be celebrated on Monday.

*Good Friday may be celebrated the following Monday by mutual agreement of Employer and Employees.

REGISTERED APPRENTICES

WAGES: Terms at the following percentages of Journeyman's wage.

1st 2nd 3rd 4th 5th

0-2000 Hrs 2000-3500 Hrs 3500-5000 Hrs 5000-6500 Hrs 6500-8000 Hrs

42% 48% 55% 65% 75%

ADDITIONAL AMOUNTS FOR SPECIFIC TYPES OF JOBSITE CONDITIONS (amount subject to any overtime premiums):

Additional \$ 0.50 per hour when required to work underground, such as in tunnels for roads, railroads, or water. Additional \$ 0.50 per hour when required to work at a height of 40 feet above the ground or roof level.

SUPPLEMENTAL BENEFITS per hour:

07/01/2021

 1st term
 \$9.00 plus 3% of hourly wage

 2nd term
 \$24.12 plus 3% of hourly wage

 3rd term
 \$24.83 plus 3% of hourly wage

 4th term
 \$24.83 plus 3% of hourly wage

 5th term
 \$24.83 plus 3% of hourly wage

2-325

Elevator Constructor 10/01/2022

JOB DESCRIPTION Elevator Constructor

ENTIRE COUNTIES

DISTRICT 1

Albany, Clinton, Essex, Fulton, Hamilton, Herkimer, Montgomery, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

PARTIAL COUNTIES

Madison: Madison Only the towns of: Brookfield, Hamilton, Lincoln, Madison, Smithfield, Stockbridge and the City of Oneida Oneida: Entire county except the towns of: Camden, Florence, and Vienna.

WAGES

Per hour

07/01/2022 01/01/2023

Mechanic \$ 50.78 \$ 53.02

Helper 70% of Mechanic 70% of Mechanic

Wage Rate Wage Rate

Four (4), ten (10) hour days may be worked for New Construction and Modernization Work at straight time during a week, Monday thru Thursday or Tuesday thru Friday.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour

07/01/2022 01/01/2023

Journeyperson/Helper

(*)Plus 6% of hourly rate, if less than 5 years of service. Plus 8% of hourly rate, if more than 5 years of service.

OVERTIME PAY

See (D, O) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 15, 16) on HOLIDAY PAGE Overtime: See (5, 6, 15, 16) on HOLIDAY PAGE

Note: When a paid holiday falls on Saturday, it shall be observed on Friday. When a paid holiday falls on Sunday, it shall be observed on Monday.

REGISTERED APPRENTICES

Wages per hour:

0-6 mo* 6-12 mo 2nd yr 3rd yr 4th yr 50% 55 % 65 % 70 % 80 %

(*)Plus 6% of the hourly rate, no additional supplemental benefits.

Supplemental Benefits - per hour worked:

Same as Journeyperson/Helper

1-35

Glazier 10/01/2022

JOB DESCRIPTION Glazier DISTRICT 5

ENTIRE COUNTIES

Broome, Chemung, Chenango, Delaware, Otsego, Schuyler, Steuben, Tioga, Tompkins

WAGES

Per hour: 07/01/2022

Glazier \$ 26.50

** IMPORTANT NOTICE **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

^{***}Four (4), ten (10) hour days are not permitted for Contract Work/Repair Work

DISTRICT 6

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 27.60

OVERTIME PAY

See (B, E*, E2, Q**) on OVERTIME PAGE.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

1000 hour terms

Appr. 1st term	\$17.00
Appr. 2nd term	18.00
Appr. 3rd term	19.00
Appr. 4th term	20.00
Appr. 5th term	21.00
Appr. 6th term	22.00
Appr. 7th term	23.00
Appr. 8th term	24.00

Supplemental Benefits per hour:

Appr. 1st term	\$ 12.60
Appr. 2nd term	12.60
Appr. 3rd term	18.60
Appr. 4th term	18.60
Appr. 5th term	19.60
Appr. 6th term	19.60
Appr. 7th term	20.60
Appr. 8th term	20.60

5-677z3

Insulator - Heat & Frost 10/01/2022

JOB DESCRIPTION Insulator - Heat & Frost

ENTIRE COUNTIES

Broome, Cayuga, Chemung, Chenango, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Tioga, Tompkins

WAGES

Per hour: 07/01/2022

Asbestos Installer \$ 37.00

Insulation Installer

(On mechanical systems only)

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SHIFTS WORKED.

1ST SHIFT \$ 37.00 2ND SHIFT 42.55 3RD SHIFT 46.25

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 24.34

OVERTIME PAY

See (*B1, Q) on OVERTIME PAGE *NOTE: First 10 hours on Saturday

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (4,6) on HOLIDAY PAGE.

Triple time for Labor Day if worked.

NOTE: When a holiday falls on Sunday, the following Monday shall be observed as a holiday.

REGISTERED APPRENTICES

WAGES per hour: One year terms at the following percentage of Journeyman's wage

4th 1st 2nd 3rd 50% 60% 70% 80% \$ 18.50 \$22.20 \$ 25.90 \$29.60

SUPPLEMENTAL BENEFITS per hour:

\$21.84 \$21.84 \$ 24.34 \$ 24.34

6-30-Syracuse

Ironworker 10/01/2022

JOB DESCRIPTION Ironworker

DISTRICT 1

ENTIRE COUNTIES

Albany, Clinton, Columbia, Delaware, Essex, Greene, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

PARTIAL COUNTIES

Fulton: Only the Townships of Broadalbin, Mayfield, Northampton, Bleecker and Johnstown.

Hamilton: Only the Townships of Hope, Benson and Wells.

Montgomery: Only the Townships of Florida, Amsterdam, Charleston, Glen, Mohawk and Root.

Otsego: Only the Towns of Unadilla, Butternuts, Morris, Otego, Oneonta, Laurens, Millford, Maryland and Worchester.

WAGES

Wages Per hour	07/01/2022
Ornamental	\$ 33.50
Reinforcing	33.50
Rodman	33.50
Structural & Precast	33.50
Mover/Rigger	33.50
Fence Erector	33.50
Stone Derrickman	33.50
Sheeter	33.75
Curtain Wall Installer	33.50
Metal Window Installer	33.50

SUPPLEMENTAL BENEFITS

Per hour

JOURNEYPERSON \$ 31.14

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTWORK:

1st Shift 6:00 AM to 4:30 PM REGULAR RATE

2nd Shift 2:00 PM to 7:00 PM **REGULAR RATE PLUS 10%** 3rd Shift 7:00 PM to 12:00 AM **REGULAR RATE PLUS 15%**

THE FOLLOWING RATE WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SINGLE IRREGULAR SHIFTS:

Shift Starting 4:30 PM to 12:00 AM **REGULAR RATE PLUS 10%**

HOLIDAY

See (1) on HOLIDAY PAGE Paid: See (5, 6) on HOLIDAY PAGE Overtime:

Note: Any holiday which occurs on Sunday shall be observed the following Monday.

REGISTERED APPRENTICES

Wages per hour

ONE YEAR TERMS AT THE FOLLOWING WAGE RATES:

	07/01/2022
1st year	\$ 19.50
2nd year	21.50
3rd year	23.50
4th year	25.50
Supplemental Benefits per hour worke	ed
1st year	\$ 11.78
2nd year	23.73
3rd year	25.42
4th year	27.13

10/01/2022 Ironworker

JOB DESCRIPTION Ironworker

DISTRICT 7

ENTIRE COUNTIES

Franklin, Herkimer, Lewis, Oneida, St. Lawrence

Chenango: Only the Townships of Columbus, New Berlin, North Norwich, Plymouth, Sherburne and Smyrna.

07/01/2022

Chenango: Only the Townships of Columbus, New Berlin, North Norwich, Plymouth, Sherburne and Smyrna.
Fulton: Only the Townships of Columbus, Oppenheim, Stratford.
Hamilton: Only the Townships of Arietta, Indian Lake, Inlet, Lake Pleasant, Long Lake and Morehouse.
Jefferson: Only the Townships of Antwerp, Champion, Philadelphia and Wilna.
Madison: Only the Townships of Brookfield, Eaton, Hamilton, Lebanon, Madison, Oneida and Stockbridge.
Montgomery: Only the Townships of Canajoharie, Minden, Palatine and St. Johnsville.
Otsego: Only the Townships of Burlington, Cherry Valley, Decatur, Edmeston, Exeter, Hartwick, Middlefield, New Lisbon, Otsego, Pittsfield, Plainfield, Richfield, Roseboom, Springfield and Westford, and Village of Cooperstown.

WAGES Per hour:

Structural/Reinforcing	\$ 31.25
Mach. Mover/Ornamental	31.25
Stone Derrickman	31.25
Chain Link Fence	31.25
Sheeter Ironworker	31.25
Pre-Engineered Building	31.25
Window Erector	31.25
Precast Erector	31.25
Welder	31.25

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 30.50

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

See (1) on HOLIDAY PAGE Paid: See (5, 6) on HOLIDAY PAGE Overtime:

NOTE: Any holiday which occurs on Sunday shall be observed the following Monday.

REGISTERED APPRENTICES

WAGES per hour: 1500 hour terms at the following wage.

1-1500hrs	\$ 19.50
1501-3000hrs	21.50
3001-4500hrs	23.50
4501-6000hrs	25.50

SUPPLEMENTAL BENEFITS per hour:

1-1500hrs	\$ 12.78
1501-3000hrs	20.87
3001-4500hrs	22.02
4501-6000hrs	23.18

7-440

DISTRICT 11

Laborer - Building 10/01/2022

JOB DESCRIPTION Laborer - Building

ENTIRE COUNTIES

Otsego

PARTIAL COUNTIES

Chenango: Only in the Townships of Columbus, Sherburne and New Berlin.

WAGES

GENERAL LABORER: flag person, portable generator tender, portable pump tender, temporary heat tender, chipping hammer, acoustic pump, mixer, concrete laborer, demolition, demo saw, general cleanup, landscaping, mason tender, jackhammer, pavement breaker, pressure blasting, signal person, buggies, wrecking, chain saw, vacuums, cutting torch, discharge pipe, mega mixer, pump crete machine. INTERMEDIATE LABORER: excavation, grading, backfilling, tampers, walk behind roller, when OSHA or contractor requires negative respirator.

PREMIUM LABORER: Environmental work, asbestos abatement, toxic and hazardous abatement, lead abatement work, mold remediation and biohazards.

WAGES:(per hour)

07/01/2022

 General
 \$ 38.95

 Intermediate
 39.35

 Premium
 41.15

These rates will cover all work within five feet of the building foundation line

Shift Differential: On all Governmental mandated irregular or off shift work, an additional 25% of wage is required. The 25% shift differential will be paid on public works contract for shifts or irregular workdays outside the normal working hours for 2nd and 3rd shifts or irregular work day or when mandated or required by state, federal, county, local or other governmental agency contracts.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 30.20 Shift 37.04

OVERTIME PAY

See (B, E, E5, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

Holidays that fall on Saturday shall be observed on Friday, when holidays fall on Sunday they shall be observed on Monday.

REGISTERED APPRENTICES

1000 hour terms at the following wage rates:

 1st term
 \$ 22.22

 2nd term
 26.26

 3rd term
 30.30

 4th term
 34.34

Supplemental Benefits per hour: Apprentices \$ 27.03 Shift 32.71

11-17.BB

Laborer - Heavy&Highway

10/01/2022

JOB DESCRIPTION Laborer - Heavy&Highway

DISTRICT 11

ENTIRE COUNTIES

Otsego

PARTIAL COUNTIES

Chenango: Only the Townships of Columbus, Sherburne and New Berlin.

WAGES

CLASS 1: Flagperson, gateperson.

CLASS 2: General laborer, chuck tender, nipper, powder carrier, magazine tender, concrete men, vibrator men, mason tender, mortar men, traffic control, custodial work, temporary heat, pump men, pit men, dump men, asphalt men, joint setter, signalman, pipe men, riprap, dry stone layers, jack hammer, bush hammer, pavement breaker, men on mulching & seeding machines, all seeding & sod laying, landscape work, walk behind self-propelled power saws, grinder, walk behind rollers and tampers of all types, burner men, filling and wiring of baskets for gabion walls, chain saw operator, railroad track laborers, power buggy, plaster & acoustic pump, power brush cutter, retention liners, walk behind surface planer, chipping hammer, manhole, catch basin or inlet installing, mortar mixer, laser men. *Micropaving and crack sealing.

CLASS 3: Asbestos, toxic, bio remediation and phyto-remediation, lead or hazardous materials abatement when certification or license is required, Drilling Equipment Only Where a Separate Air Compressor Unit Supplies Power.

CLASS 4: Asphalt screedman, blaster, all laborers involved in pipejacking and boring operations not exceeding more than 10 feet into pipe, boring or drilled area.

WAGES: (per hour)	07/01/2022	06/01/2023	06/01/2024
			Additional
Class 1	\$ 36.45	\$ 38.40	\$ 2.35**
Class 2	36.45	38.40	2.35**
Class 3	39.80	41.90	2.40**
Class 4	44.45	46.75	2.20**

^{*} When laborers are performing micro paving, crack sealing or slurry application when not part of asphalt prep operations laborers shall receive an additional \$2.50 per hour over rate.

SHIFT DIFFERENTIAL: Night work and irregular shift require 20% increase on wages for all Government mandated night and irregular shift work.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 29.98 \$ 30.23 Shift 35.44 35.71

OVERTIME PAY

See (B, E, P, *R, **S, ***T, X) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 15, 25) on HOLIDAY PAGE Overtime: See (5, 6, 15, 25) on HOLIDAY PAGE

To be eligible for a paid holiday, an employee must work at least two (2) days in the calendar week or payroll week in which the holiday falls.

REGISTERED APPRENTICES

(1000) hour terms at the following wages.

	07/01/2022
1st term	\$ 22.22
2nd term	26.26
3rd term	30.30
4th term	34.34

Supplemental Benefits per hour:

All Terms Regular \$ 27.03 All Terms Shift Rate \$ 31.57

11-17.2H/H

Laborer - Tunnel 10/01/2022

JOB DESCRIPTION Laborer - Tunnel

DISTRICT 11

ENTIRE COUNTIES

Columbia, Dutchess, Greene, Orange, Otsego, Putnam, Rockland, Sullivan, Ulster, Westchester

PARTIAL COUNTIES

Chenango: Townships of Columbus, Sherburne and New Berlin.

Delaware: Townships of Andes, Bovina, Middletown, Roxbury, Franklin, Hamden, Stamford, Delhi, Kortright, Harpersfield, Merideth and Davenport.

^{**} To be allocated at a later date.

^{*}For Mon-Fri Holidays, Double Benefits to be paid for all hours worked.

^{**}For Saturday Holidays, Two and one Half Benefits for all hours worked.

^{***}For Sunday Holidays, Triple Benefits for all hours worked.

WAGES

Class 1: All support laborers/sandhogs working above the shaft or tunnel.

Class 2: All laborers/sandhogs working in the shaft or tunnel.

Class 4: Safety Miners

Class 5: Site work related to Shaft/Tunnel

WAGES: (per hour)

	07/01/2022
Class 1	\$ 53.45
Class 2	55.60
Class 4	62.00
Class 5	44.80

Toxic and hazardous waste, lead abatement and asbestos abatement work will be paid an additional \$ 3.00 an hour.

SHIFT DIFFERENTIAL...On all Government mandated irregular shift work:

- Employee shall be paid at time and one half the regular rate Monday through Friday.
- Saturday shall be paid at 1.65 times the regular rate.
- Sunday shall be paid at 2.15 times the regular rate.

SUPPLEMENTAL BENEFITS

Per hour:

Benefit 1	\$ 34.45
Benefit 2	51.60
Benefit 3	68.75

Benefit 1 applies to straight time hours, paid holidays not worked.

Benefit 2 applies to over 8 hours in a day (M-F), irregular shift work hours worked, and Saturday hours worked.

Benefit 3 applies to Sunday and Holiday hours worked.

OVERTIME PAY

See (B, E, Q, X) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 15, 25) on HOLIDAY PAGE
Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

When a recognized Holidays falls on Saturday or Sunday, holidays falling on Saturday shall be recognized or observed on Friday and holidays falling on Sunday shall be recognized or observed on Monday. Employees ordered to work on the Saturday or Sunday of the holiday or on the recognized or the observed Friday or Monday for those holidays falling on Saturday or Sunday shall receive double time the established rate and benefits for the holiday.

REGISTERED APPRENTICES

FOR APPRENTICE RATES, refer to the appropriate Laborer Heavy & Highway wage rate contained in the wage schedule for the County and location where the work is to be performed.

11-17/60/235/754Tun

Lineman Electrician 10/01/2022

JOB DESCRIPTION Lineman Electrician

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES

A Lineman/Technician shall perform all overhead aerial work. A Lineman/Technician on the ground will install all electrical panels, connect all grounds, install and connect all electrical conductors, assembly of all electrical materials, conduit, pipe, or raceway; placing of fish wire; pulling of cables, wires or fiber optic cable through such raceways; splicing of conductors; dismantling of such structures, lines or equipment.

A Groundman/Truck Driver shall: Build and set concrete forms, handle steel mesh, set footer cages, transport concrete in a wheelbarrow, hand or machine concrete vibrator, finish concrete footers, mix mortar, grout pole bases, cover and maintain footers while curing in cold weather, operate jack hammer, operate hand pavement breaker, tamper, concrete and other motorized saws, as a drill helper, operate and maintain generators, water pumps, chainsaws, sand blasting, operate mulching and seeding machine, air tools, electric tools, gas tools, load and unload materials, hand shovel and/or broom, prepare and pour mastic and other fillers, assist digger operator/equipment operator in ground excavation and restoration, landscape work and painting. Only when assisting a lineman technician, a groundman/truck driver may assist in installing conduit, pipe, cables and equipment.

NOTE: Includes Teledata Work within ten (10) feet of High Voltage Transmission Lines. Also includes digging of holes for poles, anchors, footer, and foundations for electrical equipment.

Below rates applicable on all overhead and underground distribution and maintenance work, and all overhead and underground transmission line work and the installation of fiber optic cable where no other construction trades are or have been involved. (Ref #14.01.01)

Per hour:	07/01/2022	05/01/2023	05/06/2024
Lineman, Technician	\$ 56.00	\$ 57.40	\$ 58.90
Crane, Crawler Backhoe	56.00	57.40	58.90
Welder, Cable Splicer	56.00	57.40	58.90
Digging Mach. Operator	50.40	51.66	53.01
Tractor Trailer Driver	47.60	48.79	50.07
Groundman, Truck Driver	44.80	45.92	47.12
Equipment Mechanic	44.80	45.92	47.12
Flagman	33.60	34.44	35.34

Additional \$1.00 per hour for entire crew when a helicopter is used.

Below rates applicable on all electrical sub-stations, switching structures, fiber optic cable and all other work not defined as "Utility outside electrical work". (Ref #14.02.01-A)

Lineman, Technician	\$ 56.00	\$ 57.40	\$ 58.90
Crane, Crawler Backhoe	56.00	57.40	58.90
Cable Splicer	61.60	63.14	64.79
Certified Welder -			
Pipe Type Cable	58.80	60.27	61.85
Digging Mach. Operator	50.40	51.66	53.01
Tractor Trailer Driver	47.60	48.79	50.07
Groundman, Truck Driver	44.80	45.92	47.12
Equipment Mechanic	44.80	45.92	47.12
Flagman	33.60	34.44	35.34

Additional \$1.00 per hour for entire crew when a helicopter is used.

Below rates apply on switching structures, maintenance projects, railroad catenary install/maintenance third rail installation, bonding of rails and pipe type cable and installation of fiber optic cable. (Ref #14.02.01-B)

Lineman, Tech, Welder	\$ 57.32	\$ 58.72	\$ 60.22
Crane, Crawler Backhoe	57.32	58.72	60.22
Cable Splicer	63.05	64.59	66.24
Certified Welder -			
Pipe Type Cable	60.19	61.66	63.23
Digging Mach. Operator	51.59	52.85	54.20
Tractor Trailer Driver	48.72	49.91	51.19
Groundman, Truck Driver	45.86	46.98	48.18
Equipment Mechanic	45.86	46.98	48.18
Flagman	34.39	35.23	36.13

Additional \$1.00 per hour for entire crew when a helicopter is used.

Below rates applicable on all overhead and underground transmission line work & fiber optic cable where other construction trades are or have been involved. This applies to transmission line work only, not other construction. (Ref #14.03.01)

Lineman, Tech, Welder	\$ 58.51	\$ 59.91	\$ 61.41
Crane, Crawler Backhoe	58.51	59.91	61.41
Cable Splicer	58.51	59.91	61.41
Digging Mach. Operator	52.66	53.92	55.27
Tractor Trailer Driver	49.73	50.92	52.20

Groundman, Truck Driver	46.81	47.93	49.13
Equipment Mechanic	46.81	47.93	49.13
Flagman	35.11	35.95	36.85

Additional \$1.00 per hour for entire crew when a helicopter is used.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1ST SHIFT 8:00 AM to 4:30 PM REGULAR RATE

2ND SHIFT 4:30 PM to 1:00 AM REGULAR RATE PLUS 17.3 % 3RD SHIFT 12:30 AM to 9:00 AM REGULAR RATE PLUS 31.4 %

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour worked (but also required on non-worked holidays):

	07/01/2022	05/01/2023	05/06/2024
Journeyman	\$ 25.90 *plus 7% of the hourly wage paid	\$ 26.40 *plus 7% of the hourly wage paid	\$ 26.90 *plus 7% of the hourly wage paid
Journeyman Lineman or Equipment Operators with Crane License	\$ 27.90 *plus 7% of the hourly wage paid	\$ 29.40 *plus 7% of the hourly wage paid	\$ 30.90 *plus 7% of the hourly wage paid

^{*}The 7% is based on the hourly wage paid, straight time or premium time.

OVERTIME PAY

See (B, E, Q,) on OVERTIME PAGE. *Note* Double time for all emergency work designated by the Dept. of Jurisdiction.

NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.
Overtime See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.

NOTE: All paid holidays falling on Saturday shall be observed on the preceding Friday. All paid holidays falling on Sunday shall be observed on the following Monday. Supplements for holidays paid at straight time.

REGISTERED APPRENTICES

WAGES per hour: 1000 hour terms at the following percentage of the applicable Journeyman Lineman wage.

1st	2nd	3rd	4th	5th	6th	7th
60%	65%	70%	75%	80%	85%	90%

SUPPLEMENTAL BENEFITS per hour:

07/01/2022	05/01/2023	05/06/2024
\$ 25.90	\$ 26.40	\$ 26.90
*plus 7% of	*plus 7% of	*plus 7% of
the hourly	the hourly	the hourly
wage paid	wage paid	wage paid

^{*}The 7% is based on the hourly wage paid, straight time or premium time.

6-1249a

Lineman Electrician - Teledata 10/01/2022

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per hour:

For outside work, stopping at first point of attachment (demarcation).

	07/01/2022	01/01/2023	01/01/2024	01/01/2025
Cable Splicer	\$ 36.28	\$ 37.73	\$ 39.24	\$ 40.81
Installer, Repairman	\$ 34.43	\$ 35.81	\$ 37.24	\$ 38.73
Teledata Lineman	\$ 34.43	\$ 35.81	\$ 37.24	\$ 38.73
Tech., Equip. Operator	\$ 34.43	\$ 35.81	\$ 37.24	\$ 38.73
Groundman	\$ 18.25	\$ 18.98	\$ 19.74	\$ 20.53

NOTE: EXCLUDES Teledata work within ten (10) feet of High Voltage (600 volts and over) transmission lines. For this work please see LINEMAN.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED:

1ST SHIFT REGULAR RATE

2ND SHIFT REGULAR RATE PLUS 10% 3RD SHIFT REGULAR RATE PLUS 15%

SUPPLEMENTAL BENEFITS

Per hour:	07/01/2022	01/01/2023	01/01/2024	01/01/2025
Journeyman	\$ 5.14	\$ 5.14	\$ 5.14	\$ 5.14
	*plus 3% of	*plus 3% of	*plus 3% of	*plus 3% of
	the hourly	the hourly	the hourly	the hourly
	wage paid	wage paid	wage paid	wage paid

^{*}The 3% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 16) on HOLIDAY PAGE

6-1249LT - Teledata

DISTRICT 6

Lineman Electrician - Traffic Signal, Lighting

10/01/2022

JOB DESCRIPTION Lineman Electrician - Traffic Signal, Lighting

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Lineman/Technician shall perform all overhead aerial work. A Lineman/Technician on the ground will install all electrical panels, connect all grounds, install and connect all electrical conductors which includes, but is not limited to road loop wires; conduit and plastic or other type pipes that carry conductors, flex cables and connectors, and to oversee the encasement or burial of such conduits or pipes.

A Groundman/Truck Driver shall: Build and set concrete forms, handle steel mesh, set footer cages, transport concrete in a wheelbarrow, hand or machine concrete vibrator, finish concrete footers, mix mortar, grout pole bases, cover and maintain footers while curing in cold weather, operate jack hammer, operate hand pavement breaker, tamper, concrete and other motorized saws, as a drill helper, operate and maintain generators, water pumps, chainsaws, sand blasting, operate mulching and seeding machine, air tools, electric tools, gas tools, load and unload materials, hand shovel and/or broom, prepare and pour mastic and other fillers, assist digger operator/equipment operator in ground excavation and restoration, landscape work and painting. Only when assisting a lineman technician, a groundman/truck driver may assist in installing conduit, pipe, cables and equipment.

A flagger's duties shall consist of traffic control only. (Ref #14.01.01)

Per hour:	07/01/2022	05/01/2023	05/06/2024
Lineman, Technician	\$ 48.19	\$ 49.32	\$ 50.54
Crane, Crawler Backhoe	48.19	49.32	50.54
Certified Welder	50.60	51.79	53.07
Digging Machine	43.37	44.39	45.49
Tractor Trailer Driver	40.96	41.92	42.96
Groundman, Truck Driver	38.55	39.46	40.43
Equipment Mechanic	38.55	39.46	40.43
Flagman	28.91	29.59	30.32

Above rates are applicable for installation, testing, operation, maintenance and repair on all Traffic Control (Signal) and Illumination (Lighting) projects, Traffic Monitoring Systems, and Road Weather Information Systems. Includes digging of holes for poles, anchors, footer foundations for electrical equipment; assembly of all electrical materials or raceway; placing of fish wire; pulling of cables, wires or fiber optic cable through such raceways; splicing of conductors; dismantling of such structures, lines or equipment.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1ST SHIFT 8:00 AM TO 4:30 PM REGULAR RATE

 2ND SHIFT
 4:30 PM TO 1:00 AM
 REGULAR RATE PLUS 17.3%

 3RD SHIFT
 12:30 AM TO 9:00 AM
 REGULAR RATE PLUS 31.4%

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour worked (but also required on non-worked holidays):

	07/01/2022	05/01/2023	05/06/2024
Journeyman	\$ 25.90 *plus 7% of the hourly wage paid	\$ 26.40 *plus 7% of the hourly wage paid	\$ 26.90 *plus 7% of the hourly wage paid
Journeyman Lineman or Equipment Operators with Crane License	\$ 27.90 *plus 7% of the hourly wage paid	\$ 29.40 *plus 7% of the hourly wage paid	\$ 30.90 *plus 7% of the hourly wage paid

^{*}The 7% is based on the hourly wage paid, straight time or premium time.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE. *Note* Double time for all emergency work designated by the Dept. of Jurisdiction.

NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid: See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day. Overtime: See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.

NOTE: All paid holidays falling on Saturday shall be observed on the preceding Friday. All paid holidays falling on Sunday shall be observed on the following Monday. Supplements for holidays paid at straight time.

REGISTERED APPRENTICES

WAGES per hour: 1000 hour terms at the following percentage of the applicable Journeyman Lineman wage.

1st	2nd	3rd	4th	5th	6th	7th
60%	65%	70%	75%	80%	85%	90%

SUPPLEMENTAL BENEFITS per hour:

07/01/2022	05/01/2023	05/06/2024
\$ 25.90	\$ 26.40	\$ 26.90
*plus 7% of	*plus 7% of	*plus 7% of

the hourly the hourly the hourly wage paid wage paid wage paid

6-1249a-LT

Lineman Electrician - Tree Trimmer

10/01/2022

JOB DESCRIPTION Lineman Electrician - Tree Trimmer

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES

Applies to line clearance, tree work and right-of-way preparation on all new or existing energized overhead or underground electrical, telephone and CATV lines. This also would include stump removal near underground energized electrical lines, including telephone and CATV lines.

Per hour:	07/01/2022	01/01/2023
Tree Trimmer	\$ 28.25	\$ 29.80
Equipment Operator	24.98	26.35
Equipment Mechanic	24.98	26.35
Truck Driver	20.80	21.94
Groundman	17.13	18.07
Flag person	13.20*	13.20*

^{*}NOTE: Subject to change due to any minimum wage increases.

SUPPLEMENTAL BENEFITS

Per hour worked (but also required on non-worked holidays):

	07/01/2022	01/01/2023
Journeyman	\$ 10.23	\$ 10.48
	*plus 3% of	*plus 3% of
	the hourly	the hourly
	wage paid	wage paid

^{*} The 3% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid: See (5, 6, 8, 15) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 15, 16, 25) on HOLIDAY PAGE

NOTE: All paid holidays falling on a Saturday shall be observed on the preceding Friday.

All paid holidays falling on a Sunday shall be observed on the following Monday.

6-1249TT

DISTRICT 5

Mason - Building 10/01/2022

JOB DESCRIPTION Mason - Building

ENTIRE COUNTIES

Broome, Chenango, Delaware, Otsego, Tioga

WAGES

Per hour: 07/01/2022

Building:

Bricklayer, Cement \$ 34.29

Mason, Plasterer, Stone Mason, Tuck Pointer

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

^{*}The 7% is based on the hourly wage paid, straight time or premium time.

DISTRICT 5

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 23.31

OVERTIME PAY

See (B,E,E2*,Q) on OVERTIME PAGE

*Note - Or other conditions beyond the employer's control such as fire or natural disaster.

HOLIDAY

See (1) on HOLIDAY PAGE Paid: See (5, 6) on HOLIDAY PAGE Overtime:

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's wage:

1st 2nd 3rd 4th \$21.86 \$27.00 \$28.18 \$ 30.86

Supplemental benefits per hour:

1st 2nd 3rd 4th \$20.13 \$20.19 \$ 22.48 \$23.27

5-3B - Bing - Z2

Mason - Heavy&Highway

10/01/2022

JOB DESCRIPTION Mason - Heavy&Highway

ENTIRE COUNTIES

Allegany, Broome, Chautauqua, Chemung, Chenango, Cortland, Delaware, Genesee, Livingston, Monroe, Ontario, Orleans, Otsego, Schuyler, Seneca, Steuben, Tioga, Tompkins, Wayne, Wyoming, Yates

Cattaraugus: Enitre county except in the Township of Perrysburg and the Village of Gowanda only the Bricklayer classification applies.

Erie: Only the Bricklayer classification applies.

Niagara: Only the Bricklayer classification applies.

WAGES

Per hour: 07/01/2022

Heavy & Highway:

\$ 34.88 Cement Mason Bricklayer 34.88

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 23.53

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

1500 hour terms at the following percentage of Journeyman's wage:

1st 2nd 3rd 4th 50% 60% 70% 80% Supplemental benefits per hour:

 1st term
 \$ 14.03

 2nd term
 \$ 22.97

 3rd term
 \$ 23.11

 4th term
 \$ 23.25

5-3h

Mason - Tile Finisher 10/01/2022

JOB DESCRIPTION Mason - Tile Finisher

DISTRICT 5

ENTIRE COUNTIES

Broome, Chemung, Chenango, Cortland, Delaware, Otsego, Schuyler, Steuben, Tioga, Tompkins

PARTIAL COUNTIES

Allegany: Towns of Alfred, Almond, Andover and Burns.

WAGES

Wages

Per hour: 07/01/2022

Building:

Marble, Slate, Terrazzo \$ 30.86

and Tile Finisher

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 18.61

OVERTIME PAY

See (B,E,E2*,Q) on OVERTIME PAGE

*Note - Or other conditions beyond the employer's control such as fire or natural disaster.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's wage:

1st 2nd 3rd \$ 18.52 \$ 21.60 \$ 24.69

Supplemental benefits per hour:

5-3TF - Z4

Mason - Tile Setter 10/01/2022

JOB DESCRIPTION Mason - Tile Setter

DISTRICT 5

ENTIRE COUNTIES

Broome, Chemung, Chenango, Cortland, Delaware, Otsego, Schuyler, Steuben, Tioga, Tompkins

PARTIAL COUNTIES

Allegany: Towns of Alfred, Almond, Andover and Burns.

WAGES

Wages

Per Hour: 07/01/2022

Building:

Marble, Slate, Terrazzo \$ 33.69

and Tile Setter

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 21.56

OVERTIME PAY

See (B,E,E2*,Q) on OVERTIME PAGE

*Note - Or other conditions beyond the employer's control such as fire or natural disaster.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Joureyman's wage:

1st 2nd 3rd 4th \$ 20.21 \$ 23.58 \$ 26.95 \$ 30.32

Supplemental benefits per hour:

1st 2nd 3rd 4th \$ 12.29 \$ 12.42 \$ 21.30 \$ 21.43

5-3TS - Z4

Millwright 10/01/2022

JOB DESCRIPTION Millwright

DISTRICT 6

ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES

THE FOLLOWING RATE APPLIES TO ANY GAS/STEAM TURBINE AND OR RELATED COMPONENT WORK, INCLUDING NEW INSTALLATIONS OR MAINTENANCE AND ANY/ALL WORK PERFORMED WITHIN THE PROPERTY LIMITS OF A NUCLEAR FACILITY.

Per hour: 07/01/2022

Millwright - Power Generation \$41.23

NOTE: ADDITIONAL PREMIUMS PAID FOR THE FOLLOWING WORK LISTED BELOW (amount subject to any overtime premiums):

- Certified Welders shall receive an additional \$1.75 per hour provided he/she is directed to perform certified welding.
- If a work site has been declared a hazardous site by the Owner and the use of protective gear (including, as a minimum, air purifying canister-type chemical respirators) are required, then that employee shall receive an additional \$1.50 per hour.
- An employee performing the work of a machinist shall receive an additional \$2.00 per hour. For the purposes of this premium to apply, a "machinist" is a person who uses a lathe, Bridgeport, milling machine or similar type of tool to make or modify parts.
- When performing work underground at 500 feet and below, the employee shall receive an additional \$1.00 per hour.

SUPPLEMENTAL BENEFITS

Per hour paid:

Journeyman \$ 26.72*

*NOTE: Subject to OT premium

OVERTIME PAY

See (B, E, *E2, Q, V) on OVERTIME PAGE

*NOTE - Saturday may be used as a make-up day and worked at the straight time rate of pay during a work week when conditions such as weather, power failure, fire, or natural disaster prevent the performance of work on a regular scheduled work day.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

DISTRICT 2

Overtime: See (5, 6) on HOLIDAY PAGE

NOTE: Any holiday that falls on Sunday shall be observed the following Monday. Any holiday that falls on Saturday shall be observed the preceding Friday.

