
**Contract Documents
for
Sanitary/Leachate System Rehabilitation
Rock Cut Road Transfer Station
Onondaga County Resource Recovery Agency**



GHD CONSULTING SERVICES INC.
One Remington Park Drive
Cazenovia, New York



It is a violation of the New York State Education Law for any person unless he is acting under the direction of a licensed professional engineer, to alter an item on this specification in any way. If an item is altered, the altering engineer shall affix to the item his seal and the notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.

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2019

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INVITATION TO BID
SANITARY/LEACHATE SYSTEM REHABILITATION
ROCK CUT ROAD TRANSFER STATION
ONONDAGA COUNTY RESOURCE RECOVERY AGENCY

Sealed Bids for rehabilitation of two pump stations at the Rock Cut Road Transfer Station Facility for the Onondaga County Resource Recovery Agency (OCRRA) (Owner) will be received by OCRRA in the Agency's office at 100 Elwood Davis Road, North Syracuse, NY 13212-4312 until 2:00 p.m. local time on August 19, 2019 and at that place and time will be publicly opened and read aloud.

Separate sealed Bids will be received for the following:

Contract No. 5 - Sanitary/Leachate System Rehabilitation

The work is part of the overall modifications at the Rock Cut Road Transfer Station. The current project consists of high pressure cleaning of existing floor drains and piping; removal and disposal of debris and liquid from existing sand traps and interior pump station; demolition of equipment and controls in existing pump stations; installation of new duplex pump systems and controls in existing pump stations; associated electrical work; and demolition of cast iron hatches on existing sand traps and interior pump station and replacement with load rated aluminum hatches in accordance with the Bidding Documents heretofore prepared by GHD Consulting Services Inc.

All Bids must be received via mail or hand delivered in sealed envelopes to OCRRA, 100 Elwood Davis Road, North Syracuse, NY 13212-4312, Attn: Cristina Albuino, P.E., Agency Engineer. Bids shall be labeled: "ROCK CUT ROAD TRANSFER STATION SANITARY/LEACHATE SYSTEM REHABILITATION." Bids received via e-mail or fax will not be accepted or considered.

Electronic copies of Bidding Documents may be requested from Owner. Direct all technical questions and inquires regarding distribution of Bidding Documents to Owner's Procurement Contact Person, Ms. Christine Latham, who will process all questions by email at clatham@ocrra.org. The subject heading for all e-mails shall be:

**OCRRA Rock Cut Road Transfer Station Sanitary/Leachate System Rehabilitation
Contract No. 5**

Questions will be received until 2:30 p.m. on August 9, 2019. No response will be given to questions received after that date. OCRRA will provide a full written response to all potential bidders by August 14, 2019.

Bidders shall review and acknowledge all Addenda on the Bid Form.

A Bid must be accompanied by Bid security made payable to Owner in an amount of 5 percent of Bidder's maximum Bid price and in the form of a Bid Bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of paragraphs 5.01 and 5.02 of the General Conditions.

If, upon acceptance of a Bid, a Bidder fails to enter into a Contract with Owner, the bid security shall be forfeited to and become the property of OCRRA.

No Bidder may withdraw its Bid within 60 days after the date of the Bid opening. The successful Bidder must furnish a 100% Performance Bond and a 100% Payment Bond with a surety company satisfactory to Owner and conforming to the prerequisite requirements of Article 5 of the General Conditions on the forms included in the Bidding Documents.

The Owner reserves the right to waive any informalities or to reject any or all Bids.

The Owner is exempt from payment of sales and compensating use taxes of the State of New York and of cities and counties on all materials, equipment, and supplies sold to the Owner pursuant to this Contract. These taxes are not to be included in the Bid.

The Owner is an equal opportunity organization. All qualified Minority and Women-Owned Business Enterprises (MBE/WBE) suppliers, contractors, and/or businesses will be afforded equal opportunity without discrimination because of race, color, religion, national origin, sex, sexual preference, age, or disability.

Bidders are to familiarize themselves with the State Finance Law Procurement Compliance Provisions and fill out the "Disclosure to OCRRA During Procurement Process and Prior Non-Responsibility Determinations" form, both of which are attached to the Bid Form.