REGISTERED APPRENTICES

WAGES per hour: One year terms at the following percentage of Journeyman's wage:

 Appr. 1st year
 65 %*

 Appr. 2nd year
 75 %*

 Appr. 3rd year
 80 %*

 Appr. 4th year
 90 %*

*NOTE: Additional premium for the following work listed below:

Certified Welder \$ 1.75
Hazardous Waste Work 1.50
Machinist 2.00
Underground 1.00
(500' and below)

SUPPLEMENTAL BENEFITS per hour:

 Appr. 1st year
 \$ 11.83

 Appr. 2nd year
 22.26

 Appr. 3rd year
 23.74

 Appr. 4th year
 25.24

6-1163Power

Millwright 10/01/2022

JOB DESCRIPTION Millwright

ENTIRE COUNTIES

Albany, Chenango, Delaware, Fulton, Montgomery, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie

WAGES

Per hour: 07/01/2022

Building \$ 35.84 Heavy & Highway 37.84

NOTE ADDITIONAL PREMIUMS PAID FOR THE FOLLOWING WORK LISTED BELOW (amount subject to any overtime premiums):

- Certified Welders shall receive \$1.75 per hour in addition to the current Millwrights rate provided he/she is directed to perform certified welding.
- For Building work if a work site has been declared a hazardous site by the Owner and the use of protective gear (including, as a minimum, air purifying canister-type chemical respirators) are required, then that employee shall receive a \$1.50 premium per hour for Building work.
- For Heavy & Highway work if the work is performed at a State or Federally designated hazardous waste site where employees are required to wear protective gear, the employees performing the work shall receive an additional \$2.00 per hour over the millwright heavy and highway wage rate for all hours worked on the day protective gear was worn.
- An employee performing the work of a machinist shall receive \$2.00 per hour in addition to the current Millwrights rate. For the purposes of this premium to apply, a "machinist" is a person who uses a lathe, Bridgeport, milling machine or similar type of tool to make or modify parts.
- When performing work underground at 500 feet and below, the employee shall receive an additional \$1.00.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 25.41

OVERTIME PAY

See (B, E, *E2, Q) on OVERTIME PAGE

*Note - Saturday may be used as a make-up day and worked at the straight time rate of pay during a work week when conditions such as weather, power failure, fire, or natural disaster prevent the performance of work on a regular scheduled work day.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

Note: Any holiday that falls on Sunday shall be observed the following Monday. Any holiday that falls on Saturday shall be observed the preceding Friday.

REGISTERED APPRENTICES

Wages per hour:

DISTRICT 1

(1) year terms at the following percentage of Journeyman's rate.

1st 2nd 3rd 4th 65% 75% 80% 90%

Supplemental Benefits per hour:

Apprentices:

1st term	\$ 11.93
2nd term	21.37
3rd term	22.72
4th term	24.06

2-1163.1

Operating Engineer - Building

10/01/2022

JOB DESCRIPTION Operating Engineer - Building

ENTIRE COUNTIES

Albany, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Montgomery, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

PARTIAL COUNTIES

Dutchess: Defined as north of the northern boundary line of City of Poughkeepsie then due east to Route 115 to Bedell Road then east along Bedell Road to VanWagner Road then north along VanWagner Road to Bower Road then east along Bower Road to Rte. 44 east to Route 343 then along Route 343 east to the northern boundary of Town of Dover Plains and east along the northern boundary of Town of Dover Plains to Connecticut.

WAGES

CLASS A1:

Crane, hydraulic cranes, tower crane, locomotive crane, piledriver, cableway, derricks, whirlies, dragline, boom trucks over 5 tons.

CLASS A:

Shovel, all Excavators (including rubber tire full swing), Gradalls, power road grader, all CMI equipment, front-end rubber tire loader, tractor-mounted drill (quarry master), mucking machine, concrete central mix plant, concrete pump, belcrete system, automated asphalt concrete plant, and tractor road paver, boom trucks 5 tons and under, maintenance engineer, self-contained crawler drill-hydraulic rock drill.

CLASS B:

Backhoes (rubber tired backhoe/loader combination), bulldozer, pushcat, tractor, traxcavator, scraper, LeTourneau grader, form fine grader, self-propelled soil compactor (fill roller), asphalt roller, blacktop spreader, power brooms, sweepers, trenching machine, Barber Green loader, side booms, hydro hammer, concrete spreader, concrete finishing machine, one drum hoist, power hoisting (single drum), hoist two drum or more, three drum engine, power hoisting (two drum and over), two drum and swinging engine, three drum swinging engine, hod hoist, A-L frame winches, core and well drillers (one drum), post hole digger, model CHB Vibro-Tamp or similar machine, batch bin and plant operator, dinky locomotive, skid steer loader, track excavator 5/8 cubic yard or smaller, front end rubber tired loader under four cubic yards, vacum machine (mounted or towed).

CLASS C:

Fork lift, high lift, all terrain fork lift: or similar, oiler, fireman and heavy-duty greaser, boilers and steam generators, pump, vibrator, motor mixer, air compressor, dust collector, welding machine, well point, mechanical heater, generators, temporary light plants, electric submersible pumps 4" and over, murphy type diesel generator, conveyor, elevators, concrete mixer, beltcrete power pack (belcrete system), seeding, and mulching machines, pumps.

* In the event that equipment listed above is operated by robotic control, the classification covering the operation will be the same as if manually operated.

WAGES per hour

•	07/01/2022
Class # A1	\$ 47.81
Class # A	47.32
Class # B	46.30
Class # C	43.40

Additional \$0.50 per hr for Tower Cranes.

Additional \$1.25 per hr for Cranes with Boom length & jib 150ft. and over.

Additional \$2.25 per hr for Cranes with Boom length & jib 200ft. and over.

Additional \$2.50 per hr over B rate for Nuclear Leader work.

Additional \$0.40 per hr for tunnel or excavation of shaft 40' or more deep.

Additional \$2.50 per hour if work requires Personal Protective Equipment for hazardous waste site activities with a level C or over rating.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour

07/01/2022

Journeyman \$30.55

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

Note: If a holiday falls on Sunday, it will be celebrated on Monday. If the holiday falls on Saturday, it will be celebrated on Friday.

Employees who work a designated holiday shall be paid double time plus 8 hours of straight time.

REGISTERED APPRENTICES

Wages per hour

1000 hours terms at the following percentage of Journeyperson's wage Class B

1st 2nd 3rd 4th 60% 70% 80% 90%

Supplemental Benefits per hour worked

All terms \$ 25.85

1-158 Alb

Operating Engineer - Heavy&Highway

10/01/2022

JOB DESCRIPTION Operating Engineer - Heavy&Highway

DISTRICT 1

ENTIRE COUNTIES

Albany, Broome, Chenango, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Montgomery, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Tioga, Warren, Washington

PARTIAL COUNTIES

Dutchess: Defined as north of the northern boundary line of City of Poughkeepsie then due east to Route 115 to Bedell Road then east along Bedell Road to VanWagner Road then north along VanWagner Road to Bower Road then east along Bower Road to Rte. 44 east to Route 343 then along Route 343 east to the northern boundary of Town of Dover Plains and east along the northern boundary of Town of Dover Plains to Connecticut.

WAGES

CLASSIFICATION A:

Asphalt Curb Machine (Self Propelled, Slipform), Asphalt Paver, Automated Concrete Spreader (CMI Type), Automatic Fine Grader, Backhoe (Except Tractor Mounted, Rubber Tired), Backhoe Excavator Full Swing (CAT 212 or similar type), Back Filling Machine, Belt Placer (CMI Type), Blacktop Plant (Automated), Boom truck, GPS operated Bull Dozer, Cableway, Caisson Auger, Central Mix Concrete Plant (Automated), Concrete Curb Machine (Self Propelled, Slipform), Concrete Pump, Crane, Cherry Picker, Derricks (steel erection), Dragline, Overhead Crane (Gantry or Straddle type), Pile Driver, Truck Crane, Directional Drilling Machine, Dredge, Dual Drum Paver, Excavator (All PurposeHydraulically Operated) (Gradall or Similar), Front End Loader (4 cu. yd. and Over), Head Tower (Sauerman or Equal), Hoist (Two or Three Drum), Holland Loader, Maintenance Engineer, Mine Hoist, Mucking Machine or Mole, Pavement Breaker(SP) Wertgen; PB-4 and similar type, Power Grader, Profiler (over 105 H.P.), Quad 9, Quarry Master (or equivalent), Scraper, Shovel, Side Boom, Slip Form Paver (If a second man is needed, he shall be an Oiler), Tractor Drawn BeltType Loader, Truck or Trailer Mounted Log Chipper (Self Feeder), Tug Operator (Manned Rented Equipment Excluded), Tunnel Shovel

CLASSIFICATION B:

Backhoe (Tractor Mounted, Rubber Tired), Bituminous Recycler Machine, Bituminous Spreader and Mixer, Blacktop Plant (NonAutomated), Blast or Rotary Drill (Truck or Tractor Mounted), Brokk, Boring Machine, Cage Hoist, Central Mix Plant [(NonAutomated) and All Concrete Batching Plants], Concrete Paver (Over 16S), Crawler Drill (Self-contained), Crusher, Diesel Power Unit, Drill Rigs, Tractor Mounted, Front End Loader (Under 4 cu. yd.), Greaseman/Lubrication Engineer, HiPressure Boiler (15 lbs. and over), Hoist (One Drum), Hydro-Axe, Kolman Plant Loader and Similar Type Loaders (If Employer requires another man to clean the screen or to maintain the equipment, he shall be an Oiler), L.C.M. Work Boat Operator, Locomotive, Material handling knuckle boom, Mini Excavator (under 18,000 lbs.), Mixer (for stabilized base self-propelled), Monorail Machine, Plant Engineer, Prentice Loader, Profiler (105 H.P. and under), Pug Mill, Pump Crete, Ready Mix Concrete Plant, Refrigeration Equipment (for soil stabilization), Road Widener, Roller (all above subgrade), Sea Mule, Self-contained Rideon Rock Drill(Excluding Air-Track Type Drill), Skidder, Tractor with Dozer and/or Pusher, Trencher, Tugger Hoist, Vacum machine (mounted or towed), Vermeer saw (ride on, any size or type), Welder, Winch, Winch Cat

CLASSIFICATION C:

A Frame Winch Hoist on Truck, Articulated Heavy Hauler, Aggregate Plant, Asphalt or Concrete Grooving Machine (ride on), Ballast Regulator(Ride-on), Boiler (used in conjunction with production), Bituminous Heater (self-propelled), Boat (powered), Cement and Bin Operator, Concrete Pavement Spreader and Finisher Concrete Paver or Mixer (16' and under), Concrete Saw (self-propelled), Conveyor, Deck Hand, Directional Drill Machine Locator, Drill (Core and Well), Farm Tractor with accessories, Fine Grade Machine, Fireman, Fork Lift, Form Tamper, Grout Pump, Gunite Machine, Hammers (Hydraulic self-propelled), Hydra-Spiker (ride-on), Hydraulic Pump (jacking system), Hydro-Blaster (Water), Mulching Machine, Oiler, Parapet Concrete or Pavement Grinder, Post Hole Digger and Post Driver, Power Broom (towed), Power Heaterman, Power Sweeper, Revinius Widener, Roller (Grade and Fill), Scarifier (ride-on), Shell Winder, Skid steer loader (Bobcat or similar), Span-Saw (ride-on), Steam Cleaner, Tamper (ride-on), Tie Extractor (ride-on), Tie Handler (ride-on), Tie Inserter (ride-on), Tie Spacer (ride-on), Tire Repair, Track Liner (ride-on), Tractor, Tractor (with towed accessories), Vibratory Compactor, Vibro Tamp, Well Point, and the following hands-off equipment: Compressors, Dust Collectors, Generators, Pumps, Welding Machines, Light Plants and Heaters

- Note for all above classifications of Operating Engineer - In the event that equipment listed above is operated by robotic control, the classification covering the operation will be the same as if manually operated.

WAGES per hour

07/01/2022
\$ 51.03
49.42
48.51
45.94

Additional \$2.50 per hour for All Employees who work a single irregular work shift starting from 5:00 PM to 1:00 AM that is mandated by the Contracting Agency.

Additional \$2.50 per hr. for hazardous waste removal work on State and/or Federally designated waste site which require employees to wear Level C or above forms of personal protection.

- (*) Premiums for CRANES is based upon Class A rates with the following premiums:
- Additional \$4.00 per hr for Tower Cranes, including self erecting.
- Additional \$3.00 per hr for Lattice Boom Cranes and all other cranes with a manufacturers rating of fifty (50) tons and over.
- Additional \$2.00 per hr for all Hydraulic Cranes and Derricks with a manufacturer's rating of 49 ton and below, including boom trucks.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour

Journeyperson \$30.75

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

Note: If the holiday falls on Sunday, it will be celebrated on Monday. If the Holiday falls on a Saturday employer can choose to celebrate Saturday or give Friday off with pay.

REGISTERED APPRENTICES

Wages per hour

1000 hours terms at the following percentage of Journeyperson's wage Class B

1st 2nd 3rd 4th 60% 70% 80% 90%

Supplemental Benefits per hour worked

All Terms \$ 26.15

1-158H/H Alb

Operating Engineer - Survey Crew

10/01/2022

JOB DESCRIPTION Operating Engineer - Survey Crew ENTIRE COUNTIES

Prevailing Wage Rates for 07/01/2022 - 06/30/2023 Last Published on Oct 01 2022

Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES

Dutchess: The northern portion of the county from the northern boundary line of the City of Poughkeepsie, north.

Genesee: Only the portion of the county that lies east of a line down the center of Route 98 to include all area that lies within the City of Batavia.

WAGES

These rates apply to Building, Tunnel and Heavy Highway.

Per hour:

SURVEY CLASSIFICATIONS:

Party Chief - One who directs a survey party.

Instrument Person - One who operates the surveying instruments.

Rod Person - One who holds the rods and assists the Instrument Person.

07/01/2022

Party Chief \$47.37 Instrument Person 43.51 Rod Person 32.26

Additional \$3.00/hr. for Tunnel Work

Additional \$2.50/hr. for Hazardous Work Site

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 28.05

OVERTIME PAY

See (B, E, P, *X) on OVERTIME PAGE

*Note: \$24.10/Hr. Only for "ALL" premium hours paid when worked.

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: 1000 hour terms based on the Percentage of Rod Persons Wage:

07/01/2022

0-1000 60% 1001-2000 70% 2001-3000 80%

SUPPLEMENTAL BENEFIT per hour worked:

0-1000 \$ 19.83 / PHP \$17.03 1001-2000 22.85 / " 19.45 2001-3000 25.88 / " 21.93

NOTE: PHP is premium hours paid when worked.

12-158-545 D.H.H.

Operating Engineer - Survey Crew - Consulting Engineer

10/01/2022

JOB DESCRIPTION Operating Engineer - Survey Crew - Consulting Engineer

DISTRICT 12

ENTIRE COUNTIES

Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES

Dutchess: The northern portion of the county from the northern boundary line of the City of Poughkeepsie, north.

Genesee: Only the portion of the county that lies east of a line down the center of Route 98 to include all area that lies within the City of

Batavia.

WAGES

These rates apply to feasibility and preliminary design surveying, line and grade surveying for inspection or supervision of construction when performed under a Consulting Engineer Agreement.

Per hour:

SURVEY CLASSIFICATIONS:

Party Chief - One who directs a survey party.

Instrument Person - One who operates the surveying instruments.

Rod Person - One who holds the rods and assists the Instrument Person.

07/01/2022

Party Chief \$47.37 Instrument Person 43.51 Rod Person 32.26

Additional \$3.00/hr. for Tunnel Work.

Additional \$2.50/hr. for EPA or DEC certified toxic or hazardous waste work.

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$28.05

OVERTIME PAY

See (B, E, Q, *X) on OVERTIME PAGE

*Note: \$24.10/Hr. Only for "ALL" premium hours paid when worked.

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: 1000 hour terms based on percentage of Rod Persons Wage:

07/01/2022

0-1000 60% 1001-2000 70% 2001-3000 80%

SUPPLEMENTAL BENEFIT per hour worked:

0-1000 \$ 19.83 / PHP \$17.03 1001-2000 \$ 22.85 / " 19.45 2001-3000 \$ 25.88 / " 21.93

NOTE: PHP is premium hours paid when worked.

12-158-545 DCE

DISTRICT 7

Operating Engineer - Tunnel

10/01/2022

JOB DESCRIPTION Operating Engineer - Tunnel

ENTIRE COUNTIES

Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES

Dutchess: Northern part of Dutchess, to the northern boundary line of the City of Poughkeepie, then due east to Route 115 to Bedell Road, then east along Bedell Road to VanWagner Road, then north along VanWagner Road to Bower Road, then east along Bower Road to Rte. 44 east to Rte. 343, then along Rte. 343 east to the northern boundary of the Town of Dover Plains and east along the northern boundary of the Town of Dover Plains, to the borderline of the State of Connecticut.

Genesee: Only that portion of the county that lies east of a line drawn down the center of Route 98 and the entirety of the City of Batavia.

WAGES

CLASS A: Automatic Concrete Spreader (CMI Type); Automatic Fine Grader; Backhoe (except tractor mounted, rubber tired); Belt Placer (CMI Type); Blacktop Plant (automated); Cableway; Caisson Auger; Central Mix Concrete Plant (automated); Concrete Curb Machine (self-propelled slipform); Concrete Pump (8" or over); Dredge; Dual Drum Paver; Excavator; Front End Loader (4 cu. yd & over); Gradall; Head Tower (Sauerman or Equal); Hoist (shaft); Hoist (two or three Drum); Log Chipper/Loader (self-feeder); Maintenance Engineer (shaft and tunnel); any Mechanical Shaft Drill; Mine Hoist; Mining Machine(Mole and similar types); Mucking Machine or Mole; Overhead Crane (Gantry or Straddle Type); Pile Driver; Power Grader; Remote Controlled Mole or Tunnel Machine; Scraper; Shovel; Side Boom; Slip Form Paver (If a second man is needed, they shall be an Oiler); Tripper/Maintenance Engineer (shaft & tunnel); Tractor Drawn Belt-Type Loader; Tug Operator (manned rented equipment excluded); Tunnel Shovel

CLASS B: Automated Central Mix Concrete Plant; Backhoe (topside); Backhoe (track mounted, rubber tired); Backhoe (topside); Bituminous Spreader and Mixer, Blacktop Plant (non-automated); Blast or Rotary Drill (truck or tractor mounted); Boring Machine; Cage Hoist; Central Mix Plant(non-automated); all Concrete Batching Plants; Compressors (4 or less exceeding 2,000 c.f.m. combined capacity); Concrete Pump; Crusher; Diesel Power Unit; Drill Rigs (tractor mounted); Front End Loader (under 4 cu. yd.); Grayco Epoxy Machine; Hoist (One Drum); Hoist (2 or 3 drum topside); Knuckle Boom material handler; Kolman Plant Loader & similar type Loaders (if employer requires another person to clean the screen or to maintain the equipment, they shall be an Oiler); L.C.M. Work Boat Operator; Locomotive; Maintenance Engineer (topside); Maintenance Grease Man; Mixer (for stabilized base-self propelled); Monorail Machine; Plant Engineer; Personnel Hoist; Pump Crete; Ready Mix Concrete Plant; Refrigeration Equipment (for soil stabilization); Road Widener; Roller (all above sub-grade); Sea Mule; Shotcrete Machine; Shovel (topside); Tractor with Dozer and/or Pusher; Trencher; Tugger Hoist; Tunnel Locomotive; Vacuum Machine (mounted or towed); Welder; Winch; Winch Cat

CLASS C: A Frame Truck; All Terrain Telescoping Material Handler; Ballast Regulator (ride-on); Compressors (4 not to exceed 2,000 c.f.m. combined capacity; or 3 or less with more than 1200 c.f.m. but not to exceed 2,000 c.f.m.); Compressors ((any size, but subject to other provisions for compressors), Dust Collectors, Generators, Pumps, Welding Machines, Light Plants (4 or any type combination)); Concrete Pavement Spreaders and Finishers; Conveyor; Drill (core); Drill (well); Electric Pump used in conjunction with Well Point System; Farm Tractor with Accessories; Fine Grade Machine; Fork Lift; Grout Pump (over 5 cu. ft.); Gunite Machine; Hammers (hydraulic-self-propelled); Hydra-Spiker (ride-on); Hydra-Blaster (water); Hydro-Blaster; Motorized Form Carrier; Post Hole Digger and Post Driver; Power Sweeper; Roller grade & fill); Scarifer (ride-on); Span-Saw (ride-on); Submersible Electric Pump (when used in lieu of well points); Tamper (ride-on); Tie-Extractor (ride-on), Tie Handler (ride-on), Tie Inserter (ride-on), Tie Spacer (ride-on); Track Liner (ride-on); Tractor with towed accessories; Vibratory Compactor; Vibro Tamp, Well Point

CLASS D: Aggregate Plant; Cement & Bin Operator; Compressors (3 or less not to exceed 1,200 c.f.m. combined capacity); Compressors ((any size, but subject to other provisions for compressors), Dust Collectors, Generators, Pumps, Welding Machines, Light Plants (3 or less or any type or combination)); Concrete Saw (self-propelled); Form Tamper; Greaseman; Hydraulic Pump (jacking system); Junior Engineer; Light Plants; Mulching Machine; Oiler; Parapet Concrete or Pavement Grinder; Power Broom (towed); Power Heaterman (when used for production); Revinius Widener; Shell Winder; Steam Cleaner; Tractor

07/01/2022
\$ 52.60
50.19
48.97
46.18
43.17

Additional \$5.00 per hour for Hazardous Waste Work on a state or federally designated hazardous waste site where the Operating Engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin and eye protection. Fringe benefits will be paid at the hourly wage premium.

CRANES

Crane 1: All cranes, including self-erecting to be paid \$4.00 per hour over the Class A rate.

Crane 2: All Lattice Boom Cranes and all cranes with a manufacturer's rating of fifty (50) ton and over to be paid \$3.00 per hour over Class A rate.

Crane 3: All hydraulic cranes and derricks with a manufacturer's rating of forty nine (49) ton and below, including boom trucks, to be paid \$2.00 per hour over Class A rate.

Crane 1	\$ 54.19
Crane 2	53.19
Crane 3	52.19

SUPPLEMENTAL BENEFITS

Per hour:

\$ 23.70 + 9.35*

OVERTIME PAY

See (B, B2, E, Q, X) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE If a holiday falls on Sunday, it shall be observed on Monday.

REGISTERED APPRENTICES

WAGES:(1000) hours terms at the following percentage of Journeyman's Class B wage.

1st term 60% 2nd term 65%

^{*} This portion of benefits subject to same premium rate as shown for overtime wages.

3rd term 70% 4th term 75%

SUPPLEMENTAL BENEFITS per hour: Same as Journeyman

7-158-832TL.

Painter	10/01/2022

JOB DESCRIPTION Painter DISTRICT 2

ENTIRE COUNTIES

Delaware, Otsego

WAGES

Per hour:

	07/01/2022	05/01/2023 Additional	05/01/2024 Additional
Painter	\$ 27.64	\$ 1.35*	\$ 1.35*
Taper, Paperhangers, and Vinyl hangers	29.02	1.42*	1.42*

^{*}To be allocated at a later date.

ADDITIONAL AMOUNTS FOR SPECIFIC TYPES OF JOBSITE CONDITIONS (amount subject to any overtime premiums):

- Additional \$ 1.10 per hour for Brush and Roll Epoxy (Solvent Base Only)
- Additional \$ 0.60 per hour for Swing Scaffold, Boatswain chair, Spray helper, Steam cleaning acid and high pressure water, Power grinders with respirator
- Additional \$ 0.60 per hour for Structural steel (buildings) defined as new or old construction where ceilings, walls or the steel itself is to be painted from open trusses which require climbing or crawling without the support of solid scaffolding or scaffolding starting at the floor or ground level.
- Additional \$ 1.00 per hour for Spray Painting
- Additional \$ 1.00 per hour for Steeple Jack (Over 100 feet)
- Additional \$ 1.50 per hour for Spray Epoxy (Solvent Based)
- Additional \$ 0.90 per hour for Sandblasting

NOTE - SEE BRIDGE PAINTER RATES FOR BRIDGES & TANKS

** IMPORTANT NOTICE - EFFECTIVE 04/01/2009 **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 22.24

OVERTIME PAY

See (B, *E2, F, R) on OVERTIME PAGE

*Saturday is also payable at the straight time rate if the employee misses work, except where a doctor or hospital's verification of illness is produced Monday through Friday when work was available to the employee. Saturday is not a make-up day when work is missed as a result of a Holiday.

If working 4 (four) 10 (ten) hour day schedule, Friday will be the makeup day.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

A Holiday that falls on a Sunday will be celebrated on Monday, a holiday that falls on a Saturday will be celebrated on Friday.

REGISTERED APPRENTICES

WAGES:

Painter: 750 hour terms at the Painter Apprentice wage rate:

1st	2nd	3rd	4th	5th	6th	7th	8th
\$ 18.00	\$ 19.00	\$ 20.00	\$ 21.00	\$ 22.00	\$ 23.00	\$ 24.00	\$ 25.00

Taper: 750 hour terms at the following Journeyman Taper Apprentice wage rate:

1st	2nd	3rd	4th	5th	6th
\$ 20.00	\$ 21.00	\$ 22.00	\$ 23.00	\$ 24.00	\$ 25.00

ADDITIONAL AMOUNTS FOR SPECIFIC TYPES OF JOBSITE CONDITIONS (amount subject to any overtime premiums):

- Additional \$ 1.10 per hour for Brush and Roll Epoxy (Solvent Base Only)
- Additional \$ 0.60 per hour for Swing Scaffold, Boatswain chair, Spray helper, Steam cleaning acid and high pressure water, Power grinders with respirator
- Additional \$ 0.60 per hour for Structural steel (buildings) defined as new or old construction where ceilings, walls or the steel itself is to be painted from open trusses which require climbing or crawling without the support of solid scaffolding or scaffolding starting at the floor or ground level.
- Additional \$ 1.00 per hour for Spray Painting
- Additional \$ 1.00 per hour for Steeple Jack (Over 100 feet)
- Additional \$ 1.50 per hour for Spray Epoxy (Solvent Based)
- Additional \$ 0.90 per hour for Sandblasting

SUPPLEMENTAL BENEFITS per hour:

Painter/Decorator:

1st	2nd	3rd	4th	5th	6th	7th	8th
\$ 6.00	\$ 7.00	\$ 8.00	\$ 9.10	\$ 11.00	\$ 11.00	\$ 13.00	\$ 14.00
Taper/Drywall	Finisher:						
1st	2nd	3rd	4th	5th	6th		
\$ 6.00	\$ 7.00	\$ 8.00	\$ 10.00	\$ 13.00	\$ 14.00		

2-178 O

Painter 10/01/2022

JOB DESCRIPTION Painter

DISTRICT 3

ENTIRE COUNTIES

Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Cortland, Delaware, Erie, Genesee, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Wayne, Wyoming, Yates

WAGES

Per hour: 07/01/2022

Bridge \$41.06 Tunnel 41.06 Tank* 39.06

For Bridge Painting Contracts, ALL WORKERS on and off the bridge (including Flagmen) are to be paid Painter's Rate; the contract must be ONLY for Bridge Painting.

Tank rate applies to indoor and outdoor tanks, tank towers, standpipes, digesters, waste water treatment tanks, chlorinator tanks, etc. Covers all types of tanks including but not limited to steel tanks, concrete tanks, fiberglass tanks, etc.

Note an additional \$1.50 per hour is required when the contracting agency or project specification requires any shift to start prior to 6:00am or after 12:00 noon.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 29.89

OVERTIME PAY

Exterior work only See (B, E4, F*, R) on OVERTIME PAGE.

All other work See (B, F*, R) on OVERTIME PAGE.

*Note - Saturday is payable at straight time if the employee misses work, except where a doctor's or hospital verification of illness is produced Monday through Friday when work was available to the employee.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

750 hour terms at the following percentage of Journeyman's wage rate:

1st 2nd 3rd 4th 5th 6th \$ 24.00 \$ 26.00 \$ 28.00 \$ 30.00 \$ 34.00 \$ 38.00

Supplemental benefits per hour:

1st 2nd 3rd 4th 5th 6th \$ 6.60 \$ 6.95 \$ 7.30 \$ 7.65 \$ 8.00 \$ 8.35 Painter - Metal Polisher 10/01/2022

JOB DESCRIPTION Painter - Metal Polisher

DISTRICT 8

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

 07/01/2022

 Metal Polisher
 \$ 37.78

 Metal Polisher*
 38.80

 Metal Polisher**
 41.78

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2022

Journeyworker:

All classification \$ 11.24

OVERTIME PAY

See (B, E, P, T) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE Overtime: See (5, 6, 9, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One (1) year term at the following wage rates:

1st year \$ 16.00 2nd year 17.00 3rd year 18.00 1st year* \$ 16.39 2nd year* 17.44 3rd year* 18.54 1st year** \$ 18.50 2nd year** 19.50 3rd year** 20.50		07/01/2022
3rd year 18.00 1st year* \$ 16.39 2nd year* 17.44 3rd year* 18.54 1st year** \$ 18.50 2nd year** 19.50	1st year	\$ 16.00
1st year* \$ 16.39 2nd year* 17.44 3rd year* 18.54 1st year** \$ 18.50 2nd year** 19.50	2nd year	17.00
2nd year* 17.44 3rd year* 18.54 1st year** \$ 18.50 2nd year** 19.50	3rd year	18.00
3rd year* 18.54 1st year** \$ 18.50 2nd year** 19.50	1st year*	\$ 16.39
1st year** \$ 18.50 2nd year** 19.50	2nd year*	17.44
2nd year** 19.50	3rd year*	18.54
	1st year**	\$ 18.50
3rd year** 20.50	2nd year**	19.50
	3rd year**	20.50

^{*}Note: Applies on New Construction & complete renovation

Supplemental benefits:

Per hour:

 1st year
 \$ 7.99

 2nd year
 7.99

 3rd year
 7.99

8-8A/28A-MP

Plumber 10/01/2022

JOB DESCRIPTION Plumber

DISTRICT 2

ENTIRE COUNTIES

Broome, Chenango

PARTIAL COUNTIES

Cortland: Only the Township of Marathon.

Delaware: Only the Townships of Andes, Bovina, Colchester, Davenport, Delhi, Deposit, Franklin, Hamden, Hancock, Harpersfield,

Kortright, Masonville, Meredith, Sidney, Stamford, Tompkins and Walton.

Madison: Only the Township of Georgetown.

^{*}Note: Applies on New Construction & complete renovation

^{**} Note: Applies when working on scaffolds over 34 feet.

^{**} Note: Applies when working on scaffolds over 34 feet.

Prevailing Wage Rates for 07/01/2022 - 06/30/2023 Last Published on Oct 01 2022

Otsego: Only the Townships of Burlington, Butternuts, Decatur, Edmeston, Hartwick, Laurens, Maryland, Milford, Morris, New Lisbon, Oneonta, Otego, Pittsfield, Unadilla, Westford and Worchester.

Tioga: Only the Townships of Newark Valley and Owego.

WAGES

Per hour:	07/01/2022	05/01/2023
		Additional
Plumber	\$ 38.23	\$ 2.50
Steamfitter	38.23	2.50

Agency-mandated shift operations:

- 1. Shift work shall start no earlier than 6AM Monday and will conclude no later than 9AM Saturday (overtime premiums applicable after 8 hours in a shift).
- 2. Single irregular shiftwork, less than 3 consecutive days will be paid at the rate of time and one-half of the regular hourly rate.
- 3. 3 consecutive work days or more:

First Shift - No Premium (Starting 6AM-9AM) Second Shift - Regular hourly rate plus 12% Third Shift - Regular hourly rate plus 18%

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$14.45 +16.49*

OVERTIME PAY

See (B, E, Q, *V) on OVERTIME PAGE

*portion of supplemental benefits subject to V code when project cost is over one hundred million (including engineering & architecture).

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

When a Holiday falls on Sunday, it will be celebrated the following day. If the holiday falls on a Saturday, it will be observed that day unless so determined by the Federal Government to be celebrated on a different day.

REGISTERED APPRENTICES

WAGES: One year terms at the following percentage of Journeyman's wage.

1st.	2nd.	3rd.	4th.	5th.
50%	55%	60%	70%	85%

SUPPLEMENTAL BENEFITS per hour:

1st term \$ 14.45 +8.10* All other terms \$ 14.45 +12.49*

2-112s-SF

Plumber 10/01/2022

JOB DESCRIPTION Plumber

DISTRICT 7

ENTIRE COUNTIES

Herkimer, Oneida

PARTIAL COUNTIES

Hamilton: Only the Town of Inlet.

Lewis: Towns of Lewis, Leyden, Lyonsdale, and West Turin.

Madison: Towns of Brookfield, Eaton, Fenner, Hamilton, Lebanon, Lenox, Lincoln, Madison, Nelson, Oneida, Smithfield, and Stockbridge. Otsego: Towns of Cherry Valley, Exeter, Middlefield, Otsego, Plainfield, Richfield, Roseboom and Springfield.

WAGES

Per hour: 07/01/2022 05/01/2023

^{*}This portion of the benefit is subject to the SAME PREMIUM as shown for overtime on projects over \$100 million in total construction costs (including engineering & architecture).

^{*}This portion of the benefit is subject to the SAME PREMIUM as shown for overtime on projects over \$100 million in total construction costs (including engineering & architecture).

		Additional
Plumber	\$ 39.25	\$ 2.50
Steamfitter	39.25	2.50

Agency-mandated shift operations:

- 1. Shift work shall start no earlier than 6AM Monday and will conclude no later than 9AM Saturday (overtime premiums applicable after 8 hours in a shift).
- 2. Single irregular shiftwork, less than 3 consecutive days will be paid at the rate of time and one-half of the regular hourly rate.
- 3. 3 consecutive work days or more:

First Shift - No Premium (Starting time 6AM-9AM) Second Shift - Regular hourly rate plus 12% Third Shift - Regular hourly rate plus 18%

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 14.45 + 16.95*

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

If a holiday falls on Sunday, it will be observed the following day. If a holiday falls on Saturday, it will be observed that day unless so determined by the Federal Government to be celebrated on a different day.

REGISTERED APPRENTICES

WAGES: Yearly terms at the following percentages of Journeyman's wage.

1st 2nd 3rd 4th 5th 55% 60% 70% 85%

SUPPLEMENTAL BENEFITS per hour:

1st Term: \$ 14.45 + 8.10* All others: \$ 14.45

+ 12.49*

7-112n-SF

Roofer 10/01/2022

JOB DESCRIPTION Roofer DISTRICT 2

ENTIRE COUNTIES

Broome, Chemung, Chenango, Delaware, Otsego, Schoharie, Schuyler, Steuben, Tioga, Tompkins

WAGES

Per hour: 07/01/2022

Roofer, Waterproofer \$ 29.05

NOTE ADDITIONAL PREMIUMS PAID FOR THE FOLLOWING WORK LISTED BELOW (amount not subject to overtime premiums):

- On days where more than one shift is worked on the job, the hours worked after 4:30 PM and before 6:30 AM will be paid an additional \$1.90 per hour premium. This premium is not for use in emergency repair situations.
- Premium of \$0.75 per hour will be paid for the application, rip-off or handling of pitch products. The premium will be paid for pitch that is showing, covered or buried on the roof.
- Premium of \$0.70 per hour will be paid when half faced respirator is required by Employer, Building Owner, or Public Entity.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 18.29

^{*} This portion of the benefit is subject to the SAME PREMIUM as shown for overtime on projects over \$100 million in total construction cost (including engineering & architecture).

^{*} This portion of the benefit is subject to the SAME PREMIUM as shown for overtime on projects over \$100 million in total construction cost (including engineering & architecture).

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES: Six month terms at the following percentage of Journeyman's wage.

 1st.
 2nd.
 3rd.
 4th.
 5th.
 6th.

 60%
 65%
 70%
 75%
 80%
 90%

NOTE ADDITIONAL PREMIUMS PAID FOR THE FOLLOWING WORK LISTED BELOW (amount not subject to overtime premiums):

- On days where more than one shift is worked on the job, the hours worked after 4:30 PM and before 6:30 AM will be paid an additional \$1.90 per hour premium. This premium is not for use in emergency repair situations.
- Premium of \$0.75 per hour will be paid for the application, rip-off or handling of pitch products. The premium will be paid for pitch that is showing, covered or buried on the roof.
- Premium of \$0.70 per hour will be paid when half faced respirator is required by Employer, Building Owner, or Public Entity.

SUPPLEMENTAL BENEFITS per hour:

1st term	\$ 14.43
2nd term	14.92
3rd term	15.40
4th term	15.88
5th term	16.37
6th term	17.32

2-203elmi

Sheetmetal Worker 10/01/2022

JOB DESCRIPTION Sheetmetal Worker

DISTRICT 2

ENTIRE COUNTIES

Allegany, Broome, Chemung, Delaware, Otsego, Schuyler, Steuben, Tioga, Tompkins

WAGES

Per hour:

	07/01/2022	05/01/2023	05/01/2024
		Additional	Additional
Sheetmetal Worker	\$ 35.30	\$ 1.75*	\$ 1.75*
Polyresin Fiberglass	35.40	1.75*	1.75*
CAD Operator	36.30	1.75*	1.75*

^{*}To be allocated at a later date.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman: \$21.21

OVERTIME PAY

See (*B1, Q) on OVERTIME PAGE

*On Saturday, time and one half of the hourly rate for the first ten (10) hours, then two (2) times the hourly wage rate for all hours after ten (10) hours worked.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

Note: Holidays are observed on the Holiday, not on the day that it is locally observed.

REGISTERED APPRENTICES

WAGES per hour: Half Year Terms

07/01/2021	1st	2nd	3rd	4th	5th	6th	7th	8th
	21.18	21.18	22.95	24.71	26.48	28.24	30.00	31.78
SUPPLEMENTAL BEN	NEFITS per hour:							
07/01/2021	1st	2nd	3rd	4th	5th	6th	7th	8th
	1.68	1.68	17.70	17.78	17.86	17.94	18.02	18.10
								2-112

Sprinkler Fitter 10/01/2022

JOB DESCRIPTION Sprinkler Fitter

ENTIRE COUNTIES

DISTRICT 1

Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Washington, Wayne, Wyoming, Yates

WAGES

Per hour 07/01/2022

Sprinkler \$ 38.15

Fitter

SUPPLEMENTAL BENEFITS

Per hour

Journeyperson \$ 27.68

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

Note: When a holiday falls on Sunday, the following Monday shall be considered a holiday and all work performed on either day shall be at the double time rate. When a holiday falls on Saturday, the preceding Friday shall be considered a holiday and all work performed on either day shall be at the double time rate.

REGISTERED APPRENTICES

Wages per hour

One Half Year terms at the following wage.

1st \$ 18.30	2nd \$ 20.34	3rd \$ 22.12	4th \$ 24.15	5th \$ 26.19	6th \$ 28.22	7th \$ 30.25	8th \$ 32.29	9th \$ 34.32	10th \$ 36.35
Supplementa	Benefits per	hour							
1st \$ 8.37	2nd \$ 8.37	3rd \$ 19.76	4th \$ 19.76	5th \$ 20.01	6th \$ 20.01	7th \$ 20.01	8th \$ 20.01	9th \$ 20.01	10th \$ 20.01 1-669

Teamster - Building 10/01/2022

JOB DESCRIPTION Teamster - Building

DISTRICT 6

ENTIRE COUNTIES

Broome, Cayuga, Cortland, Delaware, Onondaga, Seneca, Tompkins, Yates

PARTIAL COUNTIES

Allegany: Only the Townships of Almond, Burns, and Alfred.

Chenango: Only the Townships of Afton, Bainbridge, Coventry, Greene, Guilford, Oxford and Smithville. Madison: Only the Townships of Cazenovia, DeRuyter, Fenner, Georgetown, Lenox, Nelson and Sullivan.

Oswego: All Townships except Redfield, Boylston and Sandy Creek.

Otsego: Only the Townships of Butternuts, Laurens, Maryland, Millford, Morris, Oneonta, Otego, Unadilla, and Worchester.

Steuben: Only the Townships of Prattsburg, Canisteo, Fremont, Cohoctan, Dansville, Hornell, Hartsville, Greenwood, West Union,

Troupsburg, and Jasper.

Tioga: Only the Townships of Berkshire, Candor, Newark Valley, Nichols, Owego, Richford, and Tioga. All territory east of Nichols/Smithboro to Broome County, within State of New York.

WAGES

GROUP A: Straight Trucks

GROUP B: Tractor Trailer, Farm Tractor, Fuel Truck.

GROUP C: Euclid.

GROUP D: On site Mechanic.

Per hour: 07/01/2022

Building: (under \$ 5 million*)

GROUP A \$ 24.43

GROUP B 24.43

GROUP C 24.43

GROUP D 24.43

DISTRICT 1

DISTRICT 2

Building: (over \$ 5 million*)

GROUP A \$ 25.48 GROUP B 25.58 GROUP C 25.83 GROUP D 25.63

SUPPLEMENTAL BENEFITS

Per hour:

(under \$5 million*) \$ 28.63 (over \$5 million*) 29.37

OVERTIME PAY

(D, O) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

6-317

Teamster - Building 10/01/2022

JOB DESCRIPTION Teamster - Building

ENTIRE COUNTIES

Hamilton, Herkimer, Oneida

PARTIAL COUNTIES

Chenango: Entire county except the Townships of Afton, Bainbridge, Coventry, Greene, Guilford, Oxford and Smithville.

Lewis: Only the Township of Grieg, Lewis, Leyden, Lowville, Lyonsdale, Martinsburg, Turin, West Turin and Watson.

Madison: Only the Townships of Brookfield, Eaton, Hamilton, Lebanon, Lincoln, Madison, Smithfield, Stockbridge and the City of Oneida Otsego: Entire county EXCEPT Townships of Butternuts, Laurens, Maryland, Milford, Morris, Oneonta, Otego, Unidilla and Worchester.

WAGES

GROUP # A:

Straight trucks, winch, transit mix on the site, road oilers, dump trucks, pick-ups, panel, water trucks, fuel trucks on the site (including nozzle).

GROUP # B:

Low boy or Low boy trailer, Euclids or similar equipment.

WAGES per hour

07/01/2022

Group A \$ 26.14 Group B 26.44

SUPPLEMENTAL BENEFITS

Per hour

Journeyperson \$ 26.54

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

Note: Any holiday which occurs on Sunday shall be observed the following Monday.

1-294z2

Teamster - Heavy&Highway

10/01/2022

JOB DESCRIPTION Teamster - Heavy&Highway

ENTIRE COUNTIES

Broome, Delaware

PARTIAL COUNTIES

^{*} Total project cost including General Construction, Plumbing, HVAC and Electrical

^{*} Total project cost including General Construction, Plumbing, HVAC and Electrical

Chenango: Only the Townships of Smithville, Greene, Coventry, Oxford, Afton, Bainbridge and Guilford. Otsego: Only the Townships of Butternuts, Laurens, Maryland, Milford, Morris, Oneonta, Otego, Unadilla and Worchester. Tioga: Only the Townships of Nichols, Tioga, Candor, Richford, Berkshire, Newark Valley and Owego.

WAGES

Per hour:

GROUP #1: Warehousemen, Yardmen, Truck Helpers, Pickups, Panel Trucks, Flatboy Material Trucks (straight jobs), Single Axle Dump Trucks, Dumpsters, Material Checkers and Receivers, Greasers, Truck Tiremen, Mechanic Helpers and Parts Chasers, Tandems and Batch Trucks, Mechanics, Dispatcher. Semi-Trailers, Low-boy Trucks, Asphalt Distributor Trucks, Agitator, Mixer Trucks and Dumpcrete type vehicles, Truck Mechanic, Fuel Trucks.

GROUP #2: Specialized Earth Moving Equipment-Euclid type or similar off-highway where not self-loading. Straddle (Ross) Carrier, and self-contained concrete mobile truck. Off-highway Tandem Back-Dump, Twin Engine Equipment and Double-Hitched Equipment where not self-loading.

	07/01/2022	07/01/2023	07/01/2024
Group #1	\$ 29.71	\$ 31.57	\$ 33.57
Group #2	29.80	31.66	33.66

NOTES

- An additional \$1.50 per hour shall be paid to an employee who performs hazardous waste removal work on a City, County, State and/or Federally designated waste site where employee is required to use or wear personal protective equipment.
- A single irregular work shift can star an time between 5:00pm and 1:00am. All employees who work a single irregular shift on governmental mandated night work shall be paid an additional \$2.50 per hour (applicable on projects bid on or after 07/01/2020).

SUPPLEMENTAL BENEFITS

Per hour paid:

07/01/2022 07/01/2023 07/01/2024 \$ 26.62 \$ 27.26 \$ 27.76

OVERTIME PAY

See (B, E, Q, X) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE If a holiday falls on Sunday, it will be celebrated Monday.

Any employee laid off within the week in which a holiday falls shall receive holiday pay.

2-317(Bing)

Teamster - Heavy&Highway

10/01/2022

DISTRICT 1

JOB DESCRIPTION Teamster - Heavy&Highway

ENTIRE COUNTIES

Albany, Columbia, Fulton, Greene, Hamilton, Herkimer, Montgomery, Oneida, Rensselaer, Saratoga, Schenectady, Schoharie, Washington

PARTIAL COUNTIES

Chenango: Entire county except the Townships of Afton, Bainbridge, Coventry, Greene, Guilford, Oxford and Smithville.

Lewis: Only the Township of Grieg, Lewis, Leyden, Lowville, Lyonsdale, Martinsburg, Turin, West Turin and Watson.

Madison: Only the Townships of Brookfield, Eaton, Hamilton, Lebanon, Lincoln, Madison, Smithfield, Stockbridge and the City of Oneida Otsego: Entire county EXCEPT Townships of Butternuts, Laurens, Maryland, Milford, Morris, Oneonta, Otego, Unidilla and Worchester.

Warren: Only the Townships of Bolton, Warrensburg, Thurman, Stony Creek, Luzerne, Caldwell (Lake George), and Queensbury.

WAGES

GROUP #1:

Warehousemen, Yardmen, Truck Helpers, Pickups, Panel Trucks, Flatboy Material Trucks(straight jobs), Single Axel Dump Trucks, Dumpsters, Material Checkers and Receivers, Greasers, Truck Tiremen, Mechanics Helpers and Parts Chasers.

GROUP #2:

Tandems and Batch Trucks, Mechanics, Dispatcher.

GROUP #3:

Semi-Trailers, Low-boy Trucks, Asphalt Distributor Trucks, and Agitator, Mixer Trucks and dumpcrete type vehicles, Truck Mechanic, Fuel Trucks.

GROUP #4:

Specialized Earth Moving Equipment, Euclid type, or similar off-highway, where not self-loading, Straddle (Ross) Carrier, and self-contained concrete mobile truck.

GROUP #5:

Off-highway Tandem Back-Dump, Twin Engine Equipment and Double-Hitched Equipment where not self-loading.

WAGES per hour	07/01/2022	07/01/2023
Group #1	\$ 34.90	\$ 37.59
Group #2	34.96	37.65
Group #3	35.05	37.74
Group #4	35.18	37.87
Group #5	35.34	38.03

Hazardous waste projects that require a Level C or greater protection shall be paid an additional \$ 1.00 per hour.

All employees who work a single irregular work shift starting between 5pm and 1 am on governmental mandated night shifts shall be paid an additional \$1.50 per hour.

For work bid on or after April 1, 1995, there shall be a 12 month carryover of the last posted rate in effect at the time of the bid.

** IMPORTANT NOTICE - EFFECTIVE 04/01/2009 **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Friday.

NOTE - In order to use the '4 Day/10 Hour Work schedule', as your normal schedule, you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30.1; and there must be a dispensation of hours in place on the project. If the PW30.1 is not submitted you may be liable for overtime payments for work over 8 hours per day.

SUPPLEMENTAL BENEFITS

Per hour:

\$ 27.32 \$ 28.13 +\$1.00 per* +\$1.00 per* hour worked hour worked

(*) not applicable to paid holidays

OVERTIME PAY

See (B, E, Q, X) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

1-294h/h

Welder 10/01/2022

JOB DESCRIPTION Welder

DISTRICT 1

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

Per hour 07/01/2022

Welder: To be paid the same rate of the mechanic performing the work.*

*EXCEPTION: If a specific welder certification is required, then the 'Certified Welder' rate in that trade tag will be paid.

OVERTIME PAY

HOLIDAY

1-As Per Trade

Overtime Codes

Following is an explanation of the code(s) listed in the OVERTIME section of each classification contained in the attached schedule. Additional requirements may also be listed in the HOLIDAY section.

NOTE: Supplemental Benefits are 'Per hour worked' (for each hour worked) unless otherwise noted

(AA)	Time and one half of the hourly rate after 7 and one half hours per day
(A)	Time and one half of the hourly rate after 7 hours per day
(B)	Time and one half of the hourly rate after 8 hours per day
(B1)	Time and one half of the hourly rate for the 9th & 10th hours week days and the 1st 8 hours on Saturday. Double the hourly rate for all additional hours
(B2)	Time and one half of the hourly rate after 40 hours per week
(C)	Double the hourly rate after 7 hours per day
(C1)	Double the hourly rate after 7 and one half hours per day
(D)	Double the hourly rate after 8 hours per day
(D1)	Double the hourly rate after 9 hours per day
(E)	Time and one half of the hourly rate on Saturday
(E1)	Time and one half 1st 4 hours on Saturday; Double the hourly rate all additional Saturday hours
(E2)	Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
(E3)	Between November 1st and March 3rd Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather, provided a given employee has worked between 16 and 32 hours that week
(E4)	Saturday and Sunday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
(E5)	Double time after 8 hours on Saturdays
(F)	Time and one half of the hourly rate on Saturday and Sunday
(G)	Time and one half of the hourly rate on Saturday and Holidays
(H)	Time and one half of the hourly rate on Saturday, Sunday, and Holidays
(1)	Time and one half of the hourly rate on Sunday
(J)	Time and one half of the hourly rate on Sunday and Holidays
(K)	Time and one half of the hourly rate on Holidays
(L)	Double the hourly rate on Saturday
(M)	Double the hourly rate on Saturday and Sunday
(N)	Double the hourly rate on Saturday and Holidays
(O)	Double the hourly rate on Saturday, Sunday, and Holidays
(P)	Double the hourly rate on Sunday
(Q)	Double the hourly rate on Sunday and Holidays
(R)	Double the hourly rate on Holidays
(S)	Two and one half times the hourly rate for Holidays

- (S1) Two and one half times the hourly rate the first 8 hours on Sunday or Holidays One and one half times the hourly rate all additional hours.
- (T) Triple the hourly rate for Holidays
- (U) Four times the hourly rate for Holidays
- (V) Including benefits at SAME PREMIUM as shown for overtime
- (W) Time and one half for benefits on all overtime hours.
- (X) Benefits payable on Paid Holiday at straight time. If worked, additional benefit amount will be required for worked hours. (Refer to other codes listed.)

Holiday Codes

PAID Holidays:

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

OVERTIME Holiday Pay:

(28)

Easter Sunday

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays. The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Following is an explanation of the code(s) listed in the HOLIDAY section of each classification contained in the attached schedule. The Holidays as listed below are to be paid at the wage rates at which the employee is normally classified.

(1)	None
(2)	Labor Day
(3)	Memorial Day and Labor Day
(4)	Memorial Day and July 4th
(5)	Memorial Day, July 4th, and Labor Day
(6)	New Year's, Thanksgiving, and Christmas
(7)	Lincoln's Birthday, Washington's Birthday, and Veterans Day
(8)	Good Friday
(9)	Lincoln's Birthday
(10)	Washington's Birthday
(11)	Columbus Day
(12)	Election Day
(13)	Presidential Election Day
(14)	1/2 Day on Presidential Election Day
(15)	Veterans Day
(16)	Day after Thanksgiving
(17)	July 4th
(18)	1/2 Day before Christmas
(19)	1/2 Day before New Years
(20)	Thanksgiving
(21)	New Year's Day
(22)	Christmas
(23)	Day before Christmas
(24)	Day before New Year's
(25)	Presidents' Day
(26)	Martin Luther King, Jr. Day
(27)	Memorial Day
(20)	Factor Cundou

(29) Juneteenth



NEW YORK STATE DEPARTMENT OF LABOR Bureau of Public Work - Debarment List

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Under Article 8 and Article 9 of the NYS Labor Law, a contractor, sub-contractor and/or its successor shall be debarred and ineligible to submit a bid on or be awarded any public work or public building service contract/sub-contract with the state, any municipal corporation or public body for a period of five (5) years from the date of debarment when:

- Two (2) final determinations have been rendered within any consecutive six-year (6) period determining that such contractor, sub-contractor and/or its successor has WILLFULLY failed to pay the prevailing wage and/or supplements;
- One (1) final determination involves falsification of payroll records or the kickback of wages and/or supplements.

The agency issuing the determination and providing the information, is denoted under the heading 'Fiscal Officer'. DOL = New York State Department of Labor; NYC = New York City Comptroller's Office; AG = New York State Attorney General's Office; DA = County District Attorney's Office.

<u>Debarment Database:</u> To search for contractors, sub-contractors and/or their successors debarred from bidding or being awarded any public work contract or subcontract under NYS Labor Law Articles 8 and 9, <u>or</u> under NYS Workers' Compensation Law Section 141-b, access the database at this link: https://applications.labor.ny.gov/EDList/searchPage.do

For inquiries where WCB is listed as the "Agency", please call 1-866-546-9322

AGENCY	Fiscal Officer	FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	DOL	****5754	0369 CONTRACTORS, LLC		515 WEST AVE UNIT PH 13NORWALK CT 06850	05/12/2021	05/12/2026
DOL	DOL	****4018	ADIRONDACK BUILDING RESTORATION INC.		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	AG	****1812	ADVANCED BUILDERS & LAND DEVELOPMENT, INC.		400 OSER AVE #2300HAUPPAUGE NY 11788	09/11/2019	09/11/2024
DOL	DOL	****1687	ADVANCED SAFETY SPRINKLER INC		261 MILL ROAD P.O BOX 296EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	NYC	****6775	ADVENTURE MASONRY CORP.		1535 RICHMOND AVENUE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	NYC		AGOSTINHO TOME		405 BARRETTO ST BRONX NY 10474	05/31/2018	05/31/2023
DOL	NYC		AMJED PARVEZ		401 HANOVER AVENUE STATEN ISLAND NY 10304	01/11/2021	01/11/2026
DOL	DOL		ANGELO F COKER		2610 SOUTH SALINA STREET SUITE 14SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL		ANGELO F COKER		2610 SOUTH SALINA STREET SUITE 14SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL		ANGELO GARCIA		515 WEST AVE UNIT PH 13NORWALK CT 06850	05/12/2021	05/12/2026
DOL	DOL		ANITA SALERNO		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DOL		ANTONIO ESTIVEZ		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	NYC		ARADCO CONSTRUCTION CORP		115-46 132RD ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	DOL		ARNOLD A. PAOLINI		1250 BROADWAY ST BUFFALO NY 14212	02/03/2020	02/03/2025
DOL	NYC		ARSHAD MEHMOOD		168-42 88TH AVENUE JAMAICA NY 11432	11/20/2019	11/20/2024
DOL	NYC	*****2591	AVI 212 INC.		260 CROPSEY AVENUE APT 11GBROOKLYN NY 11214	10/30/2018	10/30/2023
DOL	NYC		AVM CONSTRUCTION CORP		117-72 123RD ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	NYC		AZIDABEGUM		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	DOL	*****8421	B & B DRYWALL, INC		206 WARREN AVE APT 1WHITE PLAINS NY 10603	12/14/2021	12/14/2026
DOL	NYC		BALWINDER SINGH		421 HUDSON ST SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	NYC	****8416	BEAM CONSTRUCTION, INC.		50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
DOL	DOL		BERNARD BEGLEY		38 LONG RIDGE ROAD BEDFORD NY 10506	12/18/2019	12/18/2024
DOL	NYC	****2113	BHW CONTRACTING, INC.		401 HANOVER AVENUE STATEN ISLAND NY 10304	01/11/2021	01/11/2026
DOL	DOL		BIAGIO CANTISANI			06/12/2018	06/12/2023
DOL	DOL	****3627	BJB CONSTRUCTION CORP.		38 LONG RIDGE ROAD BEDFORD NY 10506	12/18/2019	12/18/2024
DOL	DOL	****4512	BOB BRUNO EXCAVATING, INC		5 MORNINGSIDE DR AUBURN NY 13021	05/28/2019	05/28/2024
DOL	DOL		BOGDAN MARKOVSKI		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
DOL	DOL		BRADLEY J SCHUKA		4 BROTHERS ROAD WAPPINGERS FALLS NY 12590	10/20/2020	10/20/2025
DOL	DOL		BRUCE P. NASH JR.		5841 BUTTERNUT ROAD EAST SYRACUSE NY 13057	09/12/2018	09/12/2023
DOL	DOL	*****0225	C&D LAFACE CONSTRUCTION, INC.		8531 OSWEGO RD BALDWINSVILLE NY 13027	02/03/2020	01/09/2023
DOL	DOL	*****9383	C.C. PAVING AND EXCAVATING, INC.		2610 SOUTH SALINA ST SUITE 12SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL	*****9383	C.C. PAVING AND EXCAVATING, INC.		2610 SOUTH SALINA ST SUITE 12SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL	****4083	C.P.D. ENTERPRISES, INC		P.O BOX 281 WALDEN NY 12586	03/03/2020	03/03/2025
DOL	DOL	****5161	CALADRI DEVELOPMENT CORP.		1223 PARK ST. PEEKSKILL NY 10566	05/17/2021	05/17/2026

DOL	DOL	*****3391	CALI ENTERPRISES, INC.		1223 PARK STREET	05/17/2021	05/17/2026
DOL	NYC		CALVIN WALTERS		PEEKSKILL NY 10566 465 EAST THIRD ST	09/09/2019	09/09/2024
DOL	DOL		CANTISANI & ASSOCIATES		MT. VERNON NY 10550 442 ARMONK RD MOUNT KISCSO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CANTISANI HOLDING LLC		WOONT RISCSO INT 10349	06/12/2018	06/12/2023
DOL	DOL		CARMEN RACHETTA		8531 OSWEGO RD BALDWINSVILLE NY 13027	02/03/2020	02/03/2025
DOL	DOL		CARMENA RACHETTA		8531 OSWEGO ROAD BALDWINSVILLE NY 13027	02/03/2020	01/09/2023
DOL	DOL	*****3812	CARMODY "2" INC		BALDWINGVILLE IVI 10021	06/12/2018	06/12/2023
DOL	DOL	****1143	CARMODY BUILDING CORP	CARMODY CONTRACTIN G AND CARMODY CONTRACTIN G CORP.	442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY CONCRETE CORPORATION			06/12/2018	06/12/2023
DOL	DOL		CARMODY ENTERPRISES, LTD.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY INC		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3812	CARMODY INDUSTRIES INC			06/12/2018	06/12/2023
DOL	DOL		CARMODY MAINTENANCE CORPORATION		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CARMODY MASONRY CORP		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	AG	****7247	CENTURY CONCRETE CORP		2375 RAYNOR ST RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	AG		CESAR J. AGUDELO		81-06 34TH AVENUE APT. 6EJACKSON HEIGHTS NY 11372	02/07/2018	02/07/2023
DOL	DOL	*****0026	CHANTICLEER CONSTRUCTION LLC		4 BROTHERS ROAD WAPPINGERS FALLS NY 12590	10/20/2020	10/20/2025
DOL	NYC		CHARLES ZAHRADKA		863 WASHINGTON STREET FRANKLIN SQUARE NY 11010	03/10/2020	03/10/2025
DOL	DOL		CHRISTOPHER GRECO		26 NORTH MYRTLE AVENUE SPRING VALLEY NY 10956	02/18/2021	02/18/2026
DOL	DOL		CHRISTOPHER J MAINI		19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL		CHRISTOPHER PAPASTEFANOU A/K/A CHRIS PAPASTEFANOU		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL	****1927	CONSTRUCTION PARTS WAREHOUSE, INC.	CPW	5841 BUTTERNUT ROAD EAST SYRACUSE NY 13057	09/12/2018	09/12/2023
DOL	DOL	****3228	CROSS-COUNTY LANDSCAPING AND TREE SERVICE, INC.	ROCKLAND TREE SERVICE	26 NORTH MYRTLE AVENUE SPRING VALLEY NY 10956	02/18/2021	02/18/2026
DOL	DOL	*****2524	CSI ELECTRICAL & MECHANICAL INC		42-32 235TH ST DOUGLASTON NY 11363	01/14/2019	01/14/2024
DOL	NYC		DALJIT KAUR BOPARAI		185-06 56TH AVE FRESH MEADOW NY 11365	10/17/2017	10/17/2022
DOL	DOL	****7619	DANCO CONSTRUCTION UNLIMITED INC.		485 RAFT AVENUE HOLBROOK NY 11741	10/19/2021	10/19/2026
DOL	DOL		DARIAN L COKER		2610 SOUTH SALINA ST SUITE 2CSYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL		DARIAN L COKER		2610 SOUTH SALINA ST SUITE 2CSYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	NYC		DAVID WEINER		14 NEW DROP LANE 2ND FLOORSTATEN ISLAND NY 10306	11/14/2019	11/14/2024
DOL	AG		DEBRA MARTINEZ		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		DELPHI PAINTING & DECORATING CO INC		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL		DOMENICO LAFACE		8531 OSWEGO RD BALDWINSVILLE NY 13027	02/03/2020	01/09/2023
DOL	DOL	****5175	EAGLE MECHANICAL AND GENERAL CONSTRUCTION LLC		11371 RIDGE RD WOLCOTT NY 14590	02/03/2020	02/03/2025

DOL	DOL		EAST COAST PAVING		2238 BAKER RD GILLETT PA 16923	03/12/2018	03/12/2023
DOL	AG		EDWIN HUTZLER		23 NORTH HOWELLS RD BELLPORT NY 11713	08/04/2021	08/04/2026
DOL	DA		EDWIN HUTZLER		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	*****0780	EMES HEATING & PLUMBING CONTR		5 EMES LANE MONSEY NY 10952	01/20/2002	01/20/3002
DOL	NYC	****5917	EPOCH ELECTRICAL, INC		97-18 50TH AVE CORONA NY 11368	04/19/2018	04/19/2024
DOL	DOL		FAIGY LOWINGER		11 MOUNTAIN RD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL		FRANK BENEDETTO		19 CATLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL	****4722	FRANK BENEDETTO AND CHRISTOPHER J MAINI	B & M CONCRETE	19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	NYC		FRANK MAINI		1766 FRONT ST YORKTOWN HEIGHTS NY 10598	01/17/2018	01/17/2023
DOL	DA		FREDERICK HUTZLER		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	NYC	****6616	G & G MECHANICAL ENTERPRISES, LLC.		1936 HEMPSTEAD TURNPIKE EAST MEDOW NY 11554	11/29/2019	11/29/2024
DOL	DOL		GABRIEL FRASSETTI			04/10/2019	04/10/2024
DOL	NYC		GAYATRI MANGRU		21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	DOL		GEOFF CORLETT		415 FLAGGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DA		GEORGE LUCEY		150 KINGS STREET BROOKLYN NY 11231	01/19/1998	01/19/2998
DOL	DOL		GIGI SCHNECKENBURGER		261 MILL RD EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DOL		GIOVANNI LAFACE		8531 OSWEGO RD BALDWINSVILLE NY 13027	02/03/2020	01/09/2023
DOL	NYC	*****3164	GLOBE GATES INC	GLOBAL OVERHEAD DOORS	405 BARRETTO ST BRONX NY 10474	05/31/2018	05/31/2023
DOL	NYC		GREAT ESTATE CONSTRUCTION, INC.		327 STAGG ST BROOKLYN NY 11206	10/10/2017	10/10/2022
DOL	DOL		GREGORY S. OLSON		P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL		HANS RATH		24 ELDOR AVENUE NEW CITY NY 10956	02/03/2020	02/03/2025
DOL	NYC	****3228	HEIGHTS ELEVATOR CORP.		1766 FRONT ST YORKTOWN HEIGHTS NY 10598	01/17/2018	01/17/2023
DOL	DOL	****5131	INTEGRITY MASONRY, INC.	M&R CONCRETE	722 8TH AVE WATERVLIET NY 12189	06/05/2018	06/05/2023
DOL	DOL		IRENE KASELIS		32 PENNINGTON AVE WALDWICK NJ 07463	05/30/2019	05/30/2024
DOL	DOL	*****9211	J. WASE CONSTRUCTION CORP.		8545 RT 9W ATHENS NY 12015	03/09/2021	03/09/2026
DOL	DOL		J.A. HIRES CADWALLADER		P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL		JAMES C. DELGIACCO		722 8TH AVE WATERVLIET NY 12189	06/05/2018	06/05/2023
DOL	DOL		JAMES J. BAKER		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL		JAMES LIACONE		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		JAMES RACHEL		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL	****7993	JBS DIRT, INC.		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL	****5368	JCH MASONRY & LANDSCAPING INC.		35 CLINTON AVE OSSINING NY 10562	09/12/2018	09/12/2023

DOL	NYC		JENNIFER GUERRERO		1936 HEMPSTEAD TURNPIKE EAST MEADOW NY 11554	11/29/2019	11/29/2024
DOL	DOL		JIM PLAUGHER		17613 SANTE FE LINE ROAD WAYNEFIELD OH 45896	07/16/2021	07/16/2026
DOL	AG		JOHN ANTHONY MASSINO		36-49 204TH STREET BAYSIDE NY 11372	02/07/2018	02/07/2023
DOL	DOL		JOHN F. CADWALLADER		200 LATTA BROOK PARK HORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL	****4612	JOHN F. CADWALLADER, INC.	THE GLASS COMPANY	P.O BOX 100 200 LATTA BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL		JOHN GOCEK		14B COMMERCIAL AVE ALBANY NY 12065	11/14/2019	11/14/2024
DOL	DOL		JOHN LUCIANO			05/14/2018	05/14/2023
DOL	DOL		JOHN MARKOVIC		47 MANDON TERRACE HAWTHORN NJ 07506	03/29/2021	03/29/2026
DOL	DOL		JOHN WASE		8545 RT 9W ATHENS NY 12015	03/09/2021	03/09/2026
DOL	AG	****0600	JOHNCO CONTRACTING, INC.		36-49 204TH STREET BAYSIDE NY 11372	02/07/2018	02/07/2023
DOL	DOL		JON E DEYOUNG		261 MILL RD P.O BOX 296EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DOL		JORGE RAMOS		8970 MIKE GARCIA DR MANASSAS VA 20109	07/16/2021	07/16/2026
DOL	DOL		JORI PEDERSEN		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL		JOSE CHUCHUCA		35 CLINTON AVE OSSINING NY 10562	09/12/2018	09/12/2023
DOL	NYC		JOSEPH MARTINO		1535 RICHMOND AVENUE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	DOL		JOY MARTIN		2404 DELAWARE AVE NIGARA FALLS NY 14305	09/12/2018	09/12/2023
DOL	DOL	****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL	****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL	****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL	****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL		JULIUS AND GITA BEHREND		5 EMES LANE MONSEY NY 10952	11/20/2002	11/20/3002
DOL	DOL		KARIN MANGIN		796 PHELPS ROAD FRANKLIN LAKES NJ 07417	12/01/2020	12/01/2025
DOL	DOL		KATE E. CONNOR		7088 INTERSTATE ISLAND RD SYRACUSE NY 13209	03/31/2021	03/31/2026
DOL	DOL		KATIE BURDICK		2238 BAKER RD GILLETT PA 16923	03/12/2018	03/12/2023
DOL	DOL	****2959	KELC DEVELOPMENT, INC		7088 INTERSTATE ISLAND RD SYRACUSE NY 13209	03/31/2021	03/31/2026
DOL	DOL		KIMBERLY F. BAKER		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL	****3490	L & M CONSTRUCTION/DRYWALL INC.		1079 YONKERS AVE YONKERS NY 10704	08/07/2018	08/07/2023
DOL	DA	****8816	LAKE CONSTRUCTION AND DEVELOPMENT CORPORATION		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL		LAVERN GLAVE		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	AG	****3291	LINTECH ELECTRIC, INC.		3006 TILDEN AVE BROOKLYN NY 11226	02/16/2022	02/16/2027
DOL	DA	****4460	LONG ISLAND GLASS & STOREFRONTS, LLC		4 MANHASSET TRL RIDGE NY 11961	09/06/2018	09/06/2023
DOL	AG	****4216	LOTUS-C CORP.		81-06 34TH AVENUE APT. 6EJACKSON HEIGHTS NY 11372	02/07/2018	02/07/2023
DOL	DOL		LOUIS A. CALICCHIA		1223 PARK ST. PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	NYC		LUBOMIR PETER SVOBODA		27 HOUSMAN AVE STATEN ISLAND NY 10303	12/26/2019	12/26/2024
DOL	NYC		M & L STEEL & ORNAMENTAL IRON CORP.		27 HOUSMAN AVE STATEN ISLAND NY 10303	12/26/2019	12/26/2024

DOL	DOL	****2196	MAINSTREAM SPECIALTIES, INC.		11 OLD TOWN RD SELKIRK NY 12158	02/02/2021	02/02/2026
DOL	DA		MANUEL P TOBIO		150 KINGS STREET BROOKLYN NY 14444	08/19/1998	08/19/2998
DOL	DA		MANUEL TOBIO		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	NYC		MAREK FABIJANOWSKI		50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
DOL	NYC		MARIA NUBILE		84-22 GRAND AVENUE ELMHURST NY 11373	03/10/2020	03/10/2025
DOL	DOL		MASONRY CONSTRUCTION, INC.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3333	MASONRY INDUSTRIES, INC.		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	NYC		MATINA KARAGIANNIS		97-18 50TH AVE CORONA NY 11368	04/19/2018	04/19/2023
DOL	DOL		MATTHEW P. KILGORE		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	DOL		MAURICE GAWENO		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		MICHAEL LENIHAN		1079 YONKERS AVE UNIT 4YONKERS NY 10704	08/07/2018	08/07/2023
DOL	AG		MICHAEL RIGLIETTI		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL	****4829	MILESTONE ENVIRONMENTAL CORPORATION		704 GINESI DRIVE SUITE 29MORGANVILLE NJ 07751	04/10/2019	04/10/2024
DOL	NYC	*****9926	MILLENNIUM FIRE PROTECTION, LLC		325 W. 38TH STREET SUITE 204NEW YORK NY 10018	11/14/2019	11/14/2024
DOL	NYC	*****0627	MILLENNIUM FIRE SERVICES, LLC		14 NEW DROP LNE 2ND FLOORSTATEN ISLAND NY 10306	11/14/2019	11/14/2024
DOL	AG		MSR ELECTRICAL CONSTRUCTION CORP.		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	NYC		MUHAMMED A. HASHEM		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	NYC		NAMOW, INC.		84-22 GRAND AVENUE ELMHURST NY 11373	03/10/2020	03/10/2025
DOL	DA	****9786	NATIONAL INSULATION & GC CORP		180 MILLER PLACE HICKSVILLE NY 11801	12/12/2018	12/12/2023
DOL	DOL	****3684	NATIONAL LAWN SPRINKLERS, INC.		645 N BROADWAY WHITE PLAINS NY 10603	05/14/2018	05/14/2023
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL	****7429	NICOLAE I. BARBIR	BESTUCCO CONSTRUCTI ON, INC.	444 SCHANTZ ROAD ALLENTOWN PA 18104	09/17/2020	09/17/2025
DOL	DOL	****1845	OC ERECTERS, LLC A/K/A OC ERECTERS OF NY INC.		1207 SW 48TH TERRACE DEERFIELD BEACH FL 33442	01/16/2018	01/16/2023
DOL	DOL		PAULINE CHAHALES		935 S LAKE BLVD MAHOPAC NY 10541	03/02/2021	03/02/2026
DOL	DOL		PETER STEVENS		11 OLD TOWN ROAD SELKIRK NY 12158	02/02/2021	02/02/2026
DOL	DOL	*****0466	PRECISION BUILT FENCES, INC.		1617 MAIN ST PEEKSKILL NY 10566	03/03/2020	03/03/2025
DOL	NYC		RASHEL CONSTRUCTION CORP		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	DOL	****1068	RATH MECHANICAL CONTRACTORS, INC.		24 ELDOR AVENUE NEW CITY NY 10956	02/03/2020	02/03/2025
DOL	DOL	****2633	RAW POWER ELECTRIC CORP.		3 PARK CIRCLE MIDDLETOWN NY 10940	01/30/2018	01/30/2023
DOL	DOL	****2633	RAW POWER ELECTRIC CORP.		3 PARK CIRCLE MIDDLETOWN NY 10940	07/11/2022	07/11/2027
DOL	AG	****7015	RCM PAINTING INC.		69-06 GRAND AVENUE 2ND FLOORMASPETH NY 11378	02/07/2018	02/07/2023
DOL	DA	****7559	REGAL CONTRACTING INC.		24 WOODBINE AVE NORTHPORT NY 11768	10/01/2020	10/01/2025
DOL	DOL		REGINALD WARREN		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023