Bidders are required to certify, under penalty of perjury, that Bids have been prepared without collusion with other Bidders, subcontractors, suppliers, etc. This certification is included with the Bid Form and each Bidder must sign in the space provided.

A pre-bid conference will not be held. Bidders may contact Owner (calbunio@ocrra.org, 315-295-0743) to schedule a site visit.

Cristina Albunio, PE
Agency Engineer, OCRRA

Dated: July 31, 2019

SECTION 00100

INSTRUCTIONS TO BIDDERS

ARTICLE 1 - 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.
 - B. Prefixes to Referenced Paragraph Numbers are as follows:

Instructions To Bidders; "I-_____"
General Conditions; "GC-_____"
Supplementary Conditions; "SC-_____"

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.
- 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 seven days of Owner's and/or Engineer's request, Bidder shall submit written evidence such as financial data, previous experience, present commitments, and such other data as may be identified herein or requested by Owner and/or Engineer.
- A. Evidence of Bidder's authority to do business in the state where the Project is located
 - B. Bidder's state contractor License number, if applicable.
 - C. At a minimum, the Owner may request the Bidder to submit three project references of past projects performed for a municipality or owner similar in nature to the Rock Cut Road Transfer Station Modifications Project.
 - D. The Contractor must also demonstrate that they have a minimum of five years' experience with projects of a similar nature.
- 3.02. Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

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- 3.03. Contractor shall perform a minimum of 50% of the Work, excluding material and equipment purchases, with its own labor force. Contractor shall abide by the minimum hourly wage rates attached to the Supplementary Conditions.
- 3.04. The Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract, and to complete the work contemplated therein. Conditional bids will not be accepted.
- 3.05. Before awarding this Contract, a meeting will be conducted with the lowest Bidder(s) to discuss the Contractor's plan for constructing the proposed project (i.e., equipment that will be used, field representative, overall understanding of the project, etc.). The purpose of this meeting is to further allow the Owner and Engineer to select the appropriate Contractor for this project.

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. Bidder is responsible for any interpretation or conclusion Bidder draws from any data, interpretations, opinions or information contained in such reports or shown or indicated in such drawings. Cost to Bidders for obtaining copies of reports and drawings will be made available to any Bidder by Owner on request.

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 such reports and drawings referenced in Paragraph 4.03A will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents. Bidder is responsible for any interpretation or conclusion Bidder draws from any 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

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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 written 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.
- 4.06. Reference is made to Article 7 of the Supplementary Conditions for the identification of the general nature of other work that is planned to be performed at the Site by others (such as utilities, other prime contractors, and Owner) 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 if they exist.
 - A. Paragraph 6.13.C of the General Conditions indicates that if an Owner safety program exists, it will be noted in the Supplementary Conditions.
- 4.07. 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, or performance of the Work, including the latest New York State Department of Labor Prevailing Wage Rate Schedules;
 - D. carefully study all: (1) 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, 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;
 - 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 (1) 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;

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- 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. correlate 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. 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
 - J. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.
- 4.08. 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 formal pre-Bid conference will not be held.

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 Owner in writing. Interpretations or clarifications considered necessary by Owner in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Owner as having received the Bidding Documents. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. Questions received after the deadline stated in the Invitation to Bid or as modified in subsequent Addenda will not be answered.

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- 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

A Bid must be accompanied by Bid security made payable to Owner in an amount of 5 percent 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.

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.

- 8.01. 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.
- 8.02. Bid bonds shall be executed by a surety company licensed to do business in the State of New York.

ARTICLE 9 - CONTRACT TIMES

- 9.01. The number of days within which, or the dates by which, Milestones are to be achieved and 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 11 - 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. The Bid Form requires identification of Subcontractors on the form provided. In addition, 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,

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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, in which case apparent Successful Bidder shall submit an acceptable substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

- 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 by the Owner 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 the Owner.

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.

- 13.02. 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.
- 13.03. 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.
- 13.04. 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 must be shown.
- 13.05. A Bid by an individual shall show the Bidder's name and official address.
- 13.06. A Bid by a joint venture shall be executed by each joint venture in the manner indicated on the Bid form. The official address of the joint venture must be shown.
- 13.07. All names and titles of individuals with the authority to sign bidding documents shall be printed in ink below the signatures.
- 13.08. The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.

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- 13.09. Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.10. 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. Lump Sum

- A. Bidders shall submit a Bid on a lump sum basis as set forth in the Bid Form.

14.02. 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.

14.03. Estimated Quantities

- A. The Bidder, by submitting his or her Bid, agrees that he/she is satisfied with and will at no time dispute the estimated quantities stated in the Bid as a proper means of comparing the Bids.

The Owner is exempt from payment of sales and compensating use taxes of the State of New York and of cities and counties on all materials, equipment, and supplies sold to the Owner pursuant to this Contract. Also exempt from such taxes are purchases by the Contractor and his subcontractors of materials, equipment, and supplies to be sold to the Owner pursuant to this Contract, including tangible personal property to be incorporated in any structure, building, or other real property forming part of the Project. These taxes are not to be included in the Bid.

14.04. 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.

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ARTICLE 15 - SUBMITTAL OF BID

- 15.01. With each copy of the Bidding Documents, a Bidder is furnished one copy of the Bid Form, and, if required, the Bid Bond Form. The copy of the Bid Form is to be completed and submitted with the Bid security and all required attachments to the Bid stated in the Bid Form.
- 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 envelope plainly marked on the outside with the notation "BID ENCLOSED." Bids sent by mail will be deemed submitted when received at Owner's office.

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 48 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. Late Bids will not be opened.

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 be non-responsive. 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

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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 to perform the Work in accordance with the Contract Documents.
- 19.06. If the Contract is to be awarded, Owner will award the Contract to the lowest responsible Bidder.
- 19.07. It is the intention of the Owner that the work will be awarded within 30 days after the opening of Bids to the lowest responsible Bidder or combination of lowest responsible Bidders whose Bids conform of the requirements of the Bidding Contract Documents. Bids may not be withdrawn, altered, or revoked during this period.

Even after the expiration of such 30-day period, the Owner may accept a Bid and award the work to any Bidder whose Bid has not been unequivocally withdrawn or revoked prior to the mailing of written notice of award to the successful Bidder. For purposes of the preceding sentence, withdraw or revocation of a Bid shall not occur until the Owner receives an unequivocal statement to that effect.

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 under Section 2045 of the Public Authorities Law 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.

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ARTICLE 23 - NEW YORK STATE BIDDING PROVISIONS

23.01. Hours and Wages (See Labor Law Section 220)

- A. No laborer, workman or mechanic in the employ of the Contractor, Subcontractor or other person doing or contracting to do the whole or part of the work contemplated by this Contract shall be permitted or required to work more than eight hours in any one calendar day or more than five days in any one week except in cases of extraordinary emergency, including fire, flood or danger to life or property.
- B. Each laborer, workman or mechanic employed by the Contractor, Subcontractor or other person about or upon the work under this contract shall be paid no less than the prevailing rate wages and shall be provided the supplements not less than the prevailing supplements as determined by the Fiscal Officer pursuant to Article 8 of the Labor Law. The prevailing rate schedule as determined by the Fiscal Officer follows this section and is a part of this Contract. Wage rates redetermined in accordance with the law will be transmitted, when received, to the Contractor and will become a part of this Contract at no cost to the Owner. Any person employed on the site of the work in an occupation not listed in the following prevailing rate schedule shall be paid not less than the minimum rate per hour and shall be provided not less than the supplements designated by the Fiscal Officer.
- C. The Contractor is encouraged to review Labor Law, Section 220 and related Sections in their entirety.