DOL	DOL	****9148	RICH T CONSTRUCTION		107 WILLOW WOOD LANE CAMILLUS NY 13031	11/13/2018	11/13/2023
DOL	DOL		RICHARD MACONE		8617 THIRD AVE BROOKLYN NY 11209	09/17/2018	09/17/2023
DOL	DOL		RICHARD REGGIO		1617 MAIN ST PEEKSKILL NY 10566	03/03/2020	03/03/2025
DOL	DOL	****9148	RICHARD TIMIAN	RICH T CONSTRUCTI ON	108 LAMONT AVE SYRACUSE NY 13209	10/16/2018	10/16/2023
DOL	DOL		RICHARD TIMIAN JR.		108 LAMONT AVE SYRACUSE NY 13209	10/16/2018	10/16/2023
DOL	DOL		RICHARD TIMIAN JR.		108 LAMONT AVE SYRACUSE NY 13209	11/13/2018	11/13/2023
DOL	DOL		ROBBYE BISSESAR		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	01/11/2003	01/11/3003
DOL	DOL		ROBERT A. VALERINO		3841 LANYARD COURT NEW PORT RICHEY FL 34652	07/09/2019	07/09/2024
DOL	DOL		ROBERT BRUNO		5 MORNINGSIDE DRIVE AUBURN NY 13021	05/28/2019	05/28/2024
DOL	DOL		RODERICK PUGH		404 OAK ST SUITE 101SYRACUSE NY 13203	07/23/2018	07/23/2023
DOL	DOL	****4880	RODERICK PUGH CONSTRUCTION INC.		404 OAK ST SUITE 101SYRACUSE NY 13203	07/23/2018	07/23/2023
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	07/11/2022	07/11/2027
DOL	DOL		RONALD MESSEN		14B COMMERCIAL AVE ALBANY NY 12065	11/14/2019	11/14/2024
DOL	DOL		ROSEANNE CANTISANI			06/12/2018	06/12/2023
DOL	DOL	****7172	RZ & AL INC.		198 RIDGE AVENUE VALLEY STREAM NY 11581	06/06/2022	06/06/2027
DOL	DOL	*****1365	S & L PAINTING, INC.		11 MOUNTAIN ROAD P.O BOX 408MONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL	*****7730	S C MARTIN GROUP INC.		2404 DELAWARE AVE NIAGARA FALLS NY 14305	09/12/2018	09/12/2023
DOL	DOL		SAL FRESINA MASONRY CONTRACTORS, INC.		1935 TEALL AVENUE SYRACUSE NY 13206	07/16/2021	07/16/2026
DOL	DOL		SAL MASONRY CONTRACTORS, INC.		(SEE COMMENTS) SYRACUSE NY 13202	07/16/2021	07/16/2026
DOL	DOL	*****9874	SALFREE ENTERPRISES INC		P.O BOX 14 2821 GARDNER RDPOMPEI NY 13138	07/16/2021	07/16/2026
DOL	DOL		SALVATORE A FRESINA A/K/A SAM FRESINA		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13218	07/16/2021	07/16/2026
DOL	DOL		SAM FRESINA		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13218	07/16/2021	07/16/2026
DOL	NYC	*****0349	SAM WATERPROOFING INC		168-42 88TH AVENUE APT.1 AJAMAICA NY 11432	11/20/2019	11/20/2024
DOL	NYC		SANDEEP BOPARAI		185-06 56TH AVE FRESH MEADOW NY 11365	10/17/2017	10/17/2022
DOL	NYC	****1130	SCANA CONSTRUCTION CORP.		863 WASHINGTON STREET FRANKLIN SQUARE NY 11010	03/10/2020	03/10/2025
DOL	DOL	*****2045	SCOTT DUFFIE	DUFFIE'S ELECTRIC, INC.	P.O BOX 111 CORNWALL NY 12518	03/03/2020	03/03/2025
DOL	DOL		SCOTT DUFFIE		P.O BOX 111 CORNWALL NY 12518	03/03/2020	03/03/2025
DOL	NYC	****6597	SHAIRA CONSTRUCTION CORP.		421 HUDSON STREET SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	DOL	****1961	SHANE BURDICK	CENTRAL TRAFFIC CONTROL, LLC.	2238 BAKER ROAD GILLETT PA 16923	03/12/2018	03/12/2023
DOL	DOL		SHANE BURDICK		2238 BAKER ROAD GILLETT PA 16923	03/12/2018	03/12/2023
DOL	DOL		SHANE NOLAN		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL		SHULEM LOWINGER		11 MOUNTAIN ROAD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024

DOL	DOL	*****0816	SOLAR ARRAY SOLUTIONS, LLC		9365 WASHINGTON ST LOCKPORT IL 60441	07/23/2018	07/23/2023
DOL	DOL	****0440	SOLAR GUYS INC.		8970 MIKE GARCIA DR MANASSAS VA 20109	07/16/2021	07/16/2026
DOL	NYC		SOMATIE RAMSUNAHAI		115-46 132ND ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	DOL	*****2221	SOUTH BUFFALO ELECTRIC, INC.		1250 BROADWAY ST BUFFALO NY 14212	02/03/2020	02/03/2025
DOL	DOL	*****3661	SPANIER BUILDING MAINTENANCE CORP		200 OAK DRIVE SYOSSET NY 11791	03/14/2022	03/14/2027
DOL	DOL		STANADOS KALOGELAS		485 RAFT AVENUE HOLBROOK NY 11741	10/19/2021	10/19/2026
DOL	DOL	****3496	STAR INTERNATIONAL INC		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	08/11/2003	08/11/3003
DOL	DOL	****6844	STEAM PLANT AND CHX SYSTEMS INC.		14B COMMERCIAL AVENUE ALBANY NY 12065	11/14/2019	11/14/2024
DOL	DOL	****9933	STEED GENERAL CONTRACTORS, INC.		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL	****9528	STEEL-IT, LLC.		17613 SANTE FE LINE ROAD WAYNESFIELD OH 45896	07/16/2021	07/16/2026
DOL	DOL		STEFANOS PAPASTEFANOU, JR. A/K/A STEVE PAPASTEFANOU, JR.		256 WEST SADDLE RIVER RD UPPER SADDLE RIVER NJ 07458	05/30/2019	05/30/2024
DOL	DOL		STEVE TATE		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL		STEVEN MARTIN		2404 DELWARE AVE NIAGARA FALLS NY 14305	09/12/2018	09/12/2023
DOL	DOL	*****3800	SUBURBAN RESTORATION CO. INC.		5-10 BANTA PLACE FAIR LAWN PLACE NJ 07410	03/29/2021	03/29/2026
DOL	NYC	****5863	SUKHMANY CONSTRUCTION, INC.		185-06 56TH AVE FRESH MEADOW NY 11365	10/17/2017	10/17/2022
DOL	DOL	*****1060	SUNN ENTERPRISES GROUP, LLC		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
DOL	DOL		SYED RAZA		198 RIDGE AVENUE NY 11581	06/06/2022	06/06/2027
DOL	DOL	****8209	SYRACUSE SCALES, INC.		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DOL		TALAILA OCAMPA		1207 SW 48TH TERRACE DEERFIELD BEACH FL 33442	01/16/2018	01/16/2023
DOL	DOL		TERRY THOMPSON		11371 RIDGE RD WOLCOTT NY 14590	02/03/2020	02/03/2025
DOL	DOL	*****9733	TERSAL CONSTRUCTION SERVICES INC		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13208	07/16/2021	07/16/2026
DOL	DOL		TERSAL CONTRACTORS, INC.		221 GARDNER RD P.O BOX 14POMPEI NY 13138	07/16/2021	07/16/2026
DOL	DOL		TERSAL DEVELOPMENT CORP.		1935 TEALL AVENUE SYRACUSE NY 13206	07/16/2021	07/16/2026
DOL	DOL		TEST		P.O BOX 123 ALBANY NY 12204	05/20/2020	05/20/2025
DOL	DOL	****6789	TEST1000		P.O BOX 123 ALBANY NY 12044	03/01/2021	03/01/2026
DOL	DOL	*****5766	THE COKER CORPORATION	COKER CORPORATIO N	2610 SOUTH SALINA ST SUITE 14SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL	*****5766	THE COKER CORPORATION	COKER CORPORATIO N	2610 SOUTH SALINA ST SUITE 14SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DA	****4106	TRIPLE H CONCRETE CORP		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	****6392	V.M.K CORP.		8617 THIRD AVE BROOKLYN NY 11209	09/17/2018	09/17/2023
DOL	DOL	****6418	VALHALLA CONSTRUCTION, LLC.		796 PHLEPS ROAD FRANKLIN LAKES NJ 07417	12/01/2020	12/01/2025
DOL	NYC	****2426	VICKRAM MANGRU	VICK CONSTRUCTI ON	21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	NYC		VICKRAM MANGRU		21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	DOL		VICTOR ALICANTI		42-32 235TH ST DOUGLASTON NY 11363	01/14/2019	01/14/2024
DOL	NYC		VIKTAR PATONICH		2630 CROPSEY AVE BROOKLYN NY 11214	10/30/2018	10/30/2023

DOL	DOL		VIKTORIA RATH		24 ELDOR AVENUE NEW CITY NY 10956	02/03/2020	02/03/2025
DOL	NYC		VITO GARGANO		1535 RICHMOND AVE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	NYC	****3673	WALTERS AND WALTERS, INC.		465 EAST AND THIRD ST MT. VERNON NY 10550	09/09/2019	09/09/2024
DOL	DOL	****3296	WESTERN NEW YORK CONTRACTORS, INC.		3841 LAYNARD COURT NEW PORT RICHEY FL 34652	07/09/2019	07/09/2024
DOL	DOL		WHITE PLAINS CARPENTRY CORP		442 ARMONK RD	06/12/2018	06/12/2023
DOL	DOL		WILLIAM G. PROERFRIEDT		85 SPRUCEWOOD ROAD WEST BABYLON NY 11704	01/19/2021	01/19/2026
DOL	DOL	****5924	WILLIAM G. PROPHY, LLC	WGP CONTRACTIN G, INC.	54 PENTAQUIT AVE BAYSHORE NY 11706	01/19/2021	01/19/2026
DOL	DOL	****4043	WINDSHIELD INSTALLATION NETWORK, INC.		200 LATTA BROOK PARK HORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL	****4730	XGD SYSTEMS, LLC	TDI GOLF	415 GLAGE AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	NYC		ZAKIR NASEEM		30 MEADOW ST BROOKLYN NY 11206	10/10/2017	10/10/2022
DOL	NYC	****8277	ZHN CONTRACTING CORP		30 MEADOW ST BROOKLYN NY 11206	10/10/2017	10/10/2022

SPECIFICATIONS GROUP

GENERAL REQUIREMENTS SUBGROUP

GENERAL REQUIREMENTS

DIVISION 01

SECTION 01 10 00

SUMMARY

PART I - GENERAL

I.I SECTION INCLUDES

- A. Contract description/scope of work
- B. Contractor's use of site
- C. Work sequence
- D. Specification Conventions

1.2 CONTRACT DESCRIPTION/SCOPE OF WORK

A. Work of the Project includes, but is not limited to; earthwork, site clearing, water system installation, sanitary sewer installation, construction of a sewer pump station, storm drainage infrastructure, gas and electrical utilities installation. The project will install an access road in the site approximately 1,100 LF long. Water services will be extended from NYS Route 28 and a gravity wastewater collection system will be installed to serve the business park.

B. Type of Contract:

1. Project will be constructed under a Single Prime Contract.

C. GENERAL ITEMS:

- I. Submittal Schedule:
 - a. Within ten (10) days after Contract Award, Contractor must submit (a) a progress schedule outline which conforms to the Project Schedule, and (b) a list of all required submittals with anticipated date of submittal, expected approval date, and requisite lead tome to deliver the item after approval. In prioritizing their submittals, Contractors must carefully follow the planned sequence for the project.
- 2. Conflicts between the "Scope of Work" Section and the Drawings and Specifications:
 - a. If a conflict is related to certain work between the "Scope of Work" and the Drawings and Specifications, the Architect/Engineer interpretation will be final.
 - b. If the conflict is a matter of Quality or Quantity of the finished product, the more stringent and expensive detail will govern for pricing purposes.
- 3. Utility Usage Charges:
 - a. Temporary Electric: By the Contractor.
 - b. Telephone Services: All telephone (cellular phone) is by the Contractor.
 - c. Temporary Water: By the Contractor.

1.3 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the Work is indicated.
 - I. Limits: Confine construction operations to designated work areas.
 - 2. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

1.4 MATERIALS CONTAINING ASBESTOS

- A. The Contractor is advised that materials containing asbestos will not be accepted for use on this project. Contractor shall provide a letter certifying compliance with this requirement.
- B. If the Contractor or subcontractor and their employees locate a material of suspicious nature, the Contractor shall notify the Engineer prior to disturbing said material in any fashion. Testing of said material will be by the Owner, if required. If found to contain asbestos or lead, material will be removed or otherwise handled by approved asbestos or lead handlers using approved methods, following all State and Federal regulations. Additional cost will be by Owner.

1.5 WORK RESTRICTIONS

- A. Comply with restrictions on construction operations.
 - I. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work to between 7:00 a.m. to 5:00 p.m., Monday through Friday, unless otherwise indicated. Work hours may be modified to meet Project requirements if approved by Owner and authorities having jurisdiction.
- C. Existing Utility Interruptions: Do not interrupt utilities unless permitted under the following conditions:
 - I. Notify Construction Project Representative not less than two (2) days in advance of proposed utility interruptions.
 - 2. Obtain Village of Richfield Spring's written permission before proceeding with utility interruptions.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

SECTION 01 20 00

PRICE AND PAYMENT PROCEDURES

PART I - GENERAL

I.I SECTION INCLUDES

- A. Cash allowances.
- B. Contingency allowances.
- C. Schedule of values.
- D. Applications for payment.
- E. Change procedures.
- F. Defect assessment.
- G. Supplemental Bid Prices.

1.2 SCHEDULE OF VALUES

- A. Prime Contractor shall submit printed schedule on EJCDC No. C-620 Contractor's Application for Payment. Contractor's electronic media printout will be considered if it conforms to EJCDC No. C-620.
- B. Prime Contractor shall submit Schedule of Values in duplicate within 15 days after Award of Contract and prior to Notice to Proceed.
- C. Format: Utilize Table of Contents of this Project Manual. Identify each line item with number and title of major specification Section. Identify site mobilization, bonds insurance, and allowances.
- D. Include within each line item, direct proportional amount of Contractor's overhead and profit.
- E. Prime Contractor shall revise schedule to list approved Change Orders, with each Application for Payment.

1.3 APPLICATIONS FOR PAYMENT

- A. Submit three copies of each application on EJCDC No. C-620 Contractor's Application for Payment.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Submit updated construction schedule with each Application for Payment.

- D. Payment Period: Submit at intervals stipulated in the Agreement.
- E. Substantiating Data: When Engineer requires substantiating information, submit data justifying dollar amounts in question. Include the following with Application for Payment:
 - I. Current construction photographs specified in Section 01 33 00.
 - 2. Partial release of liens from major subcontractors and vendors.
 - 3. Record documents as specified in Section 01 70 00, for review by Owner which will be returned to Contractor.
 - 4. Affidavits attesting to off-site stored products.
 - 5. Construction progress schedules, revised and current as specified in Section 01 33 00.
- F. Execute Certification by signature of Authorized Officer.
- G. Certified Payroll: Contractor and Subcontractors must maintain certified payrolls. Contractor shall provide such payrolls, with original certifications, to the Engineer with each Application for Payment. Contractor shall submit on current Department of Labor forms.

1.4 CHANGE PROCEDURES

- A. Submittals: Submit name of individual authorized to receive change documents and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
- B. The Engineer will advise of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time by issuing supplemental instructions on EJCDC No. C-942 Field Order.
- C. The Engineer may issue a Proposal Request including a detailed description of proposed change with supplementary or revised Drawings and specifications. Contractor will prepare and submit estimate within five (5) days.
- D. Contractor may propose changes by submitting a request for change to Engineer, describing proposed change and its full effect on the Work. Include a statement describing reason for the change, and effect on Contract Sum/Price and Contract Time with full documentation and a statement describing effect on Work by separate or other Contractors. Document requested substitutions in accordance with Section 01 60 00 Product Requirements.
- E. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation.
- F. Unit Price Change Order: For contract unit prices and quantities, the Change Order will be executed on fixed unit price basis. For unit costs or quantities of units of work which are not pre-determined, execute Work under Work Change Directive. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material Change Order.
- G. Work Change Directive: Engineer may issue directive, on EJCDC No. C-940 Work Change Directive signed by Owner, instructing Contractor to proceed with change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.

- H. Time and Material Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in Conditions of the Contract. Engineer will determine change allowable in Contract Sum/Price and Contract Time as provided in Contract Documents.
- I. Maintain detailed records of work done on Time and Material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the Work.
- J. Document each quotation for change in cost or time with sufficient data to allow evaluation of quotation.
- K. Change Order Form: E|CDC No. C-941 Change Order.
- L. Execution of Change Orders: Engineer will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
- M. Correlation of Contractor Submittals:
 - I. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
 - Promptly revise progress schedules to reflect change in Contract Time, revise subschedules to adjust times for other items of work affected by the change, and resubmit.
 - 3. Promptly enter changes in Project Record Documents.

1.5 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of the Engineer, it is not practical to remove and replace the Work, the Engineer will direct appropriate remedy or adjust payment.
- C. Defective Work will be partially repaired to instructions of Engineer, and unit sum/price will be adjusted to new sum/price at discretion of Engineer.
- D. Individual specification sections may modify these options or may identify specific formula or percentage sum/price reduction.
- E. Authority of Engineer to assess defects and identify payment adjustments is final.
- F. Non-Payment for Rejected Products: Payment will not be made for rejected products for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from transporting vehicle.
 - 4. Products placed beyond lines and levels of required Work.
 - 5. Products remaining on hand after completion of the Work.
 - 6. Loading, hauling, and disposing of rejected products.

1.6 UNIT PRICES

- A. Authority: Measurement methods are delineated in Section 01 22 00.
- B. Measurement methods delineated in Section 01 22 00 complement criteria of this section.
- C. Architect/Engineer will take measurements and compute quantities accordingly. Provide assistance in taking of measurements.

D. Full Compensation.

- I. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals; erection, application or installation of item of the Work; overhead and profit.
- 2. Whenever it is specified or indicated in the Contract Documents that the Contractor is to perform work or furnish materials for which no price is fixed in the Contract, it is understood and agreed that there is included in each lump sum price bid, or unit price bid, the entire cost of the Work, including all items of work which are incidental to the completion of those portions of the work covered by such lump sum price bid or unit price bid, or, if not directly incidental to any specific Bid Item in the Bid Form, the cost thereof has been distributed among those Bid Items in the Bid Form considered most appropriate by the Contractor.
- 3. Work which is not clearly delineated in the Contract Documents to be under a particular Bid Item in the Bid Form shall be automatically assigned to one of the lump-sum or unit price Bid Items in the Bid Form by the Contractor, so that all items of work, regardless of their characteristics or anonymity, are included in the Contract Price. Additional compensation will not be made for work items which do not clearly fall under listed Bid Items in the Bid Form.
- E. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Architect/Engineer multiplied by unit sum/price for Work incorporated in or made necessary by the Work.

F. Measurement of Quantities:

- I. Weigh Scales: Inspected, tested and certified by applicable State Weights and Measures department within past year.
- 2. Platform Scales: Of sufficient size and capacity to accommodate conveying vehicle.
- 3. Metering Devices: Inspected, tested and certified by applicable state department within past year.
- 4. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
- 5. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
- 6. Measurement by Area: Measured by square dimension using mean length and width or radius.
- 7. Linear Measurement: Measured by linear dimension, at item centerline or mean chord
- 8. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

SECTION 01 22 00

UNIT PRICE MEASUREMENT AND PAYMENT

PART I - GENERAL

I.I SUMMARY

- A. Section includes measurement and payment for Unit Price Bid Items. Section supplements criteria specified in Section 01 20 00.
- B. Related Sections:
 - I. Document 00 41 43 Bid Form
 - 2. Section 01 20 00 Price and Payment Procedures

1.2 UNIT PRICE - METHOD OF MEASUREMENT AND BASIS OF PAYMENT

- A. Section 01 50 00 Temporary Facilities, and Controls:
 - I. Mobilization:
 - a. Method of Measurement: Payment for Temporary Facilities and Controls will be made on a Lump Sum basis. Includes Construction Stake-out.
 - b. Basis of Payment: The amount bid shall include the furnishing, maintaining and removal of temporary utilities, facilities, controls as described in Section 015000 Temporary Facilities and Controls and shall not exceed four percent (4%) of the total contract bid price excluding the bid price for Temporary Facilities and Controls. Should the bidder exceed the foregoing four percent (4%), the necessary adjustment will be made to determine the total amount of bid based on the arithmetically correct proposal. Progress payments will be made for this item in proportion to the total amount of contract work completed as reflected in the applications for payment less any deductions for unsatisfactory work related to this section.
 - 2. Maintenance and Protection of Traffic:
 - a. Method of Measurement: Payment for Maintenance and Protection of Traffic will be made on a Lump Sum basis.
 - b. Basis of Payment: The amount bid shall include the furnishing, maintaining and removal of all signs, marking, cones, barricades, lighting and equipment, and other incidentals necessary to control traffic.
- B. Section 31 10 00 Site Clearing:
 - 1. Method of Measurement: Payment for site clearing will be made on a Lump Sum basis.
 - 2. Basis of Payment: Includes removal of surface debris, paving and other above grade improvements, trees, shrubs and existing vegetation, temporary soil erosion and sediment control, stripping, and stockpiling topsoil and dust control.
- C. Section 31 20 00 Earthwork:
 - I. Excavation:
 - a. Method of Measurement: By the Cubic Yard.
 - b. Basis of Payment: Includes all excavation and fill.
 - 2. Embankment:
 - a. Method of Measurement: By the Cubic Yard.

- b. Basis of Payment: Includes suitable excavated material from the site and supplied fill material, placement, compaction, and grading of fill material for the access road (excluding aggregate Type 4 Select Granular Fill required for subbase and trench backfill along NYS Route 28 for the water amin extension). Fill material to meet
- 3. Aggregate Type 4, (NYSDOT Type 4/ Fill Select Granular Fill) Subbase and Backfill:
 - a. Method of Measurement: By the Cubic Yard.
 - b. Basis of Payment: Includes material, placement, compaction, and grading of subbase material for roadway and for backfill the water line extension along NYS Route 28.
- 4. No. I and No. 2 Stone. (NYSDOT No. I and No. 2 Sect. 703-4) Stone Bedding:
 - a. Method of Measurement: There will be no separate measurement for this Item.
 - b. Basis of Payment: Includes material and cleaning, grading and placement of bedding material for the bedding of utility structures. Costs for this Item shall be included under other respective Items.

D. Section 31 23 17 - Trenching:

- 1. Method of Measurement: There will be no separate measurement for this item.
- 2. Basis of Payment: Includes trench excavation, backfill bedding and compaction. Costs for this Item shall be included under the respective Water, Sewer, or Storm Piping.

E. Section 31 32 19 - Geotextiles:

- 1. Method of Measurement: There will be no separate measurement for this item.
- 2. Basis of Payment: Costs for this item shall be included under Asphalt Concrete.
- F. Section 32 12 16 - Asphalt Concrete:
 - 1. Method of Measurement: By the Ton for each type of asphalt placed.
 - 2. Basis of Payment: Includes preparation of subgrade, asphalt material, geotextile and placement, and traffic markings.
- G. Section 32 90 00 - Landscaping:
 - I. Topsoil:
 - a. Method of Measurement: By the Square Yard.
 - b. Basis of Payment: Includes preparation of subgrade, placing and grading topsoil.
 - 2. Seed and Mulch:
 - a. Method of Measurement: By the Square Yard.
 - b. Basis of Payment: Includes preparation of subgrade, seeding and mulching.
- Section 33 11 13 Public Water Distribution Systems: H.
 - 1. Method of Measurement: By the Linear Foot.
 - 2. Basis of Payment: Includes trench excavation and backfill, bedding, piping, fittings, valves, hydrants, concrete thrust blocks, services, meter, vault, testing and disinfection.
- I. Section 33 31 00 - Sanitary Sewage Systems:
 - 1. Method of Measurement: By the Linear Foot.
 - 2. Basis of Payment: Includes trench excavation and backfill, bedding, piping, fittings, manholes, laterals, air relief/cleanout manholes, thrust blocks, cleanouts, force mains bedding, and testing.

- J. Section 33 32 17 Duplex Sewage Grinder Pumping Station:
 - I. Method of Measurement: Payment for duplex sewage grinder pumping station will be made on a Lump Sum basis.
 - 2. Basis of Payment: Includes submersible pumps, floats, steel lifting chain, electrical panel, alarm system, and concrete pump station.
- K. Section 33 41 00 Storm Drainage:
 - I. Method of Measurement: By the Linear Foot.
 - 2. Basis of Payment: Includes trench excavation and backfill, bedding, piping, fittings, dry swales, media, check dams, end sections and perforated piping.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

PART I - GENERAL

I.I SECTION INCLUDES

- A. Coordination and project conditions.
- B. Field engineering.
- C. Preconstruction meeting.
- D. Pre-installation meetings.
- E. Cutting and patching.
- F. Special procedures.

1.2 COORDINATION AND PROJECT CONDITIONS

- A. Coordinate scheduling, submittals, and Work of various sections of Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.
- C. Coordinate space requirements, supports, and installation of mechanical and electrical Work indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within construction. Coordinate locations of fixtures and outlets with finish elements.
- E. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion.
- F. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.3 FIELD ENGINEERING

A. Employ Land Surveyor registered in State of New York and acceptable to Architect/Engineer.

- B. Locate and protect survey control and reference points. Promptly notify Architect/Engineer of discrepancies discovered.
- C. Control datum for survey is that shown on Drawings.
- D. Verify set-backs and easements; confirm drawing dimensions and elevations.
- E. Provide field engineering services. Establish elevations, lines, and levels, utilizing recognized engineering survey practices.
- F. Maintain complete and accurate log of control and survey work as Work progresses.
- G. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- H. Promptly report to Architect/Engineer loss or destruction of reference point or relocation required because of changes in grades or other reasons.
- I. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect/Engineer.

I.4 PRECONSTRUCTION MEETING

- A. Architect/Engineer will schedule meeting after Notice of Award.
- B. Attendance Required: Owner, Architect/Engineer, and Contractor.
- C. Agenda:
 - I. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractors, list of products, schedule of values, and progress schedule.
 - 5. Designation of personnel representing parties in Contract and Architect/Engineer.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 7. Scheduling.
- D. Architect/Engineer to record minutes and distribute copies within five days after meeting to participants, with copies to Contractor, Owner, and those affected by decisions made.

1.5 PRE-INSTALLATION MEETINGS

- A. When required in individual specification sections, convene pre-installation meetings at Project site prior to commencing work of specific section.
- B. Require attendance of parties directly affecting, or affected by, Work of specific section.
- C. Notify Architect/Engineer four days in advance of meeting date.

- D. Prepare agenda and preside at meeting:
 - 1. Review conditions of installation, preparation and installation procedures.
 - 2. Review coordination with related work.
- E. Record minutes and distribute copies within five days after meeting to participants, with copies to Architect/Engineer, Owner, and those affected by decisions made.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching.
- B. Submit written request in advance of cutting or altering elements affecting:
 - I. Structural integrity of element.
 - 2. Integrity of weather-exposed or moisture-resistant elements.
 - 3. Efficiency, maintenance, or safety of element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate contractor.
- C. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:
 - 1. Fit the several parts together, to integrate with other Work.
 - 2. Uncover Work to install or correct ill-timed Work.
 - 3. Remove and replace defective and non-conforming Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Execute work by methods to avoid damage to other Work, and to provide proper surfaces to receive patching and finishing.
- E. Cut masonry, concrete, and asphalt materials using masonry saw or core drill.
- F. Restore Work with new products in accordance with requirements of Contract Documents.
- G. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- H. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- I. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit.
- J. Identify hazardous substances or conditions exposed during the Work to Architect/Engineer for decision or remedy.

3.2 SPECIAL PROCEDURES

- Materials: As specified in product sections; match existing with new products and salvaged A. products for patching and extending work.
- B. Employ skilled and experienced installer to perform alteration work.
- C. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.
- D. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.
- E. Remove debris and abandoned items from area and from concealed spaces.
- F. Prepare surface and remove surface finishes to permit installation of new work and finishes.
- G. Remove, cut, and patch Work in manner to minimize damage and to permit restoring products and finishes to original or specified condition.
- Where new Work abuts or aligns with existing, provide smooth and even transition. H. Patch Work to match existing adjacent Work in texture and appearance.
- I. When finished surfaces are cut so that smooth transition with new Work is not possible, terminate existing surface along straight line at natural line of division and submit recommendation to Architect/Engineer for review.
- J. Where change of plane of 1/4 inch or more occurs, submit recommendation for providing smooth transition to Architect/Engineer for review.
- K. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- L. Finish surfaces as specified in individual product sections.

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART I - GENERAL

I.I SECTION INCLUDES

- A. Submittal procedures.
- B. Construction progress schedules.
- C. Proposed products list.
- D. Product data.
- E. Shop drawings.
- F. Samples.
- G. Design data.
- H. Test reports.
- I. Certificates.
- I. Manufacturer's instructions.
- K. Manufacturer's field reports.
- L. Erection drawings.
- M. Construction photographs.

1.2 SUBMITTAL PROCEDURES

- A. Transmit each submittal with Submittal Form included at the end of this Section.
- B. Sequentially number transmittal forms. Mark revised submittals with original number and sequential alphabetic suffix.
- C. Identify Project, Contractor, subcontractor and supplier; pertinent drawing and detail number, and specification section number, appropriate to submittal.
- D. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.
- E. Schedule submittals to expedite Project, and deliver to Architect/Engineer at business address. Coordinate submission of related items.

- F. For each submittal for review, allow 15 days excluding delivery time to and from Contractor.
- G. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of completed Work.
- H. Allow space on submittals for Contractor and Architect/Engineer review stamps.
- I. When revised for resubmission, identify changes made since previous submission.
- J. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.
- K. Submittals not requested will not be recognized or processed.

1.3 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial schedules within 10 days after the Effective Date of the Agreement.
- B. Submit revised Progress Schedules with each Application for Payment.
- C. Distribute copies of reviewed schedules to Project site file, subcontractors, suppliers, and other concerned parties.
- D. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.
- E. Submit computer generated horizontal bar chart with separate line for each major portion of Work or operation, identifying first work day of each week.
- F. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate early and late start, early and late finish, float dates, and duration.
- G. Indicate estimated percentage of completion for each item of Work at each submission.
- H. Submit separate schedule of submittal dates for shop drawings, product data, and samples, including dates reviewed submittals will be required from Architect/Engineer.
- I. Indicate delivery dates for Owner furnished products, if any, and products identified under Allowances, if any.
- J. Revisions to Schedules:
 - I. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
 - 2. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
 - 3. Prepare narrative report to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect, including effect of changes on schedules of separate contractors, if any.

1.4 PROPOSED PRODUCTS LIST

- A. Within 10 days after date after the Effective Date of the Agreement, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

I.5 PRODUCT DATA

- A. Product Data: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
- B. Submit number of copies Contractor requires, plus two copies Architect/Engineer will retain.
- C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- E. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 01 70 00 Execution and Closeout Requirements.

I.6 SHOP DRAWINGS

- A. Shop Drawings: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
- B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. When required by individual specification sections, provide shop drawings signed and sealed by professional engineer responsible for designing components shown on shop drawings.
 - I. Include signed and sealed calculations to support design.
 - 2. Submit drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
 - 3. Make revisions and provide additional information when required by authorities having jurisdiction.
- D. Submit number of opaque reproductions Contractor requires, plus two copies Architect/Engineer will retain.
- E. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 01 70 00 Execution and Closeout Requirements.

I.7 SAMPLES

- A. Samples: Submit to Architect/Engineer for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
- B. Samples for Selection as Specified in Product Sections:
 - I. Submit to Architect/Engineer for aesthetic, color, or finish selection.
 - 2. Submit samples of finishes from full range of manufacturers' standard colors, textures, and patterns for Architect/Engineer selection.
- C. Submit samples to illustrate functional and aesthetic characteristics of Products, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- D. Include identification on each sample, with full Project information.
- E. Submit number of samples Contractor requires, plus two samples Architect/Engineer will retain.
- F. Reviewed samples which may be used in the Work are indicated in individual specification sections.
- G. Samples will not be used for testing purposes unless specifically stated in specification section.
- H. After review, produce duplicates and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes described in Section 01 70 00 Execution and Closeout Requirements.

I.8 DESIGN DATA

- A. Submit for Architect/Engineer's knowledge as contract administrator or for Owner.
- B. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

I.9 TEST REPORTS

- A. Submit for Architect/Engineer's knowledge as contract administrator or for Owner.
- B. Submit test reports for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.10 CERTIFICATES

- A. When specified in individual specification sections, submit certification by manufacturer, installation/application subcontractor, or Contractor to Architect/Engineer, in quantities specified for Product Data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or Product but must be acceptable to Architect/Engineer.

1.11 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, to Architect/Engineer for delivery to Owner in quantities specified for Product Data.
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.12 MANUFACTURER'S FIELD REPORTS

- A. Submit reports for Architect/Engineer's benefit as contract administrator or for Owner.
- B. Submit reports in duplicate within 5 days of observation to Architect/Engineer for information.
- C. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.13 ERECTION DRAWINGS

- A. Submit drawings for Architect/Engineer's benefit as contract administrator or for Owner.
- B. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.
- C. Data indicating inappropriate or unacceptable Work may be subject to action by Architect/Engineer or Owner.

1.14 CONSTRUCTION PHOTOGRAPHS

- A. Provide photographs of site and construction throughout progress of Work produced by an experienced photographer, acceptable to Architect/Engineer.
- B. Each month submit photographs with Application for Payment.
- C. Photographs: Two prints; color, glossy or matte; 4 x 6 inch size.
- D. Take site photographs from differing directions.
- E. Take photographs as evidence of existing project conditions.
- F. Identify each print on back. Identify name of Project, orientation of view, date and time of view.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

SUBMITTAL FORM

Project Name:	
Submittal Subject:	Section #
Date: Drawing/Detail #	<u> </u>
Submittal #	
Contractor	
Manufacturer	
Subcontractor or Supplier	
Submittal is specified item.	
Submittal is an equal product.	
Submittal is substitution. Contractor hereby certifies that item submitted is identical to specified item with the following exceptions:	
I.	
6	(Submittals received without Contractor's stamp and signature of approval will be returned without review)
Continued on attached sheet.	Contractor acknowledges that all items submitted herein are provided for the base Contract Cost; and that he has reviewed the submittal information contained herein; and that he has determined and verified the materials, field measurements and field construction criteria related thereto, and that he has checked and coordinated the information contained in the submittal with the requirements of all
Contractor agrees to pay all change order costs caused by this substitution for all work by Architect/Engineer and of other trades in addition to the submittal trade.	Work in the Contract Documents and other Contracts in the Project. Contractor's Signature
Architect/Engineer reserves the right to make final decision regarding equality of substitution to specified item.	Date Note: Contractor to allow space on submittals for

Architect/Engineer review stamps.

SECTION 01 40 00

QUALITY REQUIREMENTS

PART I - GENERAL

I.I SECTION INCLUDES

- A. Quality control and control of installation.
- B. Tolerances.
- C. References.
- D. Labeling.
- E. Mock-up requirements.
- F. Testing and inspection services.
- G. Manufacturers' field services.
- H. Examination.
- I. Preparation.

1.2 QUALITY CONTROL AND CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
- F. Verify field measurements are as indicated on Shop Drawings or as instructed by manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

I.3 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. When manufacturers' tolerances conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

I.4 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where specific date is established by code.
- C. Obtain copies of standards where required by product specification sections.
- D. When specified reference standards conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- E. Neither contractual relationships, duties, nor responsibilities of parties in Contract nor those of Architect/Engineer shall be altered from Contract Documents by mention or inference otherwise in reference documents.