23.02. Discrimination Prohibited (see Labor Law Section 220-e)

- A. The Contractor agrees, in accordance with the applicable provisions of the Labor Law of the State of New York:
 - (1) That in the hiring of employees for the performance of work under this Contract or any subcontract hereunder, no Contractor, Subcontractor nor any person acting on behalf of such Contractor or Subcontractor, shall by reason of race, creed, color, national origin, or sex discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates;
 - (2) That no Contractor, Subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under this Contract on account of race, creed, color, national origin, or sex;
 - (3) That there may be deducted from the amount payable to the Contractor by the Owner under this Contract a penalty of five dollars for each person for each calendar day during which such person was discriminated against or intimidated in violation of the provisions of the Contract;
 - (4) That this Contract may be canceled or terminated by the Owner and all monies due or to become due hereunder may be forfeited, for a second or any subsequent violation of the terms or conditions of this section of the Contract;
 - (5) The aforesaid provisions of this section covering every contract for or on behalf of the State or a municipality for the manufacture, sale or distribution of materials, equipment or supplies shall be limited to operations performed within the territorial limits of the State of New York.

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23.03. Dust Hazards (See Labor Law Section 222-a)

- A. If, in the construction of the work covered by the Contract, a harmful dust hazard is created for which appliances or methods for the elimination of dust have been approved by the Board of Standards and Appeals, such appliances or methods shall be installed and maintained and effectively operated by the Contractor at his expense.
- B. The Contract shall be void and of no effect unless the Contractor complies with the provisions of this subdivision of the Contract and Labor Law Section 222-a.

23.04. Non-Collusion Certification (see General Municipal Law Section 103-d or where applicable Public Authorities Law Section 2878)

- A. Each bidder shall complete the Non-Collusive Bidding Certification attached to the Bid Form.

23.05. Worker's Compensation (see General Municipal Law Section 108)

- A. This Contract shall be void and of no effect unless the person or corporation making or performing such contract shall secure compensation for the benefit of, and keep insured during the life of such contract, such employees, in compliance with the provisions of the worker's compensation law.

23.06. Lien Law

- A. The attention of the Contractor is invited to the provisions of the Lien Law of the State of New York, wherein funds received by a contractor for a public improvement are declared to constitute trust funds in the hands of such contractor to be applied first to the payment of certain claims.

23.07. Sales and Use Tax Exemptions

- A. Owner is exempt under Section 2045 of the Public Authorities Law 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.

Accordingly, the following transactions, if occurring under this Contract, are exempt from the sales and compensating use taxes of the State of New York and of cities and counties thereof, and no sales and compensating use taxes relative to these exempt transactions shall be included in Bids:

- (1) the sale of materials, equipment and supplies to the owner;
- (2) the sale to the Contractor or his Subcontractors of materials, equipment, and supplies for use in erecting any structure or building included in the Project or in adding to, altering or improving any real property included in the Project, provided that such materials, equipment, and supplies are to become an integral component part of such structure, building or real property (i.e., incorporated in the Project);
- (3) the sale to the Contractor or his Subcontractors of materials, equipment and supplies to be resold to the Owner other than those described in (3) above.

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- B. This Project is to be bid, the Contract drawn and payments made in such manner that the Owner shall have the full advantage of all available exemptions from sales and compensating taxes.
- C. The Contractor, his Subcontractor and his materialmen shall complete New York Sales Tax Form ST120.1 (Contractor Exempt Purchase Certificate) and shall furnish such certificate to all persons, firms or corporations from whom they purchase materials, equipment and supplies which may be tax exempt as provided above.
- D. The Contractor and his Subcontractor shall maintain and keep for a period of six years after the date of final payment for the sale, or, if a claim for sales or compensating use tax is pending or threatened at the end of such six year period, until such claim is finally determined and settled, records which in the judgement of the New York State Department of Taxation and Finance adequately show all such tax exempt materials, equipment and supplies purchased by each.
- E. Each Bidder shall include in his Bid and shall be responsible for the payment of all costs and liabilities (other than those directed to be excluded as in this section above provided) for the amounts assessed under any applicable sales, consumer, use or similar tax, any assessment or tax upon the wages and salaries paid employees of the Contractor and the Subcontractor under the Contract and any other applicable taxes however assessed.

ARTICLE 24 - OCRRA PROVISIONS

24.01. Communications

- A. Communications with the Owner shall be solely through the OCRRA Procurement Contact Person as indicated below. Bidders are specifically directed not to contact any other OCRRA officials or employees in any fashion regarding this bid without prior approval. Unauthorized communications may result in the rejection of the bid.

24.02. State Finance Law Procurement Compliance Provisions

- A. Bidders are to familiarize themselves with the summary of the State Finance Law Procurement Compliance Provisions and are required to fill out the "Disclosure to OCRRA During Procurement Process of Prior Non-Responsibility Determinations" form, both of which are attached to the Bid Form. Failure to do so will result in disqualification of the Bid.

All technical questions and inquiries regarding distribution of Bidding Documents will be processed by email and facsimile through OCRRA's Procurement Contact Person:

Christine Latham, Operations Manager
OCRRA
100 Elwood Davis Road
North Syracuse, NY 13212-4312
clatham@ocrra.org (email)
(315)453-2872 (fax)

Responses, along with a copy of the questions, will be provided to all who have purchased/ordered a Bid packet.

END OF SECTION

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CONTRACTOR'S BID
FOR
CONSTRUCTION OF CONTRACT NO. 5
SANITARY/LEACHATE SYSTEM REHABILITATION
ROCK CUT ROAD TRANSFER STATION
ONONDAGA COUNTY RESOURCE RECOVERY AGENCY
5808 ROCK CUT ROAD, JAMESVILLE, NY 13078

ARTICLE 1 - BID RECIPIENT

1.01. THIS BID IS SUBMITTED TO:

Onondaga County Resource Recovery Agency
100 Elwood Davis Road
North Syracuse, NY 13212-4312
Attn: Cristina Alburnio, P.E., Agency Engineer

Bids must be received via mail or hand delivered in sealed envelopes to OCRRA at the above address, and be clearly labeled "SANITARY/LEACHATE SYSTEM REHABILITATION ROCK CUT ROAD TRANSFER STATION."

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.

- 1.02. 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 _____ days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 2 - BIDDER'S REPRESENTATIONS

- A. Bidder has examined and carefully studied the Bidding Documents, other related data identified in the Bidding Documents, and the following Addenda, receipt of all 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 Laws and Regulations that may affect cost, progress, and performance of the Work.

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- 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 relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in SC-4.02 as containing reliable "technical data", and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in SC-4.06 as
- E. Bidder has considered 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 (1) 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 the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.
- F. Based on the information and observations referred to in Paragraph 3.01.E above, 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 required, 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 others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. 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.
- I. 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.

ARTICLE 3 - BIDDER'S CERTIFICATION

3.01. Bidder certifies 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 collusive 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 engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Article:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;

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2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.
- 3.02. Bidder will perform the Work in accordance with the Contract Documents for the prices shown in the Bid Schedules that follow.
- 3.03. Bidder acknowledges that Bidder's price(s) constitute Bidder's sole compensation for performing all portions of the Work assigned to the specific Contractor required by the Contract Documents, and if a particular part of the Work is not listed specifically in the Bid Item Descriptions, Bidder has included that part of the Work in the Bid Item Description which it most logically belongs.

CONTRACT NO. 5

- A. Schedule A: Lump Sum Bid Items: Lump sum items include all Work in the Contract Documents except items specifically identified as Unit Price Work.

Item No.	Description	Total Price
A-1	General Construction	\$
Subtotal (Item A-1)		\$

- B. Schedule B: Unit Price Work: Measurement and payment of Unit Price Work is defined in Section 01025, Unit Price Items.

1. Unit Prices have been computed in accordance with General Conditions Article 11.03.B.
2. Bidders acknowledge that estimated quantities are not guaranteed, and are solely for the purposes of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

Item No.	Description	Unit	Estimated Quantity	Unit Price	Bid Price
B-1	Removal of Debris	Gallons	12,400	\$	\$
B-2	Cleaning of Pipelines	Linear Feet	1,220	\$	\$
Subtotal (Sum of Items B-1 and B-2)					\$

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C. Schedule C: Total Bid Price:

1. Determination of the apparent low Bidder shall be based on the Total Bid Price determined as follows.
2. All mathematical errors will be corrected. In case of a discrepancy between unit prices bid and extended totals, unit prices will govern. In case of discrepancy between the correct sum of individual bid items and the (incorrectly) calculated sum, the correct sum of individual bid items will govern.