1.5 LABELING

- A. Attach label from agency approved by authority having jurisdiction for products, assemblies, and systems required to be labeled by applicable code.
- B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, and the following information, as applicable, on each label.
 - I. Model number.
 - 2. Serial number.
 - 3. Performance characteristics.

1.6 TESTING AND INSPECTION SERVICES

- A. Employ and pay for services of an independent testing agency or laboratory acceptable to Owner to perform specified testing.
- B. The independent firm will perform tests, inspections and other services specified in individual specification sections and as required by Architect/Engineer.
 - I. Laboratory: Authorized to operate in State of New York.
 - 2. Laboratory Staff: Maintain full time specialist on staff to review services.
 - Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to National Bureau of Standards or accepted values of natural physical constants.

- C. Testing, inspections and source quality control may occur on or off project site. Perform off-site testing as required by Architect/Engineer or Owner.
- D. Reports will be submitted by independent firm to Architect/Engineer, Contractor, and authority having jurisdiction, in duplicate, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
 - I. Submit final report indicating correction of Work previously reported as non-compliant.
- E. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.
 - I. Notify Architect/Engineer and independent firm 48 hours prior to expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.
- F. Testing and employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- G. Re-testing or re-inspection required because of non-conformance to specified requirements shall be performed by same independent firm on instructions by Architect/Engineer.
- H. Agency Responsibilities:
 - 1. Test samples of mixes submitted by Contractor.
 - 2. Provide qualified personnel at site. Cooperate with Architect/Engineer and Contractor in performance of services.
 - 3. Perform specified sampling and testing of products in accordance with specified standards.
 - 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 5. Promptly notify Architect/Engineer and Contractor of observed irregularities or non-conformance of Work or products.
 - 6. Perform additional tests required by Architect/Engineer.
- I. Agency Reports: After each test, promptly submit two copies of report to Architect/Engineer, Contractor, and authority having jurisdiction. When requested by Architect/Engineer, provide interpretation of test results. Include the following:
 - I. Date issued.
 - 2. Project title and number.
 - 3. Name of inspector.
 - 4. Date and time of sampling or inspection.
 - 5. Identification of product and specifications section.
 - 6. Location in Project.
 - 7. Type of inspection or test.
 - 8. Date of test.
 - 9. Results of tests.
 - 10. Conformance with Contract Documents.

- J. Limits On Testing Authority:
 - Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency or laboratory may not approve or accept any portion of the Work.
 - Agency or laboratory may not assume duties of Contractor. 3.
 - Agency or laboratory has no authority to stop the Work.

1.7 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, and test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Architect/Engineer 30 days in advance of required observations. Observer subject to approval of Architect/Engineer.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- D. Refer to Section 01 33 00 - Submittal Procedures, MANUFACTURERS' FIELD REPORTS article.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 **EXAMINATION**

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Verify utility services are available, of correct characteristics, and in correct locations.

3.2 **PREPARATION**

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART I - GENERAL

I.I SECTION INCLUDES

- A. Temporary Utilities:
 - I. Temporary electricity.
 - 2. Temporary sanitary facilities.
- B. Construction Facilities:
 - 1. Progress cleaning and waste removal.
 - 2. Traffic regulation.
 - 3. Project Identification
- C. Temporary Controls:
 - I. Barriers.
 - 2. Repairing damaged pavement.
 - 3. Water control.
 - 4. Dust control.
 - 5. Erosion and sediment control.
 - 6. Noise control.
 - 7. Pollution control.
 - 8. Removal of utilities, facilities, and controls.

1.2 TEMPORARY ELECTRICITY

A. Provide and pay for power service required from utility source as needed for construction operation and sanitary sewer pump station.

1.3 TEMPORARY SANITARY FACILITIES

A. Provide and maintain required facilities and enclosures. Existing facility use is not permitted. Provide facilities at time of project mobilization.

1.4 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.
- B. Remove waste materials, debris, and rubbish from site and dispose off-site.

1.5 TRAFFIC REGULATION

- A. Signs, Signals, and Devices:
 - I. Post Mounted and Wall Mounted Traffic Control and Informational Signs: As approved by authority having jurisdiction.
 - 2. Traffic Control Signals: As approved by local jurisdictions.

- 3. Traffic Cones and Drums, Flares and Lights: As approved by authority having jurisdiction.
- 4. Flagperson Equipment: As required by authority having jurisdiction.
- B. Flag Persons: Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.
- Flares and Lights: Use flares and lights during hours of low visibility to delineate traffic C. lanes and to guide traffic.

D. Haul Routes:

- Consult with authority having jurisdiction, establish public thoroughfares to be used for haul routes and site access.
- Confine construction traffic to designated haul routes. 2.
- 3. Provide traffic control at critical areas of haul routes to regulate traffic, to minimize interference with public traffic.

E. Traffic Signs and Signals:

- Provide signs at approaches to site and on site, at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.
- Provide, operate, and maintain traffic control signals to direct and maintain orderly 2. flow of traffic in areas under Contractor's control, and areas affected by Contractor's operations.
- Relocate as Work progresses, to maintain effective traffic control. 3.

F. Removal:

- Remove equipment and devices when no longer required.
- 2. Repair damage caused by installation.
- Remove post settings to depth of 2 feet. 3.

1.6 PROJECT IDENTIFICATION/SIGN REQUIREMENTS

Α. See attached document, 'NY Rising Community Reconstruction Program Project Sign Requirements'

BARRIERS 1.7

- A. Provide barriers to prevent unauthorized entry to construction areas to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades required by authorities having jurisdiction for public rights-of-way.
- C. Provide protection for plants designated to remain. Replace damaged plants.
- Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.8 REPAIRING DAMAGED PAVEMENT

Contractor will repair/replace/restore existing roadways, parking lots, sidewalks, driveways, and other hard pavements or walkways, that are scheduled to remain after project completion, which have been inadvertently damaged by construction traffic or work, including but not limited to the following.

- 1. Restore anywhere Contractor has excavated through or across such an area.
- 2. Remove and replace materials contaminated, broken or displaced by construction activities.
- 3. Repair soft spots when they develop to minimize further deterioration.

1.9 WATER CONTROL

- A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

1.10 DUST CONTROL

- A. Execute Work by methods to minimize raising dust from construction operations.
- B. Provide positive means to prevent air-borne dust from dispersing into atmosphere.

1.11 EROSION AND SEDIMENT CONTROL

- A. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- B. Minimize surface area of bare soil exposed at one time.
- C. Provide temporary measures including berms, dikes, and drains, and other devices to prevent water flow.
- D. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
- E. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

1.12 NOISE CONTROL

A. Provide methods, means, and facilities to minimize noise produced by construction operations.

1.13 PEST CONTROL

A. Provide methods, means and facilities to prevent pests and insects from damaging the Work.

1.14 POLLUTION CONTROL

A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.

B. Comply with pollution and environmental control requirements of authorities having jurisdiction.

1.15 RODENT CONTROL

A. Provide methods, means and facilities to prevent rodents from accessing or invading premises.

1.16 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
- B. Remove underground installations to minimum depth of 2 feet.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing and permanent facilities used during construction to original or specified condition.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

SECTION 01 60 00

PRODUCT REQUIREMENTS

PART I - GENERAL

I.I SECTION INCLUDES

- A. Products.
- B. Product delivery requirements.
- C. Product storage and handling requirements.
- D. Product options.
- E. Product substitution procedures.

1.2 PRODUCTS

- A. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by Contract Documents.
- C. Furnish interchangeable components from same manufacturer for components being replaced.

1.3 PRODUCT DELIVERY REQUIREMENTS

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. Store and protect products in accordance with manufacturers' instructions.
- B. Store with seals and labels intact and legible.
- C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- D. For exterior storage of fabricated products, place on sloped supports above ground.

- E. Provide insured off-site storage and protection when site does not permit on-site storage or protection.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.
- H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.5 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of one of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit request for substitution for any manufacturer not named in accordance with the following article.

1.6 PRODUCT SUBSTITUTION PROCEDURES

- A. Architect/Engineer will consider requests for Substitutions only after date of Owner-Contractor Agreement.
- B. Substitutions may be considered when a product becomes unavailable through no fault of Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that Contractor:
 - I. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
 - 2. Will provide same warranty for Substitution as for specified product.
 - 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension which may subsequently become apparent.
 - 5. Will reimburse Owner for Architect/Engineer's charges for review or redesign services in accordance with the General Conditions.
- E. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals, without separate written request, or when acceptance will require revision to Contract Documents.

- F. Substitution Submittal Procedure:
 - 1. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
 - 2. Submit Shop Drawings, Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.
 - 3. Architect/Engineer will notify Contractor in writing of decision to accept or reject request.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

Keystone Associates Product Requirements
Architects, Engineers and Surveyors, LLC Project No. 0552.04219.1 01 60 00-3

SECTION 01 70 00

EXECUTION AND CLOSEOUT REQUIREMENTS

PART I - GENERAL

I.I SECTION INCLUDES

- A. Closeout procedures.
- B. Final cleaning.
- C. Starting of systems.
- D. Demonstration and instructions.
- E. Protecting installed construction.
- F. Project record documents.
- G. Operation and maintenance data.
- H. Manual for equipment and systems.

1.2 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect/Engineer's review.
- B. Provide submittals to Architect/Engineer required by authorities having jurisdiction.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

1.3 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.
- B. Clean site; sweep paved areas, rake clean landscaped surfaces.
- C. Remove waste and surplus materials, rubbish, and construction facilities from site.

I.4 STARTING OF SYSTEMS

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Notify Architect/Engineer seven (7) days prior to start-up of each item.
- C. Verify each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions which may cause damage.

- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by equipment or system manufacturer.
- E. Verify wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of applicable manufacturer's representative in accordance with Manufacturers' instructions.
- G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- H. Submit a written report in accordance with Section 01 33 00 Submittal Procedures that equipment or system has been properly installed and is functioning correctly.

1.5 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.
- C. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

1.6 PROTECTING INSTALLED CONSTRUCTION

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

1.7 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - I. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed Shop Drawings, Product Data, and Samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record at each product section description of 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.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish 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.
- G. Submit documents to Architect/Engineer with claim for final Application for Payment.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

SECTION 01 74 00

SITE AND AREA CLEANUP

PART I - GENERAL

I.I DESCRIPTION

- A. Maintain the site and general area free from accumulations of waste, debris, dust and mud caused by Contractor's operations.
- B. At completion of work, remove all waste materials, tools, equipment, machinery, surplus materials and clean all exposed surfaces; leave property clean and ready for occupancy, leave all right-of-ways in a condition equal to that at the beginning of work.

1.2 SAFETY REQUIREMENTS

- A. Construction cleanup crews shall provide flagmen, warning signs, and barricades in compliance with the "Manual of Traffic Control Devices" issued by the U.S. Department of Transportation, Federal Highway Administration, issue of 1983 or any later revised edition. See also plans for typical construction operation, barricades and safety precautions.
- B. Refer to Section 01 50 00 Temporary Facilities and Controls for additional safety requirements.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 DURING CONSTRUCTION

- A. Execute cleaning to ensure that any buildings affected, grounds and especially streets and public properties are maintained free from accumulation of waste materials, dust, mud and debris.
- B. Where required, wet down surfaces to lay dust and prevent the blowing of dust to nearby residences or public properties.
- C. The Contractor shall keep all streets clean and free of dust, mud and debris resulting from his own operations. Daily cleanup throughout the job will be necessary as the Contractor progresses with his work, but extra precautions in cleanup shall be made prior to weekends and holidays. The Contractor shall daily remove trench soil along traveled ways, grade, and vacuum broom surfaces initially where applicable and later water flush with high pressure sprays, being careful to avoid downstream contamination.
- D. All waste materials, debris, and rubbish shall be disposed of at sites to be chosen by Contractor unless specific sites have been obtained as may be outlined in Division 01 of these Specifications. Prior to dumping on any private property, a letter allowing such dumping shall be obtained from the property Owner and presented to the Engineer.

E. If the Contractor does not properly clean up (in the opinion of the Engineer), then the Owner shall have the option of using outside equipment to perform the work and such cost will be withheld from the Contract.

SITE AND INFRASTRUCTURE SUBGROUP

DIVISION 31

SECTION 31 10 00

SITE CLEARING

PART I - GENERAL

I.I SUMMARY

- A. Section includes: Site clearing operations including, but not limited to, the following:
 - Removal of surface debris designated to be removed, and/or within the area to be improved.
 - 2. Removal of paving and other above grade improvements including related below grade portions.
 - 3. Removal of trees, shrubs, and existing vegetation as indicated on the Drawings and/or within the area to be improved.
 - 4. Disconnecting and removing all existing utilities except those designated to remain.
 - 5. Temporary soil erosion and sediment control.
 - 6. Stripping and stockpiling topsoil.
 - 7. Dust control.
 - 8. Protection of existing trees, shrubs, and existing vegetation to remain.

B. Related Sections:

I. Section 31 20 00 - Earthwork.

1.2 DEFINITIONS

- A. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than I percent organic matter and few soil organisms.
- B. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil," but in disturbed areas such as urban environments, the surface soil can be subsoil.
- C. Topsoil: The uppermost layer of mineral soil which has the highest concentration of organic matter and microorganisms. This is the native surface soil which usually includes the organic layer in which plants have "most" of their roots and where most of the earth's biological soil activity occurs. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil. This layer is reasonably free of subsoil, clay, gravel and other objects larger than two (2) inches in diameter.
- D. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction and indicated on Drawings.
- E. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.3 QUALITY ASSURANCE

A. Requirements of Regulatory Agencies - Comply with applicable requirements of OSHA,

local governing authorities, and State Department of Labor.

PART 2 - PRODUCTS

2.1 EXPLOSIVES

A. Explosives are not permitted on site for any purpose.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 Administrative Requirements: Verification of existing conditions before starting work.
- B. Verify existing plant life designated to remain is tagged or identified.
- C. Identify waste areas for placing removed materials.
- D. Avoid interference with the use of adjacent buildings and facilities.
 - I. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
- E. Salvageable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.

3.2 PREPARATION

- A. Contractor shall consult with local utility companies and Dig Safely NY (call I-800-962-7962, call 811 or online at www.call811.com), in accordance with 16 NYCRR Part 753, not less than two (2) nor more than ten (10) days prior to performing Work to determine the existence of uncharted or incorrectly charted piping or other utilities. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place.

3.3 PROTECTION

- A. Locate, identify, and protect all utilities to remain, from damage. Consult with Owner for assistance in locating underground utilities behind and between buildings.
- B. Protect trees, plant growth, and features designated to remain, as final landscaping.
- C. Protect bench marks, survey control points, and existing structures from damage or displacement.
- D. Protect existing site improvements to remain from damage during construction.
 - I. Restore damaged improvements to their original condition, as acceptable to Owner.

3.4 CLEARING AND GRUBBING

- A. Clear areas required for access to site and execution of Work.
- B. Remove trees and shrubs indicated. Removal includes new and old stumps of trees, shrubs and their roots.
- C. Fill depressions caused by clearing or demolition operations with suitable soil material, unless further excavation or earthwork is indicated.
- D. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
 - I. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.

3.5 TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

- A. Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to Erosion and Sedimentation Control Drawings and requirements of authorities having jurisdiction.
- B. Install temporary structures as indicated on the drawings or as ordered by the Engineer to control soil erosion and water pollution. Acceptable measures shall be consistent with those of the local authorities having jurisdiction.
- C. Temporary measures shall be coordinated with any permanent erosion control systems specified elsewhere in the contract to the extent practical to assure economical, effective and continuous erosion control.
- D. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- E. Inspect, maintain, and repair erosion and sedimentation control measures during construction until permanent vegetation has been established.
- F. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3.6 REMOVAL

- A. Remove debris, rock, and vegetation from site.
- B. Remove any foundations, paving, sidewalks, curbs, retaining walls and other improvements encountered within the work areas as indicated on Drawings or whose removal is required to complete the work in the contract.
- C. Neatly saw cut edges square where existing material is cut to adjoin new work.

- D. Excavate with hand tools the soil in the pipe bed zone around utility lines to be exposed during the project.
- E. Burning of combustible cleared and grubbed materials is not permitted on the Owner's property.
- F. All material removed from the Owner's property is to be legally disposed of.

3.7 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to depth of six (6) inches from areas to be further excavated, landscaped, or graded, without mixing with foreign materials for use in finish grading.
 - I. Do not excavate wet topsoil.
 - 2. Stockpile in area designated on site and protect from erosion.
 - 3. Limit height of topsoil stockpiles to 72 inches.
- C. Do not stockpile topsoil within protection zones.
- D. Stockpile surplus topsoil to allow for re-spreading deeper topsoil.
- E. Do not remove topsoil from site without Owner's permission.

SECTION 31 20 00

EARTHWORK

PART I - GENERAL

I.I SUMMARY

- A. Section includes:
 - 1. Excavation, fill and backfill, compaction, and grading as indicated.
- B. Related Sections:
 - 1. Section 31 10 00 Site Clearing
 - 2. Section 31 23 17 Trenching
 - 3. Section 32 90 00 Landscaping
 - 4. Section 33 41 00 Storm Drainage

1.2 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies Comply with applicable requirements of OSHA, local governing authorities, and State Department of Labor.
- B. Sampling and Testing The Owner shall provide soil testing and inspection service for quality control testing during earthwork operations.
- C. Test all subgrades and fill layers before further construction work is performed thereon. Tests of subgrades and fill layers shall be taken as follows:
 - I. Footing subgrade: For each strata of soil on which footings will be placed, conduct at least one plate bearing test and field density test if subgrade is cohesionless, or an unconfined compression test if subgrade is cohesive, to verify design bearing capacities shown on Drawings. Subsequent verification and approval of each footing subgrade may be based on a visual comparison of each subgrade with re-rated tested strata, when acceptable to the Architect/Engineer.
 - 2. Paved areas and building slab subgrade: Make at least one field density test of subgrade for every 2000 sq. ft. of paved area or building slab, but in no case less than 3 tests. In each compacted fill layer, make one field density test for every 2000 sq. ft. of overlaying building slab or paved area, but in no case less than 3 tests.
 - 3. Fill under footings: In each compacted fill layer, take one compaction test for every 30 lineal feet of wall. One compaction test is required under each individual footing.
 - 4. Site Fill: An independent testing agency (hired by the Owner) will take density tests on the compacted fill. Density tests shall be done on each lift at the rate of one test for every 2000 SF (186 SM) of the compacted fill. If the material tests less than 95%, corrective action and additional testing will be required. The additional testing and corrective action will be paid for by the Contractor. It shall be the Contractor's responsibility to obtain, from a testing firm approved by the Architect/Engineer, a sieve analysis and a laboratory moisture-density curve for the proposed granular fill. The procedure shall be repeated until a material meeting the Specifications is provided.

- D. If, in opinion of Architect/Engineer, based on reports of testing service and inspection, subgrade or fills, which have been placed, are below specified density, provide additional compaction and testing at no additional expense to Owner.
- E. Refer to Section 01 40 00 Quality Requirements for additional requirements.

1.3 SUBMITTALS

A. Comply with the requirements of Section 01 33 00 - Submittal Procedures and as modified below.

B. Samples:

- Submit samples to Architect/Engineer of each type of gravel and stone specified for fill, naming source for each material. Contractor shall also submit evidence that each proposed material complies with New York State Department of Transportation for materials for comparable use.
- 2. Samples shall also be submitted to Architect/Engineer at project site and shall contain approximately one (I) gallon by volume in a substantial container.

I.4 JOB CONDITIONS

A. Project Conditions:

- I. Site Information: Data in subsurface investigation reports was used for the basis of the design and may be available to the Contractor, but for information only. Conditions are not intended as representations or warranties of accuracy or continuity between soil borings. The Owner will not be responsible for interpretations or conclusions drawn from this data by Contractor.
 - a. Additional test borings and other exploratory operations may be performed by Contractor, at the Contractor's option. No change in the Contract Sum will be authorized for such additional exploration.

B. Existing Utilities:

- I. Locations of known underground utilities have been shown on the Drawings. For underground utilities outside the building, Contractor shall consult with local utility companies and Dig Safely NY (formerly U.F.P.O.) to determine the existence of uncharted or incorrectly charted piping or other utilities prior to excavation.
- Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult the Architect/Engineer immediately for directions as to procedure. Cooperate with Owner and Utility Company in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.
- 3. Locate existing underground utilities by careful hand excavation. If utilities are to remain in place, provide protection from damage during construction operations.
- 4. Do not interrupt existing utilities serving facilities occupied and used by Owner or others except when permitted in writing by Architect/Engineer and then only after temporary utility services have been provided.
- C. Use of Explosives: Do not bring explosives onto site or use in work.

- D. Protection of Persons and Property:
 - I. Barricade open excavations and post with warning lights for safety of persons. Operate warning lights during hours from dusk to dawn each day.
 - 2. Protect structures, utilities, sidewalks, pavements, and other facilities immediately adjacent to excavations, from damage caused by settlement, lateral movement, undermining, washout, and other hazards.
 - 3. Take precautions and provide necessary bracing and shoring to guard against movement or settlement of existing improvements or new construction. Contractor is entirely responsible for strength and adequacy of bracing and shoring, and for safety and support of construction from damage or injury caused by the lack thereof or by movement or settlement.

PART 2 - PRODUCTS

2.1 FILL AND BACKFILL MATERIALS

A. General:

- Where quantity of approved fill and backfill materials required exceeds that available from onsite stock-piles, provide materials from off-site sources approved by the Architect/Engineer and spread as directed or required by the Drawings and specifications.
- 2. Provide fill and backfill materials free of rock or gravel larger than stated size, debris, waste, frozen materials, vegetable matter, and other deleterious substances.
- B. Provide, where indicated from a NYSDOT approved source, the following fill materials consisting of blast furnace slag, stone, sand, and gravel, or blends of these materials, complying with New York State Department of Transportation (NYSDOT) Standard Specification, Section 304, Type 1, or Type 4, as modified below:
 - 1. Type I Fill (NYSDOT Type I / Granular Fill) gradation requirements:

SIEVE DESIGNATION	% BY WEIGHT PASSING SQUARE MESH SIEVES
·	<u> </u>
3"	100%
2"	90% to 100%
1/4"	30% to 65%
# 4 0	5% to 40%
#200	0% to 10%

2. Type 4 Fill (NYSDOT Type 4 / Select Granular Fill) gradation requirements:

	% BY WEIGHT PASSING
SIEVE DESIGNATION	SQUARE MESH SIEVES
2"	100%
1"	75% to 90%
1/4"	30% to 65%
# 4 0	5% to 40%
#200	0% to 10%

3. Sand Fill Under Slabs - Sand fill shall be an approved, well-graded bank-run meeting the requirements of the following table:

SIEVE DESIGNATION	<u>% PASSING</u>
3/8"	100%
#4	80% to 95%
#10	50% to 90%
#40	20% to 50%
#200	0% to 5%

C. Field Quality Control:

- The material shall be placed in maximum 8" lifts and compacted to 95% of maximum density at optimum moisture content as determined by ASTM D 1557, Modified Proctor.
- 2. An independent testing agency (hired by the Owner) will take density tests on the compacted fill. Density tests shall be done on each lift at the rate of one test for every 1000 SF (93 SM) of the compacted fill. If the material tests less than 95%, corrective action and additional testing will be required. The additional testing and corrective action will be paid for by the Contractor.
- 3. Material shall be placed in such a way as not to damage concrete foundations and especially the vapor barrier.
- 4. It shall be the Contractor's responsibility to obtain, from a testing firm approved by the Architect/Engineer, a sieve analysis and a laboratory moisture-density curve for the proposed granular fill. The procedure shall be repeated until a material meeting the Specifications is provided.

D. Site Fill:

- I. Use suitable excavated material from the site and place in accordance with Part 3 Execution. Where excavated material is not acceptable by Architect/Engineer, use run-of-bank gravel as defined below.
- 2. Within a building and/or pavement footprint the maximum aggregate size per lift is 2/3 the lift thickness within two (2) feet of the finished subgrade elevation.
- 3. Run-of-bank gravel, consisting of hard, durable pebbles, rock fragments, and soil binder, with less than 10% silt and clay by weight, and free of organic matter or any other deleterious materials. The material shall meet the following gradation requirements:

	% BY WEIGHT PASSING
SIEVE DESIGNATION	SQUARE MESH SIEVE
3"	100%
#4	40%-70%
#200	0% to 10%

- a. The material shall be placed in maximum 12" lifts and compacted to 95% of maximum density at optimum moisture content as determine by ASTM D 1557, Modified Proctor.
- b. Prior to placement of fill the subgrade must be proof-rolled with a 10-ton roller and observed for the presence of soft spots. Any soft spots will be excavated and backfilled with Type I Fill as directed by the Architect/Engineer.

- c. An independent testing agency (hired by the Owner) will take density tests on the compacted fill. Density tests shall be done on each lift at the rate of one test for every 1000 SF (93 SM) of the compacted fill. If the material tests less than 95%, corrective action and additional testing will be required. The additional testing and corrective action will be paid for by the Contractor.
- d. It shall be the Contractor's responsibility to obtain, from a testing firm approved by the Architect/Engineer, a sieve analysis and a laboratory moisture-density curve for the proposed granular fill. The procedure shall be repeated until a material meeting the Specifications is provided.
- E. Provide and maintain on-site material, approved by Architect/Engineer for use as fill and backfill in locations where fill and backfill material is not otherwise specified, free of stones larger than 3", roots, organic material, construction debris and trash.
- F. Drainage Fill: Provide washed, uniformly graded mixture of crushed stone, crushed or uncrushed gravel, with 100% passing a 1-1/2" sieve and not more than 5% passing a No. 4 sieve.

2.2 COVER MATERIALS

A. Provide sound, durable, well-rounded pebbles or rocks, size #IST stone, for use as ground cover.

2.3 TOPSOIL

- A. Provide material stripped from the surface of the site and stockpiled. Material shall be screened to 1/2" maximum particle size prior to respreading operations.
 - I. Where quantity of topsoil required exceeds that available from on-site stockpiles, provide imported topsoil and spread as directed or required by Drawings.
 - 2. Obtain imported topsoil from local sources or from areas having similar soil characteristics to those found on the site.
 - 3. Stockpile surplus topsoil to allow for respreading deeper topsoil.
- B. Comply with the following requirements:
 - 1. Existing and imported topsoil shall be screened, natural, fertile, agricultural soil capable of sustaining vigorous plant growth, from well drained site free of flooding, not in frozen or muddy condition, not less than 3% organic matter, and pH value of 5.9 to 7.0. It shall be free from subsoil, slag, clay, stones, lumps, live plants, roots, sticks, crabgrass, coughgrass, noxious weeds, and foreign matter.

PART 3 - EXECUTION

3.1 TOPSOIL STRIPPING

A. All areas designated to receive improvements or otherwise disturbed during construction shall have all existing vegetative material removed and legally disposed of. All topsoil shall be stripped and stockpiled in designated areas for respreading during final grading operations. No topsoil shall be removed from the site.

B. PREPARATION

- I. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- 2. Protect and maintain erosion and sedimentation controls during earth-moving operations.
- 3. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 EXCAVATION

A. Earth Excavation:

- I. Consists of removal and disposal of materials indicated in data provided on subsurface conditions or materials encountered which are not classified as rock excavation or unauthorized excavation.
- 2. Refer to Section 31 10 00 Site Clearing for removal of pavement and other obstructions visible on ground surface and for underground structures and utilities indicated to be demolished and removed.

B. Rock Excavation:

- Consists of removal and disposal of materials encountered that cannot be broken and excavated with a 40,000 lb. excavator with a rock bucket. Rock that may be scratched, chipped or broken down solely by the above excavator will not be included as rock excavation.
 - a. Typical of materials classified as rock: Boulders 1-1/2 cu. yd. or more in volume, solid rock, hard unrippable rock in ledges, and rockhard cementitious aggregate deposits.
 - b. Classify intermittent drilling or ripping performed to increase production and not necessary to permit excavation of material encountered as earth excavation.
- 2. Rock payment lines shall be limited to the following:
 - a. Two feet outside of concrete work for which forms are required, except footings.
 - b. One foot outside perimeter of footings.
 - c. In pipe trenches, 6" below invert elevation of pipe and 2 ft. wider than inside diameter of pipe, but not less than 3 ft. minimum trench width.
 - d. Neat outside dimensions of concrete work where no forms are required.
 - e. Under slabs on grade, 6" below bottom of concrete slab.
- C. No additional time and/or compensation to the Contract will be considered for excavation not classified as rock.

D. Unauthorized Excavation:

- I. Consists of removal of materials beyond indicated subgrade elevations or side dimensions without the specific direction of the Architect/Engineer. Replace unauthorized excavation as herein specified. Unauthorized excavation is without additional compensation.
- 2. Under footings, foundation bases, or retaining walls, fill the unauthorized excavation by extending the indicated bottom elevation of the footing or base to the excavation bottom, without altering the required top elevation.
- 3. Elsewhere, backfill and compact unauthorized excavations as specified for authorized excavations of the same classification, unless otherwise directed by the Architect/Engineer.

E. Stability of Sides:

- 1. Slope the sides of excavations over 5' deep to the angle of repose of the material excavated; otherwise, shore and brace where sloping is not possible either because of space restrictions or stability of material excavated.
- 2. Maintain sides and slopes of excavations in a safe condition until completion of backfilling, by scalping, benching, shelving or bracing.
- 3. Take precautions to prevent slides or cave-ins when excavations are made in locations adjacent to backfilled excavations, and when sides of excavations are subjected to vibrations from vehicular traffic or the operation of machinery, or any other source.

F. Shoring and Bracing:

- 1. Provide materials for shoring and bracing, such as sheet piling, uprights, stringers and crossbraces, in good serviceable condition. Use timbers that are sound and free of large or loose knots.
- 2. Maintain shoring and bracing in excavations regardless of the time period excavations will be open. Carry down shoring and bracing as the excavation progresses.
- 3. Provide trench shoring and bracing to comply with ANSI A10.1 "Safety Code for Building Construction", OSHA, codes and authorities having jurisdiction and State Department of Labor.

G. Dewatering:

- I. Owner shall not be liable for a change order resulting from Contractor's inability to properly dewater the site.
- 2. Perform excavation in a manner to prevent surface water and subsurface ground water from flowing into the excavations, and to prevent water from flooding the project site and surrounding area.
- 3. Do not allow water to accumulate in excavations. Remove water from excavations using dewatering methods that will prevent softening of foundation bottoms, undercutting footings, and soil change detrimental to the stability of subgrades and foundations. Provide and maintain pumps, sumps, suction and discharge lines, and other dewatering system components necessary to convey the water away from excavations.
- 4. Convey water removed from excavations and rainwater to collecting or run-off areas. Provide and maintain temporary drainage ditches and other diversions outside the excavation limits for each structure. Do not use trench excavations for site utilities as temporary drainage ditches. Do not direct water onto the work of another contractor.

H. Material Storage:

- 1. Stockpile excavated materials classified as suitable soil material where directed, until required for backfill or fill. Place, grade, and shape stockpiles for proper drainage.
- 2. Locate and retain materials required in the work a sufficient distance from the edge of excavations, even though such excavations may be sheeted and braced, to prevent such material falling or sliding into the excavations and to prevent cave-ins.

I. Excavation for Structures:

 Conform to the elevations and dimensions shown on the Drawings and extending a sufficient distance from footings and foundations to permit placing and removal of concrete formwork, installation of services, and for other construction required, and for inspection.

- 2. In excavating for footings and foundations, take care not to disturb bottom of excavation. Excavate by hand to final grade just before concrete is placed. Trim bottoms to required lines and grades to leave solid base to receive concrete.
- J. Excavation for Pavements: Cut ground under pavements to comply with cross sections, elevations and grades as shown.

K. Removal of Unsuitable Soil Materials:

- I. Excavate unsuitable soil materials encountered that extend below the required elevations, to the additional depth directed by the Architect/Engineer.
- 2. Such additional excavation will be measured as directed by the Architect/Engineer and paid for by the Owner as a change in the work.
- 3. Where the removal of unsuitable soil materials is due to the fault or negligence of the Contractor in his performance of shoring and bracing, dewatering, material storage, cold weather protection or other specified requirements, excavate the resulting unsuitable soil material and replace with suitable soil material, as determined by Architect/Engineer and defined herein, at no additional cost to the Owner.

L. Removal of Existing Underground Utilities:

- 1. Demolish and completely remove from site portions of existing underground utilities shown to be removed.
- 2. Coordinate with other prime contractor and/or with local utility companies for shutoff service if lines are active.
- 3. Coordinate scheduling of removal to suit relocation of lines when necessary.
- 4. Additional uncharted underground utilities in way of construction operations are to be demolished and removed or relocated as directed by the Architect/Engineer. Such additional removal and relocations will be measured as directed by the Architect/Engineer and paid for by the Owner as a change in the Work.
- 5. Indicate removal termination point for underground utilities on Record Drawings.

3.3 COLD WEATHER PROTECTION

A. Protect excavation bottoms against freezing when the atmospheric temperature is less than 35°F. by covering with dry insulating materials of sufficient depth to prevent frost penetration.

3.4 USE OF EXCAVATED MATERIALS FOR BACKFILL AND FILL

- A. Excavated materials proposed to be used for backfill or fill shall be tested and meet the requirements for backfill and fill materials indicated below.
- B. Submit samples to Architect/Engineer for each type of excavated material proposed to be used as typed fill or backfill with evidence that material complies with NYSDOT requirements for materials for comparable use. Reference Paragraph 1.3 Submittals.

3.5 FILL AND BACKFILL

A. General

I. Fill: Placement of specified fill materials, in layers, over the ground surface to the required elevations, for each area classification listed below.

2. Backfill: Placement of specified backfill material, in layers, in the excavations to the required subgrade elevations, for each area classification listed below.

B. Backfill Materials:

- 1. In all excavations, or filled areas, unless otherwise noted, use the following fill types:
 - a. Under concrete slabs inside building:
 - I) Type 4 fill from subgrade to within 6" of slab or as shown on the Contract Drawings.
 - 2) Provide vapor barrier on top of the Type 4 fill material as indicated on the Drawings.
 - 3) Provide well-graded bank-run sand on top of vapor barrier.
 - b. Against structure faces that are dampproofed, waterproofed, and/or have foundation drains: Type I fill.
 - c. Under Concrete Steps, Concrete Pads, Concrete Sidewalks or Concrete Paving: Type I fill from existing subgrade to within 6" of concrete; Type 4 fill for top 6", unless otherwise indicated or as shown on the Contract Drawings.
 - d. Under Asphalt Paving: Type I fill from existing subgrade to bottom of subbase.
- C. Prior to Backfill Placement: Backfill excavations as promptly as the work permits, but not until completion of the following:
 - I. Acceptance by Architect/Engineer of construction below finish grade including, where applicable, dampproofing, waterproofing, and perimeter insulation.
 - 2. Inspection, testing, approval and recording locations of underground utilities.
 - 3. Removal of concrete formwork.
 - 4. Removal of shoring and bracing and backfilling of voids with suitable materials. Cut off temporary sheet piling driven below bottom of structures and remove in manner to prevent settlement of the structure or utilities or leave in place if required.
 - 5. Removal of trash and debris.
 - 6. Permanent or temporary horizontal bracing is in place on horizontally supported walls.
 - 7. Acceptance by Architect/Engineer of suitability of existing subgrade soil materials and compaction to receive backfill.
- D. Preparation of Ground Surface to Receive Fill: Remove vegetation, debris, unsuitable soil materials, obstructions and deleterious materials from ground surface prior to placement of fills. Reference Section 31 10 00 Site Clearing.

E. Placement and Compaction:

- I. Place backfill and fill materials in layers not more than 8" in loose depth. Before compaction, moisten or aerate each layer as necessary to provide the optimum moisture content of the soil material. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
- 2. Place backfill and fill materials evenly adjacent to structures, to the required elevations. Take care to prevent wedging action of the backfill against structures by carrying the material uniformly around the structure to approximately the same elevation in each lift.
- 3. Use power-driven hand tampers for compacting materials adjacent to structures.

3.6 COMPACTION

A. General:

- I. Perform the compaction of soil materials for backfills and fills using suitable soil compaction equipment for the materials to be compacted and the work area locations.
- 2. Control soil compacting during construction for compliance with the percentage of maximum density specified for each area classification.