Item No.	Total Price
Schedule A Total (Lump Sum Bid Items)	\$
Schedule B Total (Unit Price Work)	\$
TOTAL BID PRICE - CONTRACT NO. 5	\$

TOTAL BID PRICE, CONTRACT NO. 5 (in words)

ARTICLE 4 - NOT USED

ARTICLE 5 - TIME OF COMPLETION

- 5.01. Bidder agrees that the Work will be substantially completed and ready for final payment in accordance with paragraph 14.07 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 5.02. Bidder agrees that the Work will be substantially complete within 75 calendar days after the date that the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions, and will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within 15 calendar days after the date when the Contract Times commence to run.
- 5.03. Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 6 - ATTACHMENTS TO THIS BID

- 6.01. The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid Security in the form of a Bid Bond
 - B. Statement of Surety's Intent

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- C. Bidder's Qualification Statement
- D. List of Proposed Subcontractors
- E. Contractor's License No.: _____ or Evidence of Bidder's Ability to Obtain a State Contractor's License
- F. Certificate of Non-Collusion
- G. Resolution Accompanying Bid
- H. Conflict of Interest Affidavit
- I. Important State Finance Law Procurement Compliance Provisions
- J. Disclosure to OCRRA During Procurement Process of Prior Non-Responsibility Determinations

ARTICLE 7 - DEFINED TERMS

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

ARTICLE 8 - BID SUBMITTAL

This Bid is submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By _____
(Individual's Name)

Doing business as: _____

A Partnership

Partnership Name: _____ (SEAL)

By _____
(Signature of general partner--attach evidence of authority to sign)

Name (typed or printed): _____

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A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability): _____

By _____
(Signature--attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Attest: _____ (CORPORATE SEAL)
(Signature of Corporate Secretary)

Date of Qualification to do business in State where Project is located is: _____

A Joint Venture

Name of Joint Venture: _____

First Joint Venturer Name: _____ (SEAL)

By _____
(Signature of joint venturer partner--attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name: _____ (SEAL)

By _____
(Signature--attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

Bidder's Business Address _____

Phone No. _____ Fax No. _____ Email _____

SUBMITTED on _____, 20____

State Contractor License No. _____ (if applicable)

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BID BOND

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

BIDDER *(Name and Address):*

SURETY *(Name and Address of Principal Place of Business):*

OWNER *(Name and Address):*

BID

Bid Due Date:

Description *(Project Name and Include Location):*

BOND

Bond Number:

Date *(Not earlier than Bid due date):*

Penal sum _____ \$ _____
(Words) (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDER**SURETY**

Bidder's Name and Corporate Seal (Seal) _____
Surety's Name and Corporate Seal (Seal)

By: _____
Signature

By: _____
Signature (Attach Power of Attorney)

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Note: Above addresses are to be used for giving any required notice. Provide execution by any additional parties, such as joint venturers, if necessary.

1. 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 Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.
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 of 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.

BID SECURITY

(ATTACH BID SECURITY TO THIS PAGE IF CERTIFIED CHECK.)

STATEMENT OF SURETY'S INTENT

(To be completed if Bid Security is to be
Certified or Bank Cashier's Check)

To: _____
(Owner)

We have reviewed the Bid of _____
(Contractor)

of _____
(Address)

for _____
(Project)

Bids for which will be received on _____
(Bid Opening Date)

and wish to advise that should this Bid of the Contractor be accepted and the Contract awarded to him, it is our present intention to become surety on the performance bond and labor and material bond required by the Contract.

Any arrangement for the bonds required by the Contract is a matter between the Contractor and ourselves and we assume no liability to you or third parties if for any reason we do not execute the requisite bonds.

We are duly authorized to do business in the State of _____.

Attest:

Surety's Authorized Signature(s)

Attach Power of Attorney

(Corporate seal if any. If no seal, write "No Seal" across this place and sign.)

(This form must be completed prior to the submission of the bid.)