B. Compaction Equipment:

- I. Provide compaction equipment of suitable size and number, and in suitable working condition to complete the work on schedule.
- 2. Use sheepsfoot rollers, pneumatic tired rollers, tamper rollers, vibrating tampers, or other compaction equipment capable of obtaining the required density throughout the entire layer being compacted.
- C. Percentage of Maximum Density Requirements: Provide not less than the following percentages of the maximum density of the same soil material compacted at $\pm 2\%$ of optimum moisture content as measured against the modified proctor laboratory compaction test ASTM D 1557-91.
 - I. Building Slabs and Steps: Compact subgrade. Compact each layer of backfill or fill material to at least 95% of maximum dry density.
 - 2. Walkways, Pavements and Exterior Steps and Ramps: Compact subgrade. Compact each layer of backfill or fill material to at least 95% of maximum dry density.

D. Moisture Control:

- 1. Provide equipment capable of adding measured amounts of moisture to the soil material as determined by moisture density tests. Maintain the actual moisture content in the soil material at the time of compaction to $\pm 2\%$ of optimum moisture content as measured against the modified Proctor Laboratory compaction test ASTM D1557-91.
- 2. Where the subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply the required amount of water to the surface of subgrade, or layer of soil material, in such manner as to prevent free water appearing on the surface during or subsequent to compaction operations.
- 3. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified percentage of maximum density.

3.7 GRADING

A. Uniformly grade all areas within the limits of grading under this section, including adjacent transition areas. Smooth the finished surfaces within the specified tolerances, compact and with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.

B. Grading:

- I. Grade areas so that finish surfaces are free from irregular surface changes, large stones, and other objectionable material and as follows:
 - a. Lawn Areas: Grade areas to receive topsoil to within ± 0.10 ' of the required subgrade elevations. Subgrade elevations to be 6" below final elevations shown on the Drawings.

- b. Pavements: Shape the surface of areas under pavement to line, grade, and cross-section, with the finish surface not more than ½" above or below the required subgrade elevation.
- c. Grading Surface of Fill Under Building Slabs: Grade the surface of fill under building slabs smooth and even, free of voids, compacted as specified, and to required elevations.
- 2. Hand grade areas adjacent to existing or newly constructed structures.
- 3. Placement and Compaction:
 - a. The material shall be placed in maximum 12" lifts and compacted to 95% of maximum density at optimum moisture content as determine by ASTM D 1557, Modified Proctor.
 - b. Prior to placement of fill the subgrade must be proof-rolled with a 10-ton roller and observed for the presence of soft spots. Any soft spots will be excavated and backfilled with Type I Fill as directed by the Architect/Engineer.
- C. Compaction: After grading, compact subgrade surfaces to the depth and percentage of maximum density for each area classification.

3.8 MAINTENANCE

- A. Protection of Graded Areas: Protect newly graded areas from traffic and erosion, keep free of trash and debris. Repair and re-establish grades in settled, eroded or rutted areas to the specified tolerances.
- B. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify the surface, reshape, and compact to the required density prior to further construction. Use hand tamping over underground utilities and underfloor subdrains, etc.

3.9 DISPOSAL OF EXCESS AND WASTE MATERIALS

A. Removal from Owner's Property: Remove all excess excavated material, subsoil, trash and debris from the Owner's property and legally dispose of it.

END OF SECTION

SECTION 31 23 17

TRENCHING

PART I - GENERAL

I.I SUMMARY

A. Section includes:

- I. Trench excavation, backfill, and compaction for installation of underground piping, piping below slabs, and piping under foundations.
- 2. Refer to Section 31 20 00 Earthwork for excavation, backfill, grading, and compaction of all other types of trenches.

B. Related Sections:

- I. Section 31 20 00 Earthwork
- 2. Section 33 II 16 Site Water Distribution.
- 3. Section 33 31 00 Sanitary Sewage Systems.
- 4. Section 33 41 00 Storm Drainage.

1.2 COORDINATION

- A. Section 01 30 00 Administrative Requirements: Coordination and project conditions.
- B. Verify Work associated with lower elevation utilities is complete before placing higher elevation utilities.

I.3 OUALITY ASSURANCE

A. Regulatory Requirements: Comply with applicable requirements of OSHA, governing authorities having jurisdiction, and State Labor Department for trenching work, including required shoring.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Backfill: Material free from cinders, ashes, refuse, vegetable or organic material, boulders, rocks or stones, or other unsuitable material.
 - 1. Sand: Natural bank sand, graded from fine to coarse, not lumpy or frozen, containing no more than 10 percent by weight of loam or sand and complying with the following gradation requirements:
 - a. 100% passing 3/4" sieve.
 - b. 0-10% passing the No. 200 sieve.
 - 2. Granular fill: Type I Material (Refer to Section 31 20 00 Earthwork).
 - 3. Excavated Material: When type of backfill material is not indicated on Drawings or in Project Manual, use suitable material excavated on-site, which consists of loam, clay, sand, gravel, or other material suitable for backfilling as approved by Architect/Engineer.

- 4. Backfill under building slabs and pavements.
 - a. Backfill and compact in 8" layer the remainder of the trench from the top of the bedding to the bottom of subbase with Type I fill as specified in Section 31 20 00.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Identify required lines, levels, contours, and datum locations.
- B. Protect plant life, lawns, and other features remaining as portion of final landscaping.
- C. Protect benchmarks, sidewalks and paving, from excavating equipment and vehicular traffic.
- D. Maintain and protect above and below grade utilities indicated to remain.

3.2 EXCAVATION

- A. Excavate at least 50 feet in advance of pipe laying, but no more than one average day's pipe laying.
- B. Excavate bottom of trenches at least 2 feet wider than outside diameter of pipe or structure or as required for sheeting and bracing and proper handling of fittings, etc.
- C. Excavate trenches to depth indicated on Drawings. Provide uniform and continuous bearing and support for bedding material and piping.
- D. When Project conditions permit, slope sidewalls of excavation as shown on the Drawings. When sidewalls cannot be sloped, provide sheeting and shoring to protect excavation as specified in this section.
- E. When subsurface materials at bottom of trench are loose or soft, excavate to greater depth until suitable material is encountered, backfill with Type I fill (refer to Section 31 20 00), and compact to provide firm subgrade as approved by Architect/Engineer.
- F. Hand trim bottom of trench. Provide "bell holes" at each pipe joint as required for proper joining.
- G. Stockpile material excavated from trenches to prevent rainwater from entering trench. Divert rainwater as required. Do not obstruct existing surface drainage.
- H. Rock Excavation: Comply with Section 31 20 00 unless otherwise indicated.

3.3 BEDDING

A. Pipe Bedding:

- 1. Place bedding by hand from the bottom of trench to the depth above the pipe with material as shown on the drawings, placed in layers and compacted by tamping. Employ placement method that does not damage or disturb utilities in trench.
- 2. Place bedding material on both sides of pipe, fittings and appurtenances simultaneously.

3.4 FIELD QUALITY CONTROL

- A. Provide soil testing and inspection during backfill of trenches. Refer to Section 01 40 00 Quality Requirements: Testing and inspection services.
- B. Test all subgrades and fill layers as follows:
 - I. In each compacted fill layer, take one compaction test for every 30 lineal feet of trench.
- C. When tests indicate Work does not meet specified requirements, provide additional compaction and testing until specified conditions are met. Additional testing required due to improper installation is the responsibility of the Contractor.

3.5 PROTECTION OF FINISHED WORK

- A. Section 01 70 00 Execution Requirements: Protecting finished work.
- B. Reshape and re-compact fills subjected to vehicular traffic during construction.

END OF SECTION

SECTION 31 32 19

GEOTEXTILES

PART I - GENERAL

I.I SUMMARY

- A. Section includes geotextiles.
- B. Related Sections:
 - I. Section 31 20 00 Earthwork.

1.2 REFERENCES

- A. Comply with applicable requirements of the following standards. Should the standards conflict with other specified requirements, the most restrictive shall govern.
 - I. American Society for Testing and Materials (ASTM):

D 1777 Thickness (mils).
D 4632-86 Grab Strength (lbs.).
D 4632-86 Elongation (%).
D 4833 Puncture Strength.
D 3786-87 Mullen Burst Strength (psi).
D 4533-85 Trapezoid Tear Strength.
D 3787 (mod) Puncture Strength.

2. Occupational Safety and Health Administration (OSHA).

1.3 SUBMITTALS

- A. Manufacturer's Product Data:
 - I. Provide certifications stating that the materials comply with the specified requirements.

I.4 QUALITY ASSURANCE

A. All geotextiles shall be new, clean and in accordance with the material specifications, unless specifically noted on the plans.

1.5 PRODUCT DELIVERY AND STORAGE

- A. Take all required measures to ensure that all geotextiles are protected from damage.
- B. Special care shall be exercised during delivery and storage to avoid damage to the products.
- C. All materials shall be delivered and stored within the Contractor's work limits or in an area approved by the Owner.
- D. Products that are damaged will be removed and replaced, unless the product can be repaired in an acceptable manner.

PART 2 - PRODUCTS

2.1 FILTER FABRIC

A. Filter fabric shall be a non-woven geotextile as manufactured by American Engineering Fabrics, I Coffin Avenue, New Bedford, MA 02746, style AEF 480HS, or an approved equal, meeting the following requirements:

AEF 480HS
4.0 oz/sy.
105 lbs.
50%
45 lbs.
210 psi
65 lbs.
60 mils

Water Flow Rate 140 GPM/ft sq.

- B. The following constitute approved equals:
 - I. Mirafi 140N.
 - 2. Propex Fabrics, Inc. 4547 (formerly Amoco).
 - 3. Carthage Mills FX-40HS.
 - 4. Contech C-40NW.
 - 5. Substitutions: Section 01 60 00 Product Requirements.

2.2 SEPARATION/STABILIZATION FABRIC

A. The separation/stabilization fabric shall be a woven geotextile as manufactured by American Engineering Fabrics, I Coffin Avenue, New Bedford, MA 02746, style AEF 200W, or an approved equal, meeting the following requirements:

<u>Property</u>	<u>AEF 200W</u>
Weight	4.0 oz/sy.
Grab Strength	200 lbs.
Trap Tear Strength	75 lbs.
Mullen Burst Strength	400 psi
Puncture Strength	90 lbs.

- B. The following constitute approved equals:
 - I. Mirafi 500X.
 - 2. Propex Fabrics, Inc. 2002 (formerly Amoco).
 - 3. Carthage Mills FX-55.
 - 4. Contech C-200.
 - 5. Substitutions: Section 01 60 00 Product Requirements.

PART 3 - EXECUTION

3.1 PREPARATION

A. The surface the geotextile is to be placed on shall be smooth and free of sharp stones to prevent puncture of the geotextile.

3.2 INSTALLATION

- A. Geotextiles may be joined by overlapping or sewing.
 - 1. Overlapped seams shall have a minimum overlap of 18 inches.
 - 2. Sewn seams shall be lapped a minimum of 4" and sewn with nylon or polypropylene thread.
- B. Geotextile that is punctured or torn shall be replaced or patched. A patch shall exceed the damaged perimeter by 3 feet in all directions.
- C. Geotextile shall be placed loosely so that overlapping materials will not stretch or tear it.
- D. Geotextiles shall be unrolled from top to bottom of slopes and overlay material shall be placed from the toe of the slope towards the top.
- E. Overlay material shall be placed in the directions of seams or the direction of overlaps only.
- F. Overlay materials shall not be dropped on geotextile when avoidable.
- G. When used for underdrain, geotextile shall be placed to conform loosely to the shape of the trench. After placing the drainage material, the geotextile shall be folded over the top to form a 12-inch minimum overlap.

3.3 PROTECTION

- A. Geotextiles shall be protected from sunlight during transport and storage. After placement, the geotextile shall not be left uncovered for more than 2 weeks.
- B. Traffic or construction equipment will not be permitted directly on geotextiles.

END OF SECTION

EXTERIOR IMPROVEMENTS

DIVISION 32

SECTION 32 12 16

ASPHALT CONCRETE PAVING

PART I - GENERAL

I.I SUMMARY

- A. Section includes asphalt concrete paving, top and binder courses; aggregate base course; pavement markings.
- B. Related Sections:
 - I. Section 31 20 00 Earthwork
 - 2. Section 31 23 17 Trenching
 - 3. Section 33 41 00 Storm Drainage

I.2 SUBMITTALS

- A. Comply with Section 01 33 00 Submittal Procedures.
- B. Product Data: Submit product information and Marshall mix design including name of supplier.
- C. Certificate: Certify materials meet or exceed the latest New York Department of Transportation Specifications for Marshall mix design.

1.3 QUALITY ASSURANCE

- A. Qualifications of Asphalt Concrete Producer: Use only virgin materials which are furnished by a bulk asphalt concrete producer regularly engaged in production of hot-mix, hot-laid asphalt concrete.
- B. Material Qualifications: Asphalt concrete and aggregate materials shall comply with the New York State Department of Transportation Specifications for comparable materials. Use only virgin materials. No imported recycled materials will be allowed.
- C. Obtain materials from same source throughout.
- D. Maintain one copy of each document on site.

1.4 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 Product Requirements: Environmental conditions affecting products on site.
- B. Do not place asphalt when ambient air or base surface temperature is less than 40 degrees F, or surface is wet or frozen.
- C. Grade Control: Establish and maintain required lines and elevations.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Use locally available materials and gradations that exhibit a satisfactory record of previous installations.
- B. Subbase: Comply with the latest New York State Department of Transportation Standard Specification Section 304, Paragraph 304-2, Type 4, as modified in paragraph 2.1, of Section 31 20 00 Earthwork in these specifications.
- C. Coatings: Comply with the latest New York State Department of Transportation Standard Specification, Section 702 for the material designations indicated.
 - 1. Tack Coat: Emulsified asphalt, slow setting type; NYSDOT Designation 702-3601 (SS-1h) or 702-4501 (CSS-1h).
 - 2. Asphalt Cement Filler: NYSDOT Designation 702-05.
- D. Asphalt Concrete: Comply with the latest New York State Department of Transportation Standard Specification for Marshall mix design, Section 400.
 - Base Course: Hot, plant mixed asphalt concrete, complying with NYSDOT Standard Specification Section 401 and Section 403 for "Asphalt Concrete - Type I Base".
 - 2. Binder Course: Hot, plant mixed asphalt concrete, complying with NYSDOT Standard Specification Section 401 and Section 403 for "Asphalt Concrete Type 3 Binder".
 - 3. Shim Course: Hot, plant mixed asphalt concrete, complying with the latest NYSDOT Standard Specification Section 401 and 403 for "Asphalt Concrete Type 5 Shim".
 - 4. Top Course: Hot, plant mixed asphalt concrete, complying with the latest NYSDOT Standard Specification Section 401 and 403 for "Asphalt Concrete Type 6 Top".

2.2 EQUIPMENT

- A. Compacting Equipment: All equipment for compacting shall be self-propelled tandem roller having a minimum weight of 10 tons. A hand-held vibrating compactor may be used in areas not accessible to rollers.
- B. Paving Equipment: All equipment for paving shall be spreading, self-propelled asphalt paving machines capable of maintaining line, grade and minimum thickness as detailed on the Drawings. Spreader boxes may be used in areas specifically approved by the Engineer.

2.3 PAVEMENT MARKING PAINTS

A. Comply with requirements of the latest NYSDOT Standard Specification, Paragraph 640-2. Glass beads shall not be used.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 Administrative Requirements: Verification of existing conditions before starting work.
- B. Verify compacted subgrade is dry and ready to support paving and imposed loads.
- C. Verify gradients and elevations of subgrade are correct.

3.2 AGGREGATE BASE

A. Comply with requirements of the latest New York State Department of Transportation Standard Specification, Section 304-3, for aggregate gradations specified, unless otherwise indicated.

B. Subbase Course:

- 1. Thickness: As shown on the Drawings.
- 2. Completely fill voids with grit and roll with 10-ton roller until there is no movement of the material ahead of the roller.
- 3. After rolling, the course shall be tested with a straight edge min. 15' in length. Any depressions over 1/4" in depth shall be satisfactorily eliminated.
- 4. Subbase shall be approved before applying pavement.

3.3 ASPHALT CONCRETE PAVING - GENERAL

A. The finished surface shall be free from depressions that would collect water. All depressions over 1/8" when tested with a 6' straight edge shall be eliminated at the Contractor's expense with no evidence of patching. All paving to be carried to wood stripping, curbing, etc.

B. Installation Over Subbase:

I. Roads and Parking Areas: Apply binder and top courses over subbase in two courses to the thickness shown on the drawings. Thicknesses shown shall be compacted depth. Comply with the latest New York State Department of Transportation Standard Specification, paragraph 401-3 and paragraph 403-3, for asphalt types specified.

3.4 JOINING TO ADJACENT WORK

A. Tack coat all new and existing surfaces that will abut with new paving, including but not limited to below grade curb face, binder surface when in place longer than 7 days or excessively dirty as determined by Engineer, etc.

3.5 PAVEMENT MARKINGS

A. Apply pavement markings as indicated or in accordance with the New York State Manual of Uniform Traffic Control Devices.

- B. Apply pavement marking paint in accordance with Manufacturer's recommended procedures and in accordance with the latest NYSDOT Standard Specification, Paragraph 640-3.
- C. Pavement markings shall be the type, color, size and locations shown on the Drawings. If the information on the Drawings is not complete and authority having jurisdiction does not have requirements regarding this use, the following paint shall be supplied in accordance with AASHTO M248, latest addition. Colors shall be as follows: WHITE OR YELLOW Parking stalls, handicap parking and characters, parking islands, traffic control lettering and characters and pedestrian crossings.

3.6 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Field inspecting, testing, adjusting, and balancing.

3.7 PROTECTION OF FINISHED WORK

- A. Section 01 70 00 Execution Requirements: Protecting finished work.
- B. Immediately after placement, protect pavement from mechanical injury.

END OF SECTION

SECTION 32 90 00

LANDSCAPING

PART I - GENERAL

I.I SUMMARY

- A. Section includes finish grading of subsoil, placement and compaction of topsoil, seeding and fertilizing.
- B. Related Sections:
 - 1. Section 31 10 00 Site Clearing
 - 2. Section 31 20 00 Earthwork
 - 3. Section 31 23 17 Trenching

1.2 REFERENCES

A. ANSI Z60.1 - American Standard for Nursery Stock.

I.3 SUBMITTALS

- A. Comply with Section 01 33 00 Submittal Procedures and as modified below.
- B. Quality Control Submittals:
 - Topsoil Analysis Report: Submit soil analysis report for on-site stockpiled and imported topsoil. Do not spread or mix topsoil until Architect/Engineer approves soil analysis report.
 - a. Provide required representative samples of topsoil proposed for use in the Project to independent testing agency for analysis and recommended treatment. Contractor to bear all costs associated with testing and analysis of topsoil.
 - b. Include specific recommendations regarding exact types, time and rates of application of soil additives and fertilizers based upon soil test results and type of material to be planted. Follow soil additive recommendations during all planting and seeding operations. Include the following in report:
 - I) pH factor
 - 2) Percent organic matter
 - 3) Soluble salts
 - 4) Available nutrients
 - 5) Percent clay, sand and silt particles
 - c. Include the type, composition, rate and means of application of soil amendments and fertilizer necessary to establish the required pH factor and supply of nutrients satisfactory for planting.
 - d. Adjust all soil amendments specified in this section to comply with test reports.

2. Certificates

a. Submit certificates of inspection as required by governmental authorities, and manufacturer's or vendor's certified analysis for soil amendments and fertilizer materials. Submit other data to show that materials comply with specified requirements. Submit certificates to Architect/Engineer prior to acceptance of stock. b. Submit seed vendor's certified statement for each grass seed mix required, stating botanical and common name, percentage by weight, and percentages of purity, germination, and weed seed for each grass seed species.

1.4 CLOSEOUT SUBMITTALS

- A. Section 01 70 00 Execution Requirements: Closeout procedures.
- B. Submit typewritten instructions recommending procedures to be established by Owner for maintenance of landscape work for I full year. Submit instructions, including watering and feeding schedule, prior to expiration of required maintenance period.

1.5 QUALITY ASSURANCE

A. Qualifications:

- I. Installer: Landscape work to be done by single firm specializing in landscape work and shall comply with all applicable codes and ordinances regarding landscaping.
- B. Applicable Standards: Comply with the following codes and standards, unless otherwise shown or specified.
 - 1. American Joint Committee on Horticultural Nomenclature Standardized Plant Names.
 - 2. American Standard for Nursery Stock American Association of Nurserymen, for sizes, heights and ball sizes (ANSI Z60.1).

I.6 WARRANTY

- A. Furnish one year warranty including one continuous growing season including coverage of plants from death or unhealthy conditions.
- B. Replacements: Plants of same size and species as specified, planted in next growing season, with new warranty beginning on date of replacement.

1.7 MAINTENANCE SERVICE

A. Maintain seeded areas, sodded areas, and plant life immediately after placement until grass and plants are well established and exhibit vigorous growing condition.

PART 2 - PRODUCTS

2.1 SOIL AND SOIL MODIFICATION MATERIALS

- A. Topsoil: Excavated from site and reused. See Section 31 10 00 Site Clearing and Section 31 20 00 Earthwork.
- B. Fertilizer: Fifty (50) percent of elements derived from organic sources, to the following proportions: Nitrogen ten (10) percent, phosphoric acid ten (10) percent, soluble potash ten (10) percent.
- C. Lime: As needed to adjust soil pH.

2.2 PLANT MATERIAL

A. All new plant material shall conform to ANSI Z60.1 for calipers, heights, ball sizes, etc.

2.3 GRASS

- A. Seed Mixture: Shall be fresh, recleaned and of the latest crop year. The grass seed shall be a mixture of varieties in the proportion specified. Each type of grass shall meet or exceed the minimum percent of 95% purity with the germination listed for that type of grass.
 - 1. Kentucky Blue Grass: 50 percent % germination 80.
 - 2. Creeping Red Fescue Grass: 20 percent % germination 80.
 - 3. Perennial Ryegrass: 30 percent % germination 85.
- B. Seed Mixture for grass lined swales: Shall be fresh, recleaned and of the latest crop year. The grass seed shall be a mixture of varieties in the proportion specified. Each type of grass shall meet or exceed the minimum percent of 93% purity with the germination listed for that type of grass.
 - 1. Kentucky Blue Grass: 12 percent % germination 80.
 - 2. Chewings Fescue Grass: 25 percent % germination 85.
 - 3. Annual Ryegrass: 30 percent % germination 85.
 - 4. Perennial Ryegrass: 25 percent % germination 85.
 - 5. Wheat Clover: 3 percent % germination 98.
- C. The balance of material in the mixture, other than specified pure live seed shall consist of non-viable seed, chaff, hulls, live seed of crop plants and harmless inert matter. The percentage of weed seed shall not exceed one percent by weight for the mixture. All seed shall be delivered in the standard sized bags of the Vendor, showing the weight, analysis and Vendor's name.

PART 3 - EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. Verify required underground utilities are in proper location.
- B. Prepare subsoil to eliminate uneven areas. Maintain profiles and contours. Make changes in grade gradual. Blend slopes into level areas.
- C. Dispose of subsoil removed from landscape excavations. Do not mix with planting soil or use as backfill.
- D. Scarify subsoil to depth of three (3) inches and rake to true lines and grades, free from all unsightly variations, bumps, ridges and depressions that might hold water. All sticks, stones, clods, roots, or other objectionable material, which might interfere with the formation of a fine seed bed shall be removed from the soil.
- E. Backfill to be three (3) parts topsoil to one (1) part peat moss by volume. Place in nine (9) inch layers, water each layer until settled.

- F. Excavate entire bed and backfill with above material for mass planting.
- G. Install black fabric mesh under mulch in planting beds to prevent week growth. Landscape stone edging is to be at perimeter of the landscape area.

3.2 PLACING TOPSOIL

- A. Spread topsoil to minimum depth of four (4) inches. Rake smooth.
- B. Grade topsoil to eliminate rough, low or soft areas. Slope for positive drainage.
- C. Place topsoil into pits and beds intended for plant root balls to minimum thickness of six (6) inches.
- D. Apply fertilizer at rate of 25 pounds per 1,000 square feet and work lightly into the top two inches of soil in such a way to make an even and finely pulverized seed bed.

3.3 SEEDING

- A. The seed shall be mechanically sown at the rate of 6 pounds per 1,000 square feet. One half the grass seed allotted to an area shall be sown in one direction and the balance shall be cross-sown. After seeding, the ground surface shall be lightly and evenly raked to work the seed from 1/8 to 1/4 inch into the soil. The area shall then be rolled with an approved lawn roller weighing not over 65 pounds per foot of width for clayey or heavy soil and not over 210 pounds per foot of width for sandy or light soil. In areas exceeding 5:1 slope and in drainage swales, Contractor shall overseed at an additional rate of 3 pounds per 1,000 s.f.
- B. Immediately following seeding, apply straw mulch at the rate of 100 lbs. per 1,000 square feet.
- C. Apply water with fine spray immediately after each area has been mulched.
- D. Establish healthy stand of grass on all seeded areas.

3.4 MAINTENANCE

- A. Mow grass three (3) times at regular intervals to maintain maximum height of $2\frac{1}{2}$ inches. Do not cut more than 1/3 of grass blade at each mowing.
- B. Water to prevent all landscaped, grassed areas, and soil from drying out.
- C. Control growth of weeds.

END OF SECTION

UTILITIES

SECTION 33 05 24

UTILITY HORIZONTAL DIRECTIONAL DRILLING

PART I - GENERAL

I.I RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

I.2 SUMMARY

A. Section Includes:

- I. Excavation for approach trenches and pits.
- 2. Horizontal directional drilling.
- 3. Pipe.

B. Related Sections:

- I. Section 31 20 00 Earthwork.
- 2. Section 31 23 17 Trenching.
- 3. Section 33 31 00 Sanitary Sewage Systems.

1.3 UNIT PRICE - MEASUREMENT AND PAYMENT

A. Horizontal Directional Drilling:

- I. Basis of Measurement: By linear foot.
- 2. Basis of Payment: Includes excavation, drilling, pipe, accessories, tests, and backfill.

I.4 REFERENCES

- A. American Association of State Highway and Transportation Officials:
 - 1. AASHTO T180 Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

B. ASTM International:

- ASTM D698 Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)).
- 2. ASTM D1557 Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (6,000 ft-lbf/ft3 (2,700 kN-m/m3)).
- 3. ASTM D2922 Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- 4. ASTM D3017 Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).
- 5. ASTM F1962 Standard Guide for Use of Maxi-Horizontal Directional Drilling for Placement of Polyethylene Pipe or Conduit Under Obstacles, Including River Crossings.

C. National Utility Contractors Association:

I. NUCA - HDD Installation Guidelines.

1.5 DESIGN REQUIREMENTS

A. Design Criteria:

- I. Drilling Steering System: Remote with continuous electronic monitoring of boring depth and location.
- 2. Directional Change Capability: 90 degree with 35-foot radius curve.
- 3. Minimum distance for single bores and between boring pits:

Pipe Size	Boring Distance
I to I-I/2 inches	400 feet
2 to 2-1/2 inches	350 feet
3 to 6 inches	300 feet

- 4. Ratio of Reaming Diameter to Pipe Outside Diameter:
 - a. Nominal Pipe Diameter of 6 Inches and Smaller: 1.5 maximum.
 - b. Nominal pipe diameter larger than 6 Inches: Submit recommended ratio and reaming procedures for review.

I.6 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Shop Drawings:

- I. Submit technical data for equipment, method of installation, and proposed sequence of construction.
- Include information pertaining to pits, dewatering, method of spoils removal, equipment size and capacity, equipment capabilities including installing pipe on radius, type of drill bit, drilling fluid, method of monitoring line and grade and detection of surface movement, name plate data for drilling equipment and mobile spoils removal unit.

C. Product Data:

- I. Identify source of water used for drilling.
- 2. Submit copy of approvals and permits for use of water source.
- D. Installer Qualifications: Submit history of previous work completed of equivalent nature and scope. Include qualification and experience of key personnel.
- E. Submit State, Village of Richfield Springs, Highways & Public Work's occupancy permit for installations along public throughways and lands.
- F. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

1.7 CLOSEOUT SUBMITTALS

- A. Section 01 70 00 Execution and Closeout Requirements: Requirements for submittals.
- B. Project Record Documents: Record actual locations of pipe and invert elevations.

- C. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.
- D. Record actual depth of pipe at 25 feet intervals.
- E. Record actual horizontal location of installed pipe.
- F. Show depth and location of abandoned bores.
- G. Record depth and location of drill bits and drill stems not removed from bore.

1.8 QUALITY ASSURANCE

- A. Perform work in accordance with the following:
 - I. NUCA HDD Installation Guidelines.
 - 2. ASTM F1962.
- B. Perform Work in accordance with State Village of Richfield Springs, Highways, & Public Work's standard.
- C. Maintain one copy of each document on site.

1.9 OUALIFICATIONS

- A. Installer: Company specializing in performing work of this section with minimum 5 years documented experience approved by manufacturer.
 - 1. Work Experience: Include projects of similar scope and conditions.
 - 2. Furnish list of references upon request.

1.10 PRE-INSTALLATION MEETINGS

- A. Section 01 30 00 Administrative Requirements: Pre-installation meeting.
- B. Convene minimum one week prior to commencing work of this section.

1.11 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Provide temporary end caps and closures on piping and fittings until pipe is installed.
- C. Protect pipe from entry of foreign materials and water by temporary covers, completing sections of work, and isolating parts of completed system.
- D. Accept products on site in manufacturer's original containers or configuration. Inspect for damage.
- E. Use shipping braces between layers of stacked pipe. Stack piping lengths no more than 3 layers high.

- F. Store field joint materials indoors in dry area in original shipping containers. Maintain storage temperature of 60 to 85 degrees F.
- G. Support pipes with nylon slings during handling.

1.12 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 Product Requirements: Environmental conditions affecting products on site.
- B. Conduct operations so as not to interfere with, interrupt, damage, destroy, or endanger integrity of surface or subsurface structures or utilities, and landscape in immediate or adjacent areas.

1.13 COORDINATION

- A. Section 01 30 00 Administrative Requirements: Requirements for coordination.
- B. Coordinate work with State Village of Richfield Springs, Highways, Public Works and utilities within construction area.

PART 2 - PRODUCTS

2.1 DRILLING FLUID

A. Drilling Fluid: Liquid bentonite clay slurry; totally inert with no environmental risk.

2.2 PIPE

- A. Furnish materials in accordance with State, Village of Richfield Springs, Highways, & Public Work's standards.
- B. Sanitary Sewage System Pipe: As specified in Section 33 31 00.

2.3 FILL MATERIALS

A. Subsoil Fill: As specified in Section 31 20 00.

2.4 WATER SOURCE

A. Water: Potable, obtained from utility source.

2.5 UNDERGROUND PIPE MARKERS

- A. Trace Wire: Electronic detection materials for non-conductive piping products.
 - I. Unshielded 10 gage copper wire.
 - 2. Conductive tape.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 Administrative Requirements: Verification of existing conditions before starting work.
- B. Verify connection to existing piping system size, location, and invert elevations are in accordance with Drawings.

3.2 PREPARATION

- A. Call Local Utility Line Information service not less than three working days before performing Work.
 - I. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Locate, identify, and protect utilities indicated to remain from damage.
- C. Identify required lines, levels, contours, and datum locations.
- D. Protect plant life, lawns, and other features remaining as portion of final landscaping.
- E. Protect bench marks, survey control points, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- F. Establish pipe elevations with not less than 5 feet of cover.
- G. Establish minimum separation between sanitary sewer piping and other services in accordance with applicable code.

3.3 DEWATERING

- A. Intercept and divert surface drainage, precipitation, and groundwater away from excavation through use of dikes, curb walls, ditches, pipes, sumps or other means.
- B. Develop and maintain substantially dry subgrade during drilling and pipe installation.
- C. Comply with State & Village of Richfield Springs requirements for discharging water to watercourse, preventing stream degradation, and erosion and sediment control.

3.4 EXISTING WORK

A. Maintain access to existing facilities and services indicated to remain. Modify pipe installation indicated on Drawings to maintain access to existing facilities.

3.5 EXCAVATION

- A. Excavate subsoil as specified in Section 31 23 17 Trenching.
- B. Excavate approach trenches and pits in accordance with shop drawings and as site conditions require. Minimize number of access pits.

- C. Provide sump areas to contain drilling fluids.
- Install excavation supports as specified in Section 31 23 17 Trenching. D.
- E. Restore areas after completion of drilling and carrier pipe installation.

3.6 DRILLING

- Drill pilot bore with vertical and horizontal alignment as indicated on shop drawings. A.
- B. Guide drill remotely from ground surface to maintain alignment by monitoring signals transmitted from drill bit.
 - I. Monitor depth, pitch, and position.
 - 2. Adjust drill head orientation to maintain correct alignment.
- C. Inject drilling fluid into bore to stabilize hole, remove cuttings, and lubricate drill bit and pipe.
- D. Continuously monitor drilling fluid pumping rate, pressure, viscosity, and density while drilling pilot bore, back reaming, and installing pipe to ensure adequate removal of soil cuttings and stabilization of bore.
 - 1. Provide relief holes when required to relieve excess pressure.
 - 2. Minimize heaving during pullback.
- E. Calibrate and verify electronic monitor accuracy during first 50 feet of bore in presence of Architect/Engineer before proceeding with other drilling. Excavate minimum of four test pits spaced along first 50 feet bore to verify required accuracy. When required accuracy is not met, adjust equipment or provide new equipment capable of meeting required accuracy.
- F. After completing pilot bore, remove drill bit.

3.7 **DRILLING OBSTRUCTIONS**

- When obstructions are encountered during drilling, notify Architect/Engineer immediately. Α. Do not proceed around obstruction without Architect/Engineer's approval.
- B. For conditions requiring more than 3 feet deviation in horizontal alignment, submit new shop drawings to Architect/Engineer for approval before resuming work.
- C. Maintain adjusted bore alignment within easement or right-of-way.

3.8 PIPE INSTALLATION

- A. After completing pilot bore, remove drill bit. Install reamer and pipe pulling head.
 - 1. Select reamer with minimum bore diameter required for pipe installation.
- B. Attach pipe to pipe pulling head. Pull reamer and pipe to entry pit along pilot bore.
- C. Inject drilling fluid through reamer to stabilize bore and lubricate pipe.

- D. Install piping with horizontal and vertical alignment as shown on shop drawings.
- E. Protect and support pipe being pulled into bore so pipe moves freely and is not damaged during installation.
- F. Do not exceed pipe manufacturer's recommended pullback forces.
- G. Install trace wire continuous with each bore. Splice trace wire only at intermediate bore pits. Tape or insulate trace wire to prevent corrosion and maintain integrity of pipe detection.
 - 1. Terminate trace wire for each pipe run at structures along pipe system.
 - 2. Provide extra length of trace wire at each structure, so trace wire can be pulled 3 feet out top of structure for connection to detection equipment.
 - 3. Test trace wire for continuity for each bore before acceptance.
- H. Provide sufficient length of pipe to extend past termination point to allow connection to other pipe sections & existing manhole.
- I. Allow minimum of 24 hours for stabilization after installing pipe before making connections to pipe.
- J. Mark location and depth of bore with spray paint on paved surfaces, and wooden stakes on non-paved surfaces at 25-foot intervals.

3.9 SLURRY REMOVAL AND DISPOSAL

- A. Contain excess drilling fluids at entry and exit points until recycled or removed from site. Provide recovery system to remove drilling spoils from access pits.
- B. Remove, transport and legally dispose of drilling spoils.
 - I. Do not discharge drilling spoils in sanitary sewers, storm sewers, or other drainage systems.
 - 2. When drilling in suspected contaminated soil, test drilling fluid for contamination before disposal.
- C. When drilling fluid leaks to surface, immediately contain leak and barricade area from vehicular and pedestrian travel before resuming drilling operations.
- D. Complete cleanup of drilling fluid at end of each workday.

3.10 BACKFILL

- A. Install backfill as specified in Section 31 23 17 Trenching.
- B. Backfill approach trenches and pits with subsoil fill to contours and elevations of surrounding existing grade.
- C. Compact subsoil fill as specified in Section 31 23 17 Trenching.

3.11 **ERECTION TOLERANCES**

- Section 01 40 00 Quality Requirements: Tolerances. Α.
- B. Maximum Variation from Horizontal Position: 12 inches.
- C. Maximum Variation from Vertical Elevation: 2 inches.
- D. Minimum Horizontal and Vertical Clearance from Other Utilities: 12 inches.
- E. When pipe installation deviates beyond specified tolerances, abandon bore, remove installed pipe, re-bore, and reinstall pipe in correct alignment.
- F. Fill abandoned bores greater than 3 inches in diameter with grout or flowable fill material.

3.12 FIELD QUALITY CONTROL

- Section 01 40 00 Quality Requirements and 01 70 00 Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Upon completion of pipe installation, test pipe in accordance with the following:
 - 1. Sanitary Sewer Pipe Testing: Section 33 31 00 Sanitary Sewage Systems.
- C. Compaction Testing: As specified in Section 31 20 00 - Earthwork.
- When tests indicate Work does not meet specified requirements, remove Work, replace D. and retest.
- E. Frequency of Compaction Testing: One for each lift.

3.13 **CLEANING**

- Upon completion of drilling and pipe installation, remove drilling spoils, debris, and A. unacceptable material from approach trenches and pits. Clean up excess slurry from ground.
- B. Restore approach trenches and pits to original condition.
- C. Remove temporary facilities for drilling operations in accordance with Section 01 50 00 -Temporary Facilities and Controls.

END OF SECTION

SECTION 33 11 13

PUBLIC WATER DISTRIBUTION SYSTEMS

PART I - GENERAL

I.I SUMMARY

- A. Section includes public potable water lines, including pipe, fittings, valves and fire hydrants.
- B. Related Sections:
 - I. Section 31 23 17 Trenching.
 - 2. Section 33 13 00 Disinfection of Water Distribution.

1.2 REFERENCES

A. ASTM International:

- 1. ASTM D1557 Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10 lb. Rammer and 18-inch Drop.
- 2. ASTM D2922 Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- 3. ASTM D3017 Test Methods for Moisture Content of Soil and Soil-Aggregate Mixtures.

B. American Water Works Association:

- 1. AWWA C104 Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water.
- 2. AWWA CIIO Ductile-Iron and Gray-Iron Fittings for Water.
- 3. AWWA CIII Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings.
- 4. AWWA C115 Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges.
- 5. AWWA C151 Ductile-Iron Pipe, Centrifugally Cast, for Water or Other Liquids.
- 6. AWWA C153 Ductile-Iron Compact Fittings for Water Service.
- 7. AWWA C502 Dry Barrel Fire Hydrants.
- 8. AWWA C509 Resilient-Seated Gate Valves for Water Supply Service.
- 9. AWWA C600 Installation of Ductile-Iron Water Mains and Appurtenances.

I.3 SUBMITTALS

- A. Section 01 33 00 Submittal Procedures: Requirements for submittals.
- B. Shop Drawings: Indicate piping layout, including piping specialties.
- C. Product Data: Submit data on pipe materials, pipe fittings, valves and accessories.
- D. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.

I.4 CLOSEOUT SUBMITTALS

A. Section 01 70 00 - Execution and Closeout Requirements: Closeout procedures.

- B. Project Record Documents: Record actual locations of piping mains, valves, connections, thrust restraints, and invert elevations.
- C. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with municipality, New York State Department of Health, and AWWA Standards.
- B. Valves: Manufacturer's name and pressure rating marked on valve body.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 Product Requirements: Product storage and handling requirements.
- B. Deliver and store valves in shipping containers with labeling in place.
- C. Block individual and stockpiled pipe lengths to prevent moving.
- D. Do not place pipe or pipe materials on private property or in areas obstructing pedestrian or vehicle traffic.

1.7 FIELD MEASUREMENTS

A. Verify field measurements prior to fabrication.

PART 2 - PRODUCTS

2.1 WATER PIPING

- A. All water mains shall be ductile-iron cement lined pipe of the size and type indicated on the Drawings.
- B. Ductile Iron Piping
 - 1. Pipe: AWWA C151. Unless otherwise noted on the Drawings, the standard thickness class of ductile-iron pipe shall be Class 55 for flexible joint pipe, Class 54 for restrained joint pipe, Class 53 for flanged joint pipe, and Class 52 for all other pipe.
 - 2. Fittings: AWWA CI10 (Ductile Iron) or AWWA CI53 (Compact Ductile Iron).
 - 3. Joints:
 - a. Except where flanged joints are indicated, and unless otherwise indicated on the Drawings, Contractor may elect to use either mechanical joints or push-on type joints.
 - b. Mechanical and Push-On Joints: AWWA CIII. Push-on joints shall be equivalent to Tyton Joint by U.S. Pipe. Joints shall have brass wedges.
 - c. Restrained Joints:
 - I) Push-on Joints: Boltless, push-on type, joint restraint independent of joint seal. Equivalent to Clow Super-Lock Joint Pipe by Clow Corporation.
 - 2) Mechanical Joints: EBAA Iron Series 1100 Megalug® Mechanical Joint Restraints.

- 4. Coating and Lining (Pipe and Fittings):
 - a. Bituminous Outside Coating (buried pipe only): AWWA C110.
 - b. Cement Mortar Lining: AWWA C104.

2.2 CONCRETE THRUST BLOCKS

- A. Concrete thrust blocks shall be installed behind all tees, bends of 1/16 or greater, and all hydrants where anchoring fittings are not used. Concrete shall be poured against undisturbed soil only and shall provide at least 6 square feet of bearing area against the side of the trench (approximately 1/2 cubic yard required).
- B. Temporary thrust blocks shall be provided at all plugs or other points of future connection. Such blocks shall be constructed by placing concrete building blocks on edge (core horizontal) against the undisturbed bank of the excavation. These shall be wedged tight with hardwood wedges driven between the blocks and the plug. In addition, I/2 inch tie rods shall be placed through the plug and connected to a clamp secured to the pipe barrel. In lieu of the rods, mechanical joint retainer glands may be used.
- C. All valve and fitting "clusters" shall be securely tied together using restrained joints as specified in Paragraph 2.1.

2.3 GATE VALVES

- A. Gate valves shall conform to AWWA Standard C 509 (latest issue), resilient seated. They shall be designed for a cold water working pressure of 200 psi (min.). Unless otherwise noted or shown on the Drawings, all valves shall have mechanical or push-on joints, 'O' ring packing, and non-rising stems. Buried valves shall have a 2 inch square wrench nut, and exposed valves shall have suitable handwheels. Valves shall open counterclockwise except where designated otherwise by Owner.
- B. All buried valves shall be fitted with a two-piece adjustable cast iron valve box. Boxes shall be of the screw type. Extensions shall be included where the depth of cover exceeds 5 feet. The word "water" shall be cast in the cover.

2.4 HYDRANTS

A. Fire hydrants shall be cast iron bodied, post type hydrants having compression valves with a 5-1/4" diameter minimum valve opening. Hydrants shall have two (2) 2-1/2" hose outlets, and one (1) 4-1/2" pump outlet. Hydrants shall be the type, model and manufacturer designated by the Utility Owner.

2.5 TAPPING SLEEVES AND VALVES

- A. Tapping sleeves and valves shall conform to the specifications of the water Utility Owner. In absence of Utility Owner specifications, comply with the following specifications.
- B. Tapping Sleeves:
 - 1. Stainless steel tapping sleeve with full circumference gasket and carbon steel flange.
 - 2. Manufacturers:
 - a. Ford Meter Box Company FAST tapping sleeve.
 - b. Substitutions: Section 01 60 00 Product Requirements.
 - 3. Outlet Flange Dimensions and Drilling: ASME B16.1, Class 125 and MSS SP-60.

C. Tapping Valves:

- AWWA C509, resilient wedge with non-rising stem. Inlet flanges shall conform to ANSI B16.1, Class 125 and MSS SP-60. Mechanical joint outlets shall conform to AWWA C111. Bonnet assembly bolts shall be stainless steel.
- 2. Manufacturers:
 - a. Kennedy Valve Co. Model 8950SS.
 - b. Substitutions: Section 01 60 00 Product Requirements.
- 3. Tapping valves shall have a 2 inch square operating nut, open counterclockwise, and be fitted with a valve box as specified under "Gate Valves".

2.6 BEDDING AND COVER MATERIALS

- A. Bedding: Refer to Trench Detail on the Drawings. Use well-graded sand with 3/4" maximum particle size and not more than 10% passing No. 200 sieve.
- B. Cover: Suitable excavated material as specified in Section 31 23 17.

2.7 ACCESSORIES

A. Concrete for Thrust Restraints: Concrete type specified in Section 03 30 00.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 Administrative Requirements: Coordination and project conditions.
- B. Verify existing utility water main size, location, and invert are as indicated on Drawings.

3.2 PREPARATION

- A. Pre-Construction Site Photos:
 - I. Take photographs along centerline of proposed pipe trench; minimum one photograph for each 50 feet of pipe trench.
 - 2. Show mail boxes, curbing, lawns, driveways, signs, culverts, and other existing site features.
 - 3. Include project description, date taken and sequential number on back of each photograph.

3.3 INSTALLATION - PIPE

A. Excavation

I. All excavation work for water mains shall be done in a workmanlike manner. All material of every name and nature necessary for the proper installation of the pipe and appurtenances shall be removed from the trench and placed back from the edge to prevent a superimposed load on the bank and to provide sufficient clearance for the Work involved. The width of the trench shall be no greater than necessary to permit proper installation of the pipe, to provide clearance for sheeting and bracing where required, and to permit thorough tamping of the bedding material around the pipe. Trenches shall be excavated 4 inches below the bottom of the pipe to accommodate a granular bedding.

2. Unsuitable materials shall be removed to the depths shown on the Plans or as ordered by Engineer. Unsuitable materials shall be materials containing vegetable or organic matter, such as muck, peat, organic silt, topsoil or sod that is not satisfactory for use in backfilling.

B. Backfilling

- I. Suitable excavated material shall be used to backfill the trench above the granular bedding. All excess material and all unsuitable material shall be removed from the site by Contractor and disposed of in legal manner. Run of bank gravel shall be used where additional backfill material is necessary to replace unsuitable material. Excavated rock shall not be used for backfilling trenches.
- 2. Stone with dimensions in excess of one-half of the loose lift thickness shall be removed prior to compaction of the lift.
- 3. No trench or other excavation shall be backfilled until the Work contained therein has been tested. The backfilling material shall be placed in horizontal layers not exceeding 8 inches thick and thoroughly compacted with a mechanical tamp. Contractor will be responsible for settlement of the backfill, including maintenance of the surface, or pavement supported by the backfill, for a period of one year.

C. Pipe Laying

- I. All pipe shall be laid in accordance with AWWA Standard C 600 (latest issue). All pipe shall be laid on a sand bed with 3/4" maximum particle size and not more than 10% passing No. 200 sieve, properly prepared to furnish uniform bearing along the barrel of the pipe. The pipe shall be backfilled to a depth of six inches over the top of the pipe with the sand bedding material. All hydrants, and tees shall be firmly supported and secured against movement.
- 2. Pipe shall not be dropped, nor lifted by inserting hooks into the bell and/or spigot.
- 3. Stones, leaves, or other debris shall be removed from the pipe before it is lowered into the trench. Joints shall be assembled with accessories and lubricant (push-on only) as specified under AWWA C III (latest issue). Gaskets shall be inserted into the bell before the pipe is lowered into the trench. Any open ends shall be fitted with a tight plug to prevent dirt and/or groundwater from entering the main whenever the project is left unattended. Great care shall be taken during construction to assure that dirt, debris or animal life is not allowed to enter the pipe.
- 4. All field cut ends shall be beveled to approximately 1/8 inch.
- 5. A maximum deflection of I inch per foot of pipe length may be made in each mechanical or push-on joint. The maximum deflection for restrained joint piping shall be I/2 inch per foot of pipe length. A I2 degree deflection may be made at each flexible joint. For deflections greater than this amount, an appropriate bend shall be installed.
- 6. Install pipe with no high points. If unforeseen field conditions arise which necessitate high points, install air release valves as directed by Engineer.
- 7. Install pipe to allow for expansion and contraction without stressing pipe or joints.
- 8. Install access fittings to permit disinfection of water system performed under Section 33 13 00.
- 9. Establish elevations of buried piping with not less than 5 ft. of cover. Measure depth of cover from final surface grade to top of pipe barrel.

3.4 INSTALLATION - VALVES

- A. Set valves on solid bearing.
- B. Center and plumb valve box over valve. Set box cover flush with finished grade.

3.5 INSTALLATION - HYDRANTS

- A. Set hydrants plumb; locate pumper nozzle perpendicular to and facing roadway.
- B. Set hydrants to grade, with nozzles at least 20 inches above ground.
- C. Locate control valve 4 feet away from hydrant.
- D. Provide drainage pit 36 inches square by 24 inches deep filled with 2 inches washed gravel. Encase elbow of hydrant in gravel to 6 inches above drain opening. Do not connect drain opening to sewer.
- E. Paint hydrants in accordance with Utility Owner.

3.6 INSTALLATION - TAPPING SLEEVES AND VALVES

- A. Install tapping sleeves and valves in accordance with shop drawings and in accordance with manufacturer's instructions.
- B. After the sleeve has been installed, but prior to making the tap, the sleeve shall be subjected to a hydrostatic test equal to the maximum line pressure. There shall be no observed leakage from the sleeve.

3.7 SERVICE CONNECTIONS

A. Install service connections in accordance with Section 33 12 13.

3.8 DISINFECTION OF WATER PIPING SYSTEM

A. Flush and disinfect system in accordance with Section 33 13 00 - Disinfection of Water Distribution.

3.9 FIELD QUALITY CONTROL

- A. Section 01 40 00 Quality Requirements: Testing and inspection services.
- B. Hydrostatic and Leakage Testing
 - After completion of pipeline installation, including backfill, but prior to final connection to existing system, conduct, in presence of Architect/Engineer, concurrent hydrostatic pressure and leakage tests in accordance with AWWA C600.
 - 2. Provide equipment required to perform leakage and hydrostatic pressure tests.
 - 3. Test Pressure: Not less than 150 psi or 50 psi in excess of maximum static pressure, whichever is greater.
 - 4. Conduct hydrostatic test for at least two-hour duration.

- 5. No pipeline installation will be approved when pressure varies by more than 5 psi at completion of hydrostatic pressure test.
- 6. Before applying test pressure, completely expel air from section of piping under test. Provide corporation cocks so air can be expelled as pipeline is filled with water. After air has been expelled, close corporation cocks and apply test pressure. At conclusion of tests, remove corporation cocks and plug resulting piping openings.
- 7. Slowly bring piping to test pressure and allow system to stabilize prior to conducting leakage test. Do not open or close valves at differential pressures above rated pressure.
- 8. Examine exposed piping, fittings, valves, hydrants, and joints carefully during hydrostatic pressure test. Repair or replace damage or defective pipe, fittings, valves, hydrants, or joints discovered, following pressure test.
- 9. No pipeline installation will be approved when leakage is greater than that determined by the following formula:

L	=	<u>SDV P</u> 148,000
L	=	allowable leakage, in gallons per hour
S	=	length of pipe tested, in inches
D	=	nominal diameter of pipe, in inches
Р	=	average test pressure during leakage test, in pounds per square inch (gauge)

- 10. When leakage exceeds specified acceptable rate, locate source and make repairs. Repeat test until specified leakage requirements are met.
- C. Compaction Testing for Bedding
 - Perform compaction testing in accordance with ASTM D1557, ASTM D2922 and ASTM D3017.
 - 2. When tests indicate Work does not meet specified requirements, remove Work, replace and retest.
 - 3. Frequency of Tests: In each compacted fill layer, take one compaction test for every 30 lineal feet of trench.

END OF SECTION

SECTION 33 13 00

DISINFECTION OF WATER DISTRIBUTION

PART I - GENERAL

I.I SUMMARY

- A. Section includes disinfection of potable water distribution system; and testing and reporting results.
- B. Related Sections:
 - I. Section 33 II I3 Public Water Distribution Systems.

1.2 REFERENCES

- A. American Waterworks Association:
 - I. AWWA B300 Hypochlorites.
 - 2. AWWA C600 Installation of Ductile-Iron Water Mains and Their Appurtenances.
 - 3. AWWA C651 Disinfecting Water Mains.

I.3 SUBMITTALS

- A. Section 01 33 00 Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit procedures, proposed chemicals, and treatment levels for review.
- C. Test Reports: Indicate results comparative to specified requirements.
- D. Certificate: Certify cleanliness of water distribution system meets or exceeds New York State Department of Health requirements.

1.4 CLOSEOUT SUBMITTALS

- A. Section 01 70 00 Execution and Closeout Requirements: Closeout procedures.
- B. Disinfection Report:
 - I. Type and form of disinfectant used.
 - 2. Date and time of disinfectant injection start and time of completion.
 - 3. Test locations.
 - 4. Name of person collecting samples.
 - 5. Initial and 24 hour disinfectant residuals in treated water in ppm for each outlet tested.
 - 6. Date and time of flushing start and completion.
 - 7. Disinfectant residual after flushing in ppm for each outlet tested.
- C. Bacteriological Report:
 - I. Date issued, project name, and testing laboratory name, address, and telephone number.
 - 2. Time and date of water sample collection.

- 3. Name of person collecting samples.
- 4. Test locations.
- 5. Initial and 24 hour disinfectant residuals in ppm for each outlet tested.
- 6. Coliform bacteria test results for each outlet tested.
- 7. Certify water conforms, or fails to conform, to bacterial standards of New York State Department of Health.
- D. Water Quality Certificate: Certify water conforms to quality standards of New York State Department of Health, suitable for human consumption.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with AWWA C651.
- B. Maintain one copy of each document on site.

I.6 QUALIFICATIONS

- A. Testing Firm: Company specializing in testing potable water systems, approved by State of New York.
- B. Submit bacteriologist's signature and authority associated with testing.

PART 2 - PRODUCTS

2.1 DISINFECTION CHEMICALS

A. Chemicals: AWWA B300, Hypochlorite.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 Administrative Requirements: Coordination and project conditions.
- B. Verify piping system has been cleaned, inspected and pressure tested.
- C. Perform scheduling and disinfecting activity with start-up, water pressure testing, adjusting and balancing, demonstration procedures, including coordination with related systems.

3.2 EXECUTION

- A. Provide and attach required equipment to perform the Work of this section.
- B. Introduce treatment into piping system.
- C. Maintain disinfectant in system for 24 hours.
- D. Flush, circulate, and clean until required cleanliness is achieved; use domestic water.
- E. Replace permanent system devices removed for disinfection.

3.3 FIELD QUALITY CONTROL

- A. Section 01 40 00 Quality Requirements Testing and Inspection Services.
- B. Disinfection, Flushing, and Sampling:
 - I. Disinfect pipeline installation in accordance with AWWA C651. Use of liquid chlorine is not permitted.
 - 2. Upon completion of retention period required for disinfection, flush pipeline until chlorine concentration in water leaving pipeline is no higher than that generally prevailing in existing system or is acceptable for domestic use.
 - 3. Legally dispose of chlorinated water. When chlorinated discharge may cause damage to environment, apply neutralizing chemical to chlorinated water to neutralize chlorine residual remaining in water.
 - 4. After final flushing and before pipeline is connected to existing system, or placed in service, employ an approved independent testing laboratory to sample, test and certify water quality suitable for human consumption.

END OF SECTION

SECTION 33 31 00

SANITARY SEWAGE SYSTEMS

PART I - GENERAL

I.I SUMMARY

- A. Section includes sanitary sewerage drainage piping, fittings, manholes, laterals, air relief/cleanout manholes, force mains, pump stations, grinder pump service laterals assemblies, fittings, and accessories.
- B. Related Sections and Divisions:
 - 1. Section 31 10 00 Site Clearing.
 - 2. Section 31 20 00 Earthwork.
 - 3. Section 31 23 17 Trenching.
 - 4. Section 31 32 19 Geotextiles.
 - 5. Section 32 12 16 Asphalt Concrete Paving.
 - 6. Section 33 32 17 Duplex Grinder Pumping Station.

1.2 REFERENCES

- A. ANSI/ASTM D1557 Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10 lb. Rammer and 18-inch Drop.
- B. ANSI/ASTM D2321 Recommended Practice for Underground Installation of Thermoplastic Pipe for Sewers and other Gravity Flow Applications.
- C. ASTM C1244 Test Method for Concrete Sewer Manholes by Negative Air Pressure (Vacuum) Prior to Backfill
- D. ASTM D2922 Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- E. ASTM D3017 Test Methods for Moisture Content of Soil and Soil-Aggregate Mixtures.
- F. ANSI/ASTM D3034 Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
- G. ASTM D3212 Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals.
- H. American Water Works Association:
 - I. AWWA C104 Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water.
 - 2. AWWA CIIO Ductile-Iron and Gray-Iron Fittings for Water.
 - 3. AWWA CIII Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings.
 - 4. AWWA CII5 Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges.
 - 5. AWWA C151 Ductile-Iron Pipe, Centrifugally Cast, for Water or Other Liquids.
 - 6. AWWA C153 Ductile-Iron Compact Fittings for Water Service.

- AWWA C509 Resilient-Seated Gate Valves for Water Supply Service.
- AWWA C600 Installation of Ductile-Iron Water Mains and Appurtenances.
- AWWA C906 Polyethylene (PE) Pressure Pipe and Fittings, 4 in. through 63 in., 9. for Water Distribution.

1.3 **DEFINITIONS**

Bedding: Fill placed under, beside and directly over pipe or structure, prior to subsequent backfill operations.

1.4 **SUBMITTALS**

- A. Section 01 33 00 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit data indicating pipe and pipe accessories.
- C. Manufacturer's Installation Instructions: Indicate special procedures required to install Products specified.
- Manufacturer's Certificate: Certify products meet or exceed specified requirements. D.

1.5 **CLOSEOUT SUBMITTALS**

- Section 01 70 00 Execution and Closeout Requirements: Closeout procedures. Α.
- B. Project Record Documents: Record location of pipe runs, connections, manholes, cleanouts, and invert elevations.
- Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

1.6 FIELD MEASUREMENTS

Verify field measurements and elevations are as indicated.

1.7 COORDINATION

- Section 01 30 00 Administrative Requirements: Coordination and project conditions. A.
- B. Coordinate the Work with the governing municipality when connecting to their existing sanitary sewer or force main.

PART 2 - PRODUCTS

2.1 **SEWER PIPE MATERIALS**

Plastic Pipe: ANSI/ASTM D3034, Type PSM, Poly Vinyl Chloride (PVC) material, SDR 35, Α. push on joints with elastomeric gaskets per ASTM D3212. All adapters from PVC sewer pipe to laterals of other materials shall be standard manufactured fittings, which provide a watertight joint.

- B. Ductile Iron Pipe: ASTM A746, bell and spigot ends.
 - I. Fittings: Ductile iron.
 - 2. Joints: AWWA CIII, rubber gasket joint devices.
- C. Force main piping
 - I. PVC Pressure Sewer Pipe and Fittings 12" Nominal Pipe Size and Smaller:
 - a. SDR 21 with a pressure rating of 200 psi.
 - b. ASTM D1785, Schedule 80, bell and spigot style solvent sealed joint ends.
 - 1) Fittings: ASTM D2466, PVC.
 - 2) Joints: ASTM D2855, solvent weld with ASTM D2564 Solvent
 - 2. Ductile Iron Pipe: AWWA C151; standard cement mortar lining, AWWA C104, outside coated.
 - a. Pipe 3 Inches to 12 Inches: Pressure Class 350 psi.
 - b. Ductile Iron Fittings:
 - 1) AWWA C110; 350 psi pressure rating.
 - 2) Fitting to be cement mortar lined and outside coated as for ductile iron pipe.
 - c. Joints: AWWA CIII, where not specifically indicated on Drawings.
 - 1) Type: Mechanical joint or push-on joint.
 - 2) Rubber Gaskets, Lubricants, Glands, Bolts and Nuts: AWWA CIII.
 - 3. Polyethylene Piping: AWWA C906, SDR11 for 160 psig pressure rating.
 - a. Material: PE 3408 High Density Polyethylene (HDPE) meeting the ASTM D3350 cell classification 345464C.
 - b. Fittings: AWWA C906, molded.
 - c. Joints: Thermal butt-fusion.

2.2 MANHOLES/WETWELLS

- A. General: Comply with applicable requirements of NYSDOT Standard Specification 706-04. unless otherwise indicated.
 - I. Provide concrete mixes complying with the following strength requirements:
 - a. Precast components: 4,000 psi 28-day compressive strength.
 - b. Cast-in-place components: 4,000 psi 28-day compressive strength, air entrained.
 - 2. Provide units as shown on the drawings.
- B. Manholes: Precast reinforced concrete unit with eccentric cone top complying with ASTM C478.
 - 1. Provide precast base and riser sections as shown on drawings.
 - 2. Provide polypropylene plastic steps reinforced with minimum 1/2" dia. steel rod, complying with Item 725-02.01 of the NYSDOT Standard Specification.
- C. Wetwells: Precast reinforced concrete unit complying with ASTM C478.
 - 1. Provide precast base and riser sections as shown on drawings.
 - 2. Provide polypropylene plastic steps reinforced with minimum 1/2" dia. steel rod, complying with Item 725-02.01 of the NYSDOT Standard Specification.
- D. Pipe Connections To Manholes Or Wetwells
 - Approved manufacturers for connectors connecting with diameter dimension of ductile iron pipes, polyvinyl chloride (PVC) ASTM D3034, and PVC ASTMF679 to sewer manholes:

- A-LOK Products Inc., A-LOK or A-LOK X-CEL.
- NPC Incorporated, KOR-N-SEAL I Toggle Korband with Series 106 or 406 b. rubber boot.
- Or approved Equal.
- Approved manufacturers for connectors for inserting pressure sewer piping 2. through manhole walls:
 - A-LOK Products, Inc., Z-LOK.
 - Press Seal Gasket Corporation, 8QRS-PSX Positive Seal System. b.
 - Or approved Equal. c.

2.3 MANHOLE COVERS

A. General:

- ١. Provide castings of uniform quality, free from blowholes, porosity, hard spots, cracks or other defects.
- 2. Gray iron material: ASTM A 48-83 Class 30B, tensile strength 30,000 psi.
- 3. Manufacture all castings true to pattern and free from surface imperfections. Heavy duty round frames and covers or grates to have machined horizontal bearing surfaces. All units to have one shop coat of asphaltum.

B. Manufacturer:

- East Jordan Iron Works, Michigan.
- 2. Campbell Foundry Company, North Haven, Connecticut.
- 3. Or approved Equal.

Manhole Covers:

- Heavy duty round frame (#1207) and covers (#1203) straight type frame and cover by East Jordan Iron Works, Michigan.
- Cover inscribed "SANITARY SEWER". 2.

2.4 **CLEANOUTS**

- Α. Cleanout Pipe: Cleanouts shall be made of the same pipe material as the carrier pipe.
- B. Lid and Frame: Cast iron construction lid.
 - As manufactured by Geneco Products.
 - 2. As manufactured by Valvco, Inc.
 - 3. Or approved equal.
- Base Pad: Cast-In-Place concrete of type specified, leveled top surface to receive sanitary sewer pipe sections.
- All lids and frames shall be of one manufacturer.

2.5 **BEDDING MATERIALS**

Bedding: Refer to Trench Detail on the Drawings. Use 1/2" - 3/4" Crushed Stone, A. Crushed Gravel or Pea Gravel.

2.6 UNDERGROUND PIPE MARKERS

- A. Detectable Warning Tape: Bright colored, continuously printed, minimum 6 inches (150 mm) wide by 5 mil (0.13 mm) thick, manufactured for direct burial service.
- B. Trace Wire: Magnetic detectable conductor, brightly colored plastic covering, imprinted with "Sewer Service" in large letters.

2.7 THRUST RESTRAINTS

A. Provide pressure pipeline with restrained joints or concrete thrust blocking at bends, tees, and changes in direction; construct concrete thrust blocking in accordance with Drawings.

2.8 AIR RELIEF VALVES

A. Provide air relief valves with backflow attachment as indicated on the drawings.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 Administrative Requirements: Coordination and project conditions.
- B. Verify trench cut is ready to receive work and excavations, dimensions, and elevations are as indicated on Drawings.

3.2 INSTALLATION - PIPE

- A. Pipe shall be placed in accordance with these Contract Documents. Pipe shall be installed in accordance with ASTM D 2321 (latest issue) using peastone, crushed stone or gravel. All pipe shall be laid true to line and grade and shall have a full, firm and even bearing. Pipe laying shall begin at the downgrade end and progress on the upgrade. Bedding, excavation, and backfilling shall be performed in accordance with their respective Items. Backfilling around pipe shall be done in such a way that deformation is kept to a minimum. This can be accomplished by backfilling and compacting sides of pipe equally before compacting over top of pipe.
- B. Refer to Section 31 23 17 for trenching requirements. Do not displace or damage pipe when compacting.
- C. HDPE piping shall be laid to minimize the number of butt-fused joints. Sections of polyethylene pipe should be joined into continuous lengths on the job site above ground. The joining method shall be the butt-fusion method and shall be performed in strict accordance with the pipe manufacturer's recommendations. The butt-fusion equipment used in the joining procedure shall be capable of meeting all conditions recommended by the pipe manufacturer, including, but not limited to, fusion temperature, alignment and fusion pressure. Fused segments of pipe shall be handled so as to avoid damage to the pipe. When lifting fused sections of pipe, chains or cable-type chokers should be avoided. Nylon slings are preferred. Spreader bars should be used when lifting long, fused sections. Care should be exercised to avoid cutting or gouging the pipe.

3.3 **INSTALLATION - CLEANOUTS**

- Form bottom of excavation clean and smooth to correct elevation.
- B. Form and place Cast-In-Place Concrete base pad, with provision for sanitary sewer pipe end sections.
- Establish elevations and pipe inverts for inlets and outlets as indicated on Drawings.
- D. Mount lid and frame level in grout, secured to top cone section to elevation indicated.

3.4 **INSTALLATION - CONCRETE THRUST BLOCKS**

- A. Concrete thrust blocks shall be installed behind all force main tees and bends of 1/16 or greater where anchoring fittings are not used. Concrete shall be poured against undisturbed soil only, and shall provide at least 6 square feet of bearing area against the side of the trench (approximately 1/2 cubic yard required).
- B. Temporary thrust blocks shall be provided at all force main plugs or other points of future connection. Such blocks shall be constructed by placing concrete building blocks on edge (core horizontal) against the undisturbed bank of the excavation. These shall be wedged tight with hardwood wedges driven between the blocks and the plug. In addition, 1/2 inch tie rods shall be placed through the plug and connected to a clamp secured to the pipe barrel. In lieu of the rods, mechanical joint retainer glands may be used.

3.5 FIELD QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Testing and inspection services.
- B. Section 01 70 00 - Execution Requirements: Testing, adjusting, and balancing.
- C. Request inspection prior to and immediately after placing bedding.
- D. Compaction Testing: In accordance with ANSI/ASTM D1557, ASTM D2922, and ASTM D3017.
- E. When tests indicate work does not meet specified requirements, remove work, replace and retest.

TESTING 3.6

- A. All gravity sewer lines shall be subjected to the following tests in the presence of Engineer:
 - A lamp light shall be clearly visible between manholes.
 - A ball no less than 95% of the inside diameter of the pipe shall roll freely of its own accord between manholes (on grades less than 1.5 percent, water may be used to assist the progress of the ball).
- B. Gravity sewer lines shall also be tested for exfiltration by either of the following methods:
 - Exfiltration Water Test The lower end of the section being tested shall be plugged and the pipe filled with water until the head of water in the upper manhole is a minimum 2 feet over the top of the pipe. The leakage exfiltration or infiltration shall not exceed 100 gallons per inch of pipe diameter per mile per day for any

- section of the system. Manholes shall be tested for infiltration and water-tightness as indicated below.
- 2. Exfiltration Air Test The section of line being tested shall be securely plugged at each end. Air shall be slowly supplied to the plugged pipe line until the internal air pressure reaches 4.0 pounds per square inch. At least two minutes shall be allowed for temperature stabilization before proceeding further. Manholes shall be visually inspected for infiltration and water-tightness. The rate of air loss shall then be determined by measuring the time interval required for the internal pressure to decrease from 3.5 to 3.0 pounds per square inch. The pipe line shall be considered acceptable if the time interval for the 0.5 psi pressure drop is not less than the holding time listed in the following air test table:

AIR TEST TABLE
MINIMUM DURATION FOR AIR TEST PRESSURE DROP

Pipe Size	٦	Time			
(inches)	(mm.)	(minutes)			
4	100	2-1/2			
6	150	4			
8	200	5			
10	225	6-1/2			
12	305	7-1/2			
15	380	9-1/2			

C. Manhole Vacuum Testing

- Vacuum testing shall be in accordance with ASTM C1244 Test Method for Concrete Sewer Manholes by Negative Air Pressure (Vacuum) Prior to Backfill, except as specified herein.
- 2. Manholes shall be tested after installation with all connections in place.
 - a. Lift holes, if any, shall be plugged with an approved, non-shrink grout prior to testing.
 - b. Drop connections, if any, shall be installed prior to testing.
 - c. The vacuum test shall include testing of the seal between the cast iron frame and the concrete cone. Slab, or grade rings.
 - d. Manhole vacuum testing shall be performed after all adjacent underground utilities have been installed and all manholes have been backfilled and finished to final grade.
 - e. If a coating or lining is to be applied to the interior of the manhole the vacuum test must not be performed until the coating or lining has been cured according to the manufacturer's recommendations.
- 3. Procedure for testing shall be as follows:
 - a. Temporarily plug all pipes entering the manhole. Each plug must be installed at a location beyond the manhole/pipe gasket (i.e. outside the manhole wall), and shall be braced to prevent the plug or pipe from being drawn into the manhole.
 - b. The test head shall be placed inside the rim of the cast iron frame at the top of the manhole and inflated, in accordance with the manufacturer's recommendations.
 - c. A vacuum of at least ten inches of mercury (10" Hg) shall be drawn on the manhole. Shut the valve on the vacuum line to the manhole and shut off the pump or disconnect the vacuum line from the pump.

- d. The pressure gauge shall be liquid filled, having a 3.5-inch diameter face with a reading from zero to thirty inches of mercury.
- The manhole shall be considered to pass the vacuum test if the vacuum e. reading does not drop more than I" HG (i.e. from 10" Hg to 9" Hg) during the following minimum test times.

MINIMUM TEST TIMES FOR VARIOUS MANHOLE DIAMETERS

MH Depth	Diameter of Manhole/Time	e (seconds)	
(ft)	4 ft	5 ft	6 ft
Up to 8	20	26	33
10	25	33	41
12	30	39	49
14	35	46	57
16	40	52	67
18	45	59	73
20	50	65	81
22	55	72	89
24	59	78	97
26	64	85	105
28	69	91	113
30+	74	98	121

- f. If a manhole fails the vacuum test, the manhole shall be repaired with a nonshrink grout or other material or method approved by Engineer. The manhole surfaces shall be properly prepared prior to any repairs. Once the repair material has cured according to the manufacturer's recommendations the vacuum test shall be repeated. This process shall continue until a satisfactory test is obtained.
- All temporary plugs and braces shall be removed after each test. g.
- D. Force Main Hydrostatic and Leakage Testing:
 - After completion of pipeline installation, including backfill, but prior to final connection to existing system, conduct, in presence of Architect/Engineer, concurrent hydrostatic pressure and leakage tests in accordance with AWWA C600.
 - Provide equipment required to perform leakage and hydrostatic pressure tests. 2.
 - Test Pressure: Not less than 150 psi or 50 psi in excess of maximum static 3. pressure, whichever is greater.
 - Conduct hydrostatic test for at least two-hour duration. 4.
 - 5. No pipeline installation will be approved when pressure varies by more than 5 psi at completion of hydrostatic pressure test.
 - Before applying test pressure, completely expel air from section of piping under 6. test. Provide corporation cocks so air can be expelled as pipeline is filled with water. After air has been expelled, close corporation cocks and apply test pressure. At conclusion of tests, remove corporation cocks and plug resulting piping openings.
 - Slowly bring piping to test pressure and allow system to stabilize prior to 7. conducting leakage test. Do not open or close valves at differential pressures above rated pressure.
 - Examine exposed piping, fittings, valves, hydrants, and joints carefully during 8. hydrostatic pressure test. Repair or replace damage or defective pipe, fittings, valves, hydrants, or joints discovered, following pressure test.

9. No pipeline installation will be approved when leakage is greater than that determined by the following formula:

L = SD√ P 133,200

L = allowable leakage, in gallons per hour

S = length of pipe tested, in inches
D = nominal diameter of pipe, in inches

p = average test pressure during leakage test, in pounds per square inch

- 10. When leakage exceeds specified acceptable rate, locate source and make repairs. Repeat test until specified leakage requirements are met.
- E. Contractor shall provide written test results to Engineer and Owner's representative. Any sewer line failing to meet the requirements of the tests shall be repaired and retested until a satisfactory test result is obtained.

3.7 PROTECTION OF FINISHED INSTALLATION

- A. Section 01 70 00 Execution Requirements: Protecting finished installation.
- B. Protect pipe and aggregate cover from damage or displacement until backfilling operation is in progress.

END OF SECTION

SECTION 33 32 17

DUPLEX SEWAGE GRINDER PUMPING STATION

PART I - GENERAL

I.I SUMMARY

- A. Section includes complete factory-built and tested Grinder Pump Station(s), each consisting of a basin package, control panel, alarm device, unitized level control system, grinder pump and all necessary appurtenances to form a complete U.L. listed package system. Grinder pump shall be listed to U.L. 778 and CSA 108, basin package shall be listed to U.L. 1951, and control panel shall be listed to U.L. 508A. All equipment in the wet well shall be capable of constant submergence in sewage to a minimum depth of ten feet without electrical power being energized.
- B. Related Sections and Divisions:
 - 1. Section 31 10 00 Site Clearing.
 - 2. Section 31 20 00 Earthwork.
 - 3. Section 31 23 17 Trenching.
 - 4. Section 33 10 00 Sanitary Sewage Systems

1.2 REFERENCES

- A. American Bearing Manufacturers Association:
 - 1. ABMA 9 Load Ratings and Fatigue Life for Ball Bearings.
- B. ASTM International:
 - I. ASTM A53/A53M Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
- C. National Electrical Manufacturers Association:
 - 1. NEMA 250 Enclosures for Electrical Equipment (1000 Volts Maximum).

1.3 PERFORMANCE REQUIREMENTS

A. Refer to schedule at end of this Section.

I.4 SUBMITTALS

- A. Section 01 33 00 Submittal Procedures: Requirements for submittals.
- B. Shop Drawings:
 - I. After receipt of notice to proceed, the manufacturer shall furnish the engineer a minimum of eight (8) sets of shop drawings.
 - 2. Submit detailed dimensions for materials and equipment, including pump basins, pumps, piping, controls including wiring schematics and accessories.
 - 3. Upon receipt of accepted shop drawings, the manufacturer shall proceed with order entry and fabrication of the equipment. Prior to completion of equipment delivery, the manufacturer shall supply five (5) copies of Operation and Maintenance Manuals to Architect/Engineer for distribution as necessary.

- C. Product Data: Submit information concerning materials of construction and fabrication.
- D. Manufacturer's Installation Instructions: Submit detailed instructions on installation requirements including storage and handling procedures, anchoring, and layout.
- E. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.
- F. Manufacturer's Field Reports: Certify equipment has been installed in accordance with manufacturer's instructions.

1.5 **CLOSEOUT SUBMITTALS**

- Section 01 70 00 Execution and Closeout: Requirements for submittals. Α.
- B. Project Record Documents: Record actual locations and final orientation of equipment and accessories.
- C. Operation and Maintenance Data:
 - Submit maintenance instructions for equipment and accessories.
 - Furnish list of equipment and tools needed to maintain and calibrate equipment. 2.

QUALITY ASSURANCE 1.6

Perform Work in accordance with industry standards. Α.

1.7 **QUALIFICATIONS**

The system design is detailed in the drawings. Any pump manufacturer not specified, but wishing to be approved as an acceptable supplier shall submit a complete hydraulic analysis based on the design detailed in the drawings. All manufacturers must have been in the business of manufacturing complete grinder pump stations for a minimum of ten years. Manufacturer Representatives, Distributors, or Packagers will not be considered to be manufacturers. Manufacturer must demonstrate to the satisfaction of engineer that the proposed pump equipment will meet system flows and heads required. In addition, presubmittal must also demonstrate to the satisfaction of the engineer that the equipment being proposed meets or exceeds all performance and safety requirements, materials of construction, and user benefits of the specified equipment.

1.8 PRE-INSTALLATION MEETINGS

- A. Section 01 30 00 - Administrative Requirements: Pre-installation meeting.
- B. Convene minimum one week prior to commencing work of this section.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Prepare pumps and accessories for shipment to prevent entry of foreign matter into product body.

- C. Inspect for damage.
- D. Store products in areas protected from weather, moisture, or possible damage. Do not store products directly on ground.
- E. Handle products to prevent damage to interior or exterior surfaces.

1.10 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 Product Requirements: Environmental conditions affecting products on site.
- B. Conduct operations not to interfere with, interrupt, damage, destroy, or endanger integrity of surface structures or utilities, in immediate or adjacent areas.

I.II COORDINATION

- A. Section 01 30 00 Administrative Requirements: Requirements for coordination.
- B. Coordinate work with Municipalities of Town of Windsor or Town of Kirkwood and utilities within construction area.

1.12 EXTRA MATERIALS

- A. Section 01 70 00 Execution and Closeout Requirements: Requirements for spare parts and maintenance products.
- B. Furnish one complete set of manufacturer's recommended spare parts for each pump.
- C. Furnish special tools required for equipment maintenance.

1.13 WARRANTY

A. The manufacturer shall provide a warranty on materials and workmanship for a period of twenty-four (24) months after notice of owner's acceptance, but no greater than twenty-seven (27) months after receipt of shipment. The owner will return any equipment found to be defective to the manufacturer for inspection and validation of the defect. Defective equipment will be repaired or replaced and shipped back to customer at no charge.

1.14 ACCEPTABLE MANUFACURER(S)

A. Acceptable grinder pump station manufacturer(s) are Barnes or pre-approved equal.

1.15 CORROSION PROTECTION

A. All materials exposed to wastewater shall have inherent corrosion protection: i.e., painted cast iron, fiberglass, stainless steel, PVC, CPVC.

1.16 SAFETY

A. The Grinder Pump Station shall be free from electrical and fire hazards as required in a residential environment. As evidence of compliance with this requirement, the completely assembled, factory wired and tested grinder pump station assembly shall be U.L. listed. Grinder pump stations not U.L. listed will not be acceptable.

PART 2 - PRODUCTS

2.1 SCOPE

- A. Furnish and install Two (2) Premium Efficiency, non-clog, Submersible Sewage Pump(s) Type Sulzer ABS XFP80C-VX2-PE22/4, or an approved equal, meeting the requirements below.
- B. The pumps shall be supplied with a mating 3-inch discharge connection and be capable of delivering III U.S. GPM at a total dynamic head of 23.5 feet. An additional point on the same curve shall be 200 U.S. GPM at a total dynamic head of 17 feet. Shut off head shall be a minimum of 31 feet. The motor shall be an integral part of the pump unit. The motor shall be 2.9 HP, 4 pole, connected for operation on a TBD volt, 3 phase, 60 hertz electrical supply service. Each pump motor shall be equipped with 49 feet of power and control cable sized in accordance with NEC and CSA standards. Pumps intended for wetpit installation shall be supplied with a Standard Cast Iron guide rail system with 3-inch discharge elbow. Each pump unit shall be fitted with a Stainless-Steel Lifting Chain Assembly, 15 feet long for lifting the pump. The working load rating of the lifting system shall be a minimum of 50% greater than the pump weight.
- C. The heavy-duty submersible wastewater pumps shall be capable of handling raw unscreened sewage, storm water, and other similar solids-laden fluids without clogging. The pumps shall be driven by a Premium Efficiency motor, providing the highest levels of operational reliability and energy efficiency.

2.2 SUBMERSIBLE PUMP CONSTRUCTION

- A. Major pump components shall be of gray cast iron, EN-GJL-250 (ASTM A-48, Class 35B) with smooth surfaces devoid of porosity or other irregularities. All exposed fasteners shall be of stainless steel, I.4401 (AISI 316). All metal surfaces coming into contact with the pumped media (other than the stainless-steel components) shall be protected by a factory applied spray coating of zinc phosphate primer followed by a high solids two-part epoxy paint finish on the exterior of the pump. The pump shall be equipped with an open lifting hoop suitable for attachment of standard chain fittings. The hoop shall be of stainless steel, I.4401 (AISI 316), and shall be rated to lift a minimum of four times the pump weight.
- B. Sealing design for the pump/motor assembly shall incorporate machined surfaces fitted with Nitrile (Buna-N) rubber O-rings, with the option of upgrading to Viton®. Sealing will be the result of controlled compression of rubber O-rings in two planes of the sealing interface. Housing interfaces shall meet with metal-to-metal contact between machined surfaces, and sealing shall be accomplished without requiring a specific torque on the securing fasteners. Rectangular cross sectioned gaskets requiring specific torque limits to achieve compression shall not be considered equal. No secondary sealing compounds shall be required or used.

2.3 WET END

- A. Impeller: The Sulzer vortex impeller shall be of gray cast iron, EN-GJL-250 (ASTM A-48, Class 35B), with the option of upgrading to duplex stainless steel, I.4470 (ASTM A890, CD3MN Grade 4A). The impeller shall be an open, six-vane design, meeting the Ten State Standards requirement for minimum solids passage size of 3 inches. The impeller shall be capable of passing a minimum of 3-inch spherical solids that are commonly found in wastewater. The impeller shall have a slip fit connection onto the motor shaft, driven by a shaft key, and shall be securely fastened to the shaft by a stainless steel screw. A positively engaged, ratcheting washer assembly shall prevent the screw from loosening. The head of the impeller screw shall be effectively recessed within the impeller bore to prevent disruption of the flow stream and loss of hydraulic efficiency. The impeller shall be dynamically balanced to the ISO 10816 standard to provide smooth, vibration-free operation. Impeller designs which do not meet the Ten State Standards requirement for 3 inch solids passage size shall not be considered equal.
- B. Pump Volute: The pump volute shall be single piece gray cast iron, EN-GJL-250 (ASTM A-48, Class 35B), non-concentric design with centerline discharge. Passages shall be smooth and large enough to pass any solids which may enter the impeller. The discharge size shall be 3 inches. The discharge flange design shall permit attachment to standard ANSI or metric flanges/appurtenances. The discharge flange shall be slotted to accept both 3-inch ANSI class I25/I50 (rotated 22.5 degrees) and metric DN80 flanged fittings. Proprietary or nonstandard flange dimensions shall not be considered acceptable. The suction flange shall be integrated into the volute and its bolt holes shall be drilled and tapped to accept standard 3-inch ANSI class I25/I50 (rotated 22.5 degrees) flanged fittings. The minimum working pressure of the volute and pump assembly shall be I6 bar (232 psi).

2.4 PREMIUM EFFICIENCY MOTOR

- A. The Premium Efficiency motor shall meet efficiency standards in accordance with IEC 60034-30:2008, level IE3 and NEMA Premium*. Motor rating tests shall be conducted in accordance with IEC 60034-2-1 requirements and shall be certified accurate and correct by a third-party certifying agency. A certificate shall be available upon request. *IE3 and NEMA Premium efficiency levels are equivalent, however the NEMA Premium standard is intended to cover dry installed motors only, not integrated submersible motors.
- B. The motor shall be housed in a water-tight gray cast iron, EN-GJL-250 (ASTM A-48, Class 35B), enclosure, capable of continuous submerged operation underwater to a depth of 20 meters (65 feet) and shall have an IP68 protection rating. The motor shall be of the squirrel-cage induction design, NEMA type B. The copper stator windings shall be insulated with moisture resistant, Class H insulation material, rated for I80°C (356°F). The stator shall be press fitted into the stator housing. The use of bolts, pins, or other fastening devices requiring penetration of the stator housing is unacceptable. The rotor bars and short circuit rings shall be made of cast aluminum.
- C. The motor shall be designed for continuous duty. The maximum continuous temperature of the pumped liquid shall be 40°C (104°F), and intermittently up to 50°C (122°F). The motor shall be capable of handling up to 15 evenly spaced starts per hour without overheating. The service factor (as defined by the NEMA MGI standard) shall be 1.3. The motor shall have a voltage tolerance of +/- 10% from nominal, and a phase-to-phase

- voltage imbalance tolerance of 1%. The motor shall have a NEMA Class A temperature rise, providing cool operation under all operating conditions. The motor shall be FM approved for use in NEC Class I, Division I, Groups C & D hazardous locations. The surface temperature rating shall be T3C. The motor shall meet the requirements of NEMA MGI Part 30 and 31 for operation on PWM type Variable Frequency Drives.
- D. The motor shall be capable of operating, completely submerged, partially submerged, or unsubmerged. For submerged (wet-pit) applications, the motor shall be self cooling via the process fluid surrounding the motor. The motor shall have a NEMA Class A temperature rise for submerged service, providing cool operation under all operating conditions.
- E. Thermal Protection: Each phase of the motor shall contain a normally closed bi-metallic temperature monitor switch imbedded in the motor windings. These thermal switches shall be connected in series and set to open at 140°C +/- 5°C (284°F). They shall be connected to the control panel to provide a high stator temperature shutdown signal and are used in conjunction with external motor overload protection.
- F. Mechanical Seals: Each pump shall be equipped with a tandem mechanical shaft seal system consisting of two totally independent seal assemblies. The seals shall operate in a lubricant reservoir that hydro-dynamically lubricates the lapped seal faces at a constant rate. The lower, primary seal unit, located between the pump and the lubricant chamber, shall contain one stationary industrial duty silicon-carbide seal ring and one rotating industrial duty silicon-carbide seal ring. The stationary ring of the primary seal shall be installed in a seal holding plate of gray cast iron, EN-GJL-250 (ASTM A-48, Class 35B). The seal holding plate shall be equipped with swirl disruption ribs to prevent abrasive material from prematurely wearing the seal plate. The upper, secondary seal unit, located between the lubricant chamber and motor housing, shall contain one stationary industrial duty silicon-carbide seal ring, and one rotating industrial duty silicon-carbide seal ring. Each seal interface shall be held in contact by its own spring system. The seals shall not require routine maintenance or adjustment and shall not be dependent on the direction of rotation for proper sealing. Each pump shall be provided with a lubricant chamber for the shaft sealing system which shall provide superior heat transfer and maximum seal cooling. The lubricant chamber shall be designed to prevent overfilling, and to provide lubricant expansion capacity. The drain and inspection plug shall have a positive anti-leak seal and shall be easily accessible from the outside of the pump. The seal system shall not rely upon the pumped media for lubrication and shall not be damaged when the pump is run dry. Lubricant in the chamber shall be environmentally safe nontoxic material.
- The following seal types shall not be considered equal: Seals of proprietary design or seals manufactured by other than major independent seal manufacturing companies. Seals requiring set screws, pins, or other mechanical locking devices to hold the seal in place, conventional double mechanical seals containing either a common single or double spring acting between the upper and lower seal faces, or any system requiring a pressure differential to seat the seal and ensure sealing.
- H. Mechanical Seal Protection System: The primary mechanical seal shall be protected from interference by particles in the wastewater, including fibrous materials, by an active Seal Protection System integrated into the impeller. The back side of the impeller shall be equipped with a sinusoidal cutting ring, forming a close clearance cutting system with the lower submersible motor housing or seal plate. This sinusoidal cutting ring shall spin with

the pump impeller providing a minimum of 75 shearing actions per pump revolution. Large particles or fibrous material which attempt to lodge behind the impeller or wrap around the mechanical seal, shall be effectively sheared by the active cutting system into particles small enough to prevent interference with the mechanical seal. The Seal Protection System shall operate whenever the pump operates and shall not require adjustment or maintenance in order to function. Submersible pump designs which do not incorporate an active cutting system to protect the primary mechanical seal shall not be considered acceptable for wastewater service.

- I. Seal Failure Early Warning System: The integrity of the mechanical seal system shall be continuously monitored during pump operation and standby time. An electrical probe shall be provided in a sensing chamber positioned between the primary and secondary mechanical seals for detecting the presence of water contamination within the chamber. The sensing chamber shall be filled with environmentally safe nontoxic oil. A solid-state relay mounted in the pump control panel or in a separate enclosure shall send a low voltage, low amperage signal to the probe, continuously monitoring the conductivity of the liquid in the sensing chamber. If sufficient water enters the sensing chamber through the primary mechanical seal, the probe shall sense the increase in conductivity and signal the solid state relay in the control panel. The relay shall then energize a warning light on the control panel, or optionally, cause the pump shut down. This system shall provide an early warning of mechanical seal leakage, thereby preventing damage to the submersible motor, and allowing scheduled, rather than emergency, maintenance. Systems utilizing float switches or any other monitoring devices located in the stator housing rather than in a sensing chamber between the mechanical seals are not considered to be early warning systems and shall not be considered equal.
- J. Shaft: The pump shaft and motor shaft shall be an integral, one piece unit adequately designed to meet the maximum torque required at any normal start-up condition or operating point in the system. The shaft shall have a full shutoff head design safety factor of 1.7, and the maximum shaft deflection shall not exceed .05 mm (.002 inch) at the lower seal during normal pump operation. Each shaft shall be of stainless steel, 1.4021 (AISI 420), and shall have a polished finish with accurately machined shoulders to accommodate bearings, seals, and impeller. Carbon steel, chrome plated, or multi-piece welded shafts shall not be considered adequate or equal.
- K. Bearings: Each pump shaft shall rotate on high quality, permanently lubricated, greased bearings. The upper bearing shall be a deep grooved ball bearing and the lower bearing shall be a heavy duty, double row, angular contact ball bearing. Bearings shall be of sufficient size and properly spaced to transfer all radial and axial loads to the pump housing and minimize shaft deflection. L-10 bearing life shall be a minimum of 50,000 hours at flows ranging from 1/2 of BEP flow to 1-1/2 times BEP flow (BEP is best efficiency point). The bearings shall be manufactured by a major internationally known manufacturer of high-quality bearings and shall be stamped with the manufacturer's name and size designation on the race. Generic or unbranded bearings from other than major bearing manufacturers shall not be considered acceptable.
- L. Power Cable: The power cables shall be sized according to NEC and CSA standards and shall be of sufficient length to reach the junction box without requiring splices. The outer jacket of the cable shall be of chlorinated polyethylene (CPE) and be oil, water, and UV resistant, capable of continuous submerged operation underwater to a depth of 65 feet.

- M. Cable Entry System: The cable entry system shall consist of a submersible plug assembly which allows the cable to be easily disconnected from the pump for service or replacement. Cable sealing shall be accomplished by a Nitrile (Buna-N), optionally Viton®, compression grommet with both cylindrical and conical sealing surfaces, flanked by a stainless steel washer and an integrated strain relief. A brass, 2.0401 (ASTM B455, Grade C38500), compression nut shall be threaded into to the cast iron, EN-GIL-250 (ASTM A-48, Class 35B), cable plug housing, compressing the grommet ID to the cable while the grommet OD seals against the bore of the cable entry housing. conductors shall be terminated in copper pin connectors which are separated and retained by a circular pin retainer fabricated from high dielectric strength Polyamid (30% GF). Each pin shall pass through its own hole in the pin retainer, maintaining perfect alignment with the mating pins in the motor body. The corresponding motor body pin assembly shall be manufactured from high dielectric strength Polyamid (30% GF), with copper connector pins. The pin assembly shall be sealed with an O-ring to prevent water entry into the motor and retained in the motor housing bore via a retaining ring. Attachment of the plug assembly to the motor shall engage the corresponding copper pins, creating a complete circuit between the motor and cable. The plug assembly shall be fastened with stainless steel fasteners and shall be sealed by an O-ring.
- N. The cable plug and sealed entry system as part of the motor shall be FM and CSA approved for use in NEC Class I, Division I, Groups C & D hazardous locations. The system shall be anti-wicking by design and shall prevent any water that enters the cable through damage to the jacket from entering the motor. Cable entry designs which utilize potting compounds to provide a watertight seal or those which do not allow the cable to be easily changed in the field shall not be considered equal.

2.5 ACCESSORIES

- A. Guide Rail Base Assembly (wet pit installation): There shall be no need for personnel to enter the wet well to remove or reinstall the pump(s). In a wet pit installation, the discharge base & elbow assembly shall be permanently installed in the wet well and connected to the discharge piping. In order to prevent binding or separation of the pump from the guide rail system, the pump(s) shall connect to the guide rail base automatically and firmly, guided by one 2-inch guide pipe (two 2 inch pipes optional) extending from the base elbow to the top of the station. Systems using guide cable in lieu of rigid guide bars or pipes shall not be considered acceptable. The sliding guide bracket shall be a separate part of the pumping unit, capable of being attached to standard pump flanges, so that the pump mounting is nonproprietary, and any pump with a standard discharge flange can be mounted on the base assembly. Base or bracket assemblies with proprietary or nonstandard flange dimensions shall not be considered acceptable.
- B. A field replaceable Nitrile (Buna-N) rubber profile gasket or O-ring shall accomplish positive sealing of the pump flange/guide rail bracket to the discharge elbow. Base assemblies which rely solely on metal-to-metal contact between the pump flange and discharge base elbow as a means of sealing are inherently leak prone and shall not be considered equal. No portion of the pump shall bear directly on the floor of the sump. The guide rail system shall be available in an optional non-sparking version, approved by Factory Mutual for use in NEC Class I, Division I, Group C&D hazardous locations.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 Administrative Requirements: Verification of existing conditions before starting work.
- B. Verify layout and orientation of pumps, accessories, and piping connections.

3.2 DELIVERY

A. All grinder pump units will be delivered to the job site in satisfactory condition.

3.3 INSTALLATION

- A. Excavate in accordance with Section 31 20 00 Earthwork.
- B. Install pump units and accessories where indicated on Drawings and in accordance with manufacturer's instructions. No individual sewage pump unit shall be installed on the discharge side of an existing septic tank. Pumping units shall be connected directly to the building sewer line.
- C. The Contractor shall be responsible for handling ground water to provide a firm, dry subgrade for the structure, and shall guard against flotation or other damage resulting from general water or flooding.
- D. The grinder pump stations shall not be set into the excavation until the installation procedures and excavation have been approved by the Architect/Engineer.
- E. The basin may not be dropped, rolled or laid on its side for any reason.
- F. Installation shall be accomplished so that I" to 4" of accessway, below the bottom of the lid, extends above the finished grade line. The finished grade shall slope away from the unit. The diameter of the excavated hole must be large enough to allow for the concrete anchor.
- G. A 6" (minimum) layer of naturally rounded aggregate, clean and free flowing, with particle size of not less than 1/8" or more than 3/4" shall be used as bedding material under each
- H. A concrete anti-flotation collar, as detailed on the drawings, and sized according to the manufacturer's instructions, shall be required and shall be pre-cast to the grinder pump or poured in place. Each grinder pump station with its pre-cast anti-flotation collar shall have a minimum of three lifting eyes for loading and unloading purposes.
- I. If the concrete is poured in place, the unit shall be leveled, and filled with water, to the bottom of the inlet, to help prevent the unit from shifting while the concrete is being poured. The concrete must be manually vibrated to ensure there are no voids. If it is necessary to pour the concrete to a level higher than the inlet piping, an 8" sleeve is required over the inlet prior to the concrete being poured.

- J. The electrical enclosure shall be furnished, installed and wired to the grinder pump station by the Contractor. An alarm device is required on every installation, there shall be NO EXCEPTIONS.
- K. The Contractor shall mount the alarm device in a conspicuous location, as per national and local codes. The alarm panel will be connected to the grinder pump station by a cable as shown on the Contract Drawings. The power and alarm circuits must be on separate power circuits.
- L. Backfill in accordance with Section 31 20 00 Earthwork.
 - I. Proper backfill is essential to the long-term reliability of any underground structure. Several methods of backfill are available to produce favorable results with different native soil conditions. The most highly recommended method of backfilling is to surround the unit to grade using Class I or Class II backfill material as defined in ASTM 2321. Any other material may void the warranty. Class IA and Class IB are recommended where frost heave is a concern, Class IB is a better choice when the native soil is sand or if a high, fluctuating water table is expected. Class I, angular crushed stone offers an added benefit in that it doesn't need to be compacted.
 - 2. Class II, naturally rounded stone, may require more compactive effort, or tamping, to achieve the proper density. If the native soil condition consists of clean compactable soil, with less than 12 percent fines, free of ice, rocks, roots and organic material, it may be an acceptable backfill. Soil must be compacted in lifts not to exceed one foot to reach a final Proctor Density of at least 95 percent. Heavy, non-compactable clays and silts are not suitable backfill for this or any underground structure such as inlet or discharge lines.
 - 3. If you are unsure of the consistency of the native soil, it is recommended that a geotechnical evaluation of the material is obtained before specifying backfill.
 - 4. Another option is the use of a flowable fill (i.e., low slump concrete). This is particularly attractive when installing grinder pump stations in augured holes where tight clearances make it difficult to assure proper backfilling and compaction with dry materials. Flowable fills should not be dropped more than 4 feet from the discharge to the bottom of the hole to avoid separation of the constituent materials.
 - 5. Backfill of clean native earth, free of rocks, roots, and foreign objects shall be thoroughly compacted in lifts not exceeding 12" to a final Proctor Density of not less than 95 percent. Improper backfilling may result in damaged accessways. The grinder pump station shall be installed at a minimum depth from grade to the top of the 1 1/4" discharge line, to assure maximum frost protection. The finish grade line shall be 2" to 4" below the bottom of the lid, and final grade shall slope away from the grinder pump station.
 - 6. All restoration will be the responsibility of the Contractor. The properties shall be restored to their original condition in all respects, including, but not limited to, curb and sidewalk replacement, landscaping, loaming and seeding, and restoration of the traveled ways, as directed by the Architect/Engineer.
- M. Provide and connect piping, accessories, power and control conduit and wiring to make system operational, ready for startup.
- N. Flush piping with clean water.

3.4 FIELD QUALITY CONTROL

- A. Section 01 40 00 Quality Requirements and 01 70 00 Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.
- B. All equipment and materials necessary to perform testing shall be the responsibility of the installing Contractor. This includes, as a minimum, a portable generator and power cable (if temporary power is required), water in each basin (filled to a depth sufficient to verify the high level alarm is operating), and opening of all valves in the system. These steps shall be completed prior to the qualified factory trained technician(s) arrival on site.
- C. Pre-operational Check: Before operating system or components, make the following checks:
 - 1. Check and adjust liquid level control and alarm settings.
- D. Start-up and Performance Testing:
 - 1. The services of a trained factory-authorized technician shall be provided.
 - 2. Test each unit on clear water through minimum of four complete cycles under supervision of manufacturer's representative and in presence of Architect/Engineer.
 - 3. Demonstrate system performance, control functions, and alarms meet specified requirements.
 - 4. Hydrostatically test system piping for leaks in accordance with Section 33 10 00 Sanitary Sewer Systems.
 - 5. Adjust, repair, modify or replace system components that fail to perform as specified and rerun tests. Make final adjustments to equipment under direction of manufacturer's representative.
 - 6. Document adjustments, repairs and replacements in manufacturer's field services certification.

3.5 MANUFACTURER'S FIELD SERVICES

- A. Section 01 40 00 Quality Requirements: Requirements for manufacturer's field services.
- B. Furnish services of manufacturer's representative qualified factory trained technician(s) who shall inspect the placement and wiring of each station, perform field tests as specified herein, and instruct the Owner's personnel in the operation and maintenance of the equipment before the stations are accepted by the Owner.
- C. Certify that equipment has been properly installed and is ready for start-up and testing.

3.6 DEMONSTRATION

- A. Section 01 70 00 Execution and Closeout Requirements: Requirements for demonstration and training.
- B. Demonstrate equipment startup, shutdown, routine maintenance, alarm condition responses, and emergency repair procedures to Owner's personnel.

3.7 SCHEDULES

A. Sewage Grinder Pumping Units shall be as shown on the Drawings.

3.8 **MANUALS**

A. The Contractor shall supply five (5) copies of the Operation and Maintenance Manual to the Architect/Engineer for distribution as necessary.

END OF SECTION

SECTION 33 41 00

STORM DRAINAGE

PART I - GENERAL

I.I SUMMARY

A. Section includes subdrainage systems, including foundation drains, site storm sewerage drainage systems, including piping, fittings and accessories, bedding; manholes, catch basins, drop inlets, and frames, grates, and covers.

B. Related Sections:

- I. Section 31 20 00 Earthwork
- 2. Section 31 32 19 Geotextiles
- 3. Section 31 23 17 Trenching

1.2 SUBMITTALS

A. Submittals shall be in accordance with Section 01 33 00 - Submittal Procedures, and as modified below.

B. Shop Drawings:

- 1. Submit shop drawings of site storm sewerage drainage systems including the following:
 - a. Layout and details of all underground piping including location, material, size, elevations, and slope.
 - b. Details and locations of underground structures such as catch basins, drop inlets, storm manholes, dry wells, frames and grates/covers.

I.3 CLOSEOUT SUBMITTALS

- A. Section 01 70 00 Execution Requirements: Closeout procedures.
- B. Project Record Documents:
 - I. Accurately record actual locations of pipe runs, connections, structures, cleanouts, and invert elevations.
 - 2. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.
- C. Operation and Maintenance Data: Procedures for submittals.

I.4 COORDINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

PART 2 - PRODUCTS

2.1 **PIPE**

- Α. High Density Polyethylene (HDPE) Plastic Pipe: Corrugated High Density Polyethylene Drainage Pipe, smooth interior, conforming to ASTM D3350 and AASHTO M294, size as indicated on the Drawings
 - 1. Fittings: High density polyethylene conforming to AASHTO M252 or M294. Fabricated fittings shall be welded on the interior and exterior at all junctions.
 - 2. Joints: AASHTO M294.
- B. Polyvinyl Chloride (PVC) Storm Drainage Pipe: Unplasticized polyvinyl chloride gravity sewer pipe with integral wall bell and spigot joints, complying with ASTM D-3034 for 4"-15" SDR 35 and ASTM F679 for 18"-27"; green color.
 - 1. Bell shall consist of an integral wall section with a solid cross-section rubber expansion/contraction ring, factory assembled, to form a watertight seal in accordance with ASTM D-3212.
 - 2. Minimum Impact Strength (ASTMD-2444): 220 ft-lbs.
 - 3. Pipe Stiffness (ASTM D-2412): 46 psi.
 - 4. Provide compatible fittings complying with ASTM D-2855 and ASTM F-402, as applicable.
 - 5. Similar to "Ring-Tite PVC Gravity Sewer Pipe and Fittings" by J-M Manufacturing Co., Inc., Livingston, New Jersey.
- C. Reinforced Concrete Pipe: ASTM C76, with reinforcement; inside nominal diameter as indicated on the Drawings, bell and spigot ends or as required to match existing concrete pipe.
 - I. Fittings: Reinforced concrete
 - 2. Joints: C443, rubber compression gasket.

2.2 CONCRETE DRAINAGE UNITS

- General: Comply with applicable requirements of NYSDOT Standard Specification 706-A. 04, unless otherwise indicated.
 - 1. Provide concrete mixes complying with the following strength requirements:
 - a. Precast components: 4000 psi 28-day compressive strength.
 - b. Cast-in-place components: 4,000 psi 28-day compressive strength, air entrained.
 - 2. Provide units as shown on the Drawings.
- B. Manholes: Precast reinforced concrete unit with eccentric cone top complying with ASTM C478.
 - 1. Provide precast base and riser sections as shown on Drawings.
 - 2. Provide polypropylene plastic steps reinforced with minimum 1/2" dia. steel rod, complying with Item 725-02.01 of the NYSDOT Standard Specification.
- C. Catch Basins and Drop Inlets:
 - 1. Rectangular: Precast reinforced concrete unit with integral base.
 - 2. Round: Comply with specifications for Manholes.

2.3 DRAINAGE UNIT FRAMES, GRATES AND COVERS

A. General:

- I. Provide castings of uniform quality, free from blowholes, porosity, hard spots, cracks or other defects.
- 2. Gray iron material: ASTM A 48-83 Class 30B, tensile strength 30,000 psi.
- 3. Manufacture all castings true to pattern and free from surface imperfections. Heavy duty round frames and covers or grates to have machined horizontal bearing surfaces. All units to have one shop coat of asphaltum.
- B. Manufacturer: For convenience, details and specifications have been based on products by Syracuse Castings Sales Corporation, Cicero, New York and Campbell Foundry Company, North Haven, Connecticut.
- C. Manhole Frames and Covers:
 - I. Heavy duty round frame and cover similar to model #1032 straight type frame and cover by Syracuse Castings Sales Corporation. Cover inscribed "STORM".
- D. Catch Basin and Drop Inlet Frames And Grates:
 - I. Rectangular Catch Basins and Drop Inlets: Heavy-duty square frame and grate with straight type frame and "Type A" bicycle grate, similar to following model numbers by Syracuse Castings Sales Corporation:
 - a. 24"x24" Catch Basins: Model #2815.
 - b. 30"x30" Catch Basins: Model #2816B.
 - 2. Round Catch Basins: Heavy-duty round frame and grate similar to Model #1197 straight type frame and "Type A" bicycle grate by Syracuse Castings Sales Corporation.

2.4 FOUNDATION DRAINS AND SUBSURFACE DRAINAGE

- A. Drainage Tubing: Perforated polyethylene tubing complying with AASHTO M-252 "Standard Specification for Plastic and Polyethylene Pipe or Tubing".
 - 1. Strength (ASTM F404): 30 psi at 5% deflection.
 - 2. Similar to "Perforated Tubing" by Advanced Drainage Systems, Inc. Columbus, Ohio.
- B. Filter Fabric: See Section 31 32 19 Geotextiles.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 Administrative Requirements: Coordination and project conditions.
- B. Verify site is ready to receive work and excavations, dimensions, and elevations are as indicated on Drawings.

3.2 PREPARATION

A. Hand trim excavations to required elevations. Correct over-excavation with Type I Fill (refer to Section 31 20 00 - Earthwork)

- B. Remove large stones or other hard matter which could damage piping or impede consistent backfilling or compaction.
- C. Coat aluminized steel pipe to be in contact with concrete with zinc chromate primer in accordance with Manufacturer's recommendations.

3.3 INSTALLATION - PIPE

- A. Lay pipe straight to line and grade between drainage units.
- B. Refer to Section 31 23 17 Trenching for backfilling and compacting requirements. Do not displace or damage pipe when compacting.
- C. Check alignment and grade from string line stretched along center of pipe between batter boards placed every 25 ft., or other approved method.
- D. Pipe invert elevations shall be maximum ± 0.05 ft. from elevations shown on the Drawings.
- E. Provide proper implements, tools and facilities for safe and convenient prosecution of work.
- F. Carefully lower pipe sections and fittings into trench to prevent disturbing bedding pipe bedding or damage to the pipe. Do not drop or dump pipe into trench.
- G. Lay pipe with ends abutting true to line and grade, with bell ends upstream.
- H. Install gaskets in accordance with Manufacturer's instructions.
- I. Clean interior of pipe as work progresses.
- I. Place plugs in ends of uncompleted pipe at end of day or whenever work stops.

3.4 INSTALLATION OF CONCRETE DRAINAGE UNITS

- A. Form bottom of excavation clean and smooth to correct elevation.
- B. Establish elevations and pipe inverts for inlets and outlets as indicated on Drawings with tolerances of ± 0.05 ft.
- C. Mount lid and frame level in grout, secured to top cone section to elevation indicated.

3.5 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Requirements: Testing and inspection services.

3.6 PROTECTION OF FINISHED WORK

A. Section 01 70 00 - Execution Requirements: Protecting finished Work.

- B. Protect pipe and aggregate cover from damage or displacement until backfilling operation is in progress.
 - I. Take care not to damage or displace installed pipe and joints during construction of pipe supports, backfilling, testing, and other operations.
 - 2. Repair or replace pipe that is damaged or displaced from construction operations.
- C. Upon completion of work for this section, leave all components of the Site Storm Drainage System completely free from silt, debris, or obstruction.

END OF SECTION