BIDDER'S QUALIFICATION STATEMENT

To induce the making of this Contract, the Bidder represents to the Owner the following, as evidence of Bidder's Qualifications to perform the work herein specified:

1. How many years has your organization been in business under the name in which you propose to execute this Contract?
___ Years
2. What projects of character similar to that proposed has your present organization completed? Give the information indicated by the following tabulations:

NAME, ADDRESS, AND PHONE NO. OF OWNER FOR WHOM WORK WAS DONE	DESCRIPTION OF WORK	APPROXIMATE AMOUNT OF CONTRACT	APPROXIMATE DATE WORK WAS DONE

3. Has your present organization ever failed to complete any work awarded to it? If so, state when, where and why.

-
-
4. Do you have, or can you procure the necessary personnel, equipment, facilities and financial resources to immediately undertake and satisfactorily complete the work contemplated in this Contract?
 5. Define the percentage of the total contract that will be performed by a Minority or Women Owned Business. If any portion of this work will be performed by a subcontractor, please list the subcontractor with their percentage of the total contract.

LIST OF PROPOSED SUBCONTRACTORS

This document is an Attachment to the Bid Form and is a legally binding part thereof.

Each Bidder shall complete this "List of Proposed Subcontractors" in its entirety. Failure to do so shall render the Bid Form non-responsive and be grounds for its rejection by Owner. If Bidder intends to self-perform the type of work indicates, write "Self Perform" under Subcontractor Name.

Type of Work	Subcontractor Name and Address	Certified Disadvantage Business Enterprise?	Subcontract Amount	State Contractor License Number

OCRRA reserves the right to review Subcontractor qualifications prior to, and at the consideration for, award of the contract.

Total Subcontracted Amount: \$ _____

Percent of Total Contract: _____ %

CONTRACTOR'S LICENSE NO.

OR

**EVIDENCE OF BIDDER'S ABILITY TO
OBTAIN STATE CONTRACTOR'S LICENSE**

CERTIFICATE OF NON-COLLUSION

Non-collusive Certifications required of all bidders/proposers/quoters under Section 103-d of the General Municipal Law as amended by Chapter 751 of the Laws of 1965 and Chapter 675 of the Laws of 1966 effective September 1, 1966, is as follows:

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

(1) The prices in this bid/proposal/quote have been arrived at independently without collusion, consultation, communications, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other bidder/proposer/quoter or with any competitor.

(2) Unless otherwise required by law, the prices which have been quoted in this bid/proposal/quote have not been knowingly disclosed by the bidder/proposer/quoter and will not knowingly be disclosed by the bidder/proposer/quoter prior to opening, directly or indirectly, to any other bidder/proposer/quoter or to any competitor; and

(3) No attempt has been made or will be made by the bidder/proposer/quoter to induce any other person, partnership, or corporation to submit or not to submit a bid/proposal/quote for the purpose of restricting competition.

Legal Name of Bidder/Proposer/Quoter (Typed)

Address (Typed)

City State Zip

BY:

Signature

Name (Typed)

Dated _____, 20__

Title (Typed)

RESOLUTION ACCOMPANYING BID
(To be filled out by corporate Bidders only)

To: _____
(Name of Owner)

I HEREBY CERTIFY that the following is a true and correct copy of resolutions duly adopted at a meeting of the Board of Directors of _____, a corporation incorporated under the Laws of the State of New York, duly called and held on the _____ day of _____, 20____, a quorum then being present; that the said resolutions have been entered upon the regular minute book of the corporation and are in accordance with the certificate of incorporation and the by-laws and are now in full force and effect:

RESOLVED THAT _____
be and hereby is authorized to sign and submit the Bid Proposal of this corporation for the following project:

and to include in such Bid Proposal the certificate as to non- collusion required by law as the act and deed of such corporation, and for all inaccuracies or misstatements in such certificate this corporation shall be liable under the penalty of perjury; and to enter into the contract if awarded to this corporation;

Resolved that the following officer(s) of this corporation is/are authorized on behalf of this corporation to sign proposal and the contract:

(Authorized Officer[s])

I FURTHER CERTIFY that the names of the persons holding titles referred to in the foregoing resolutions are as follows:

Name	Title
_____	_____
_____	_____
_____	_____

Secretary: _____

Dated: _____

(Corporate seal, if any)

CONFLICT OF INTEREST AFFIDAVIT

STATE OF _____)
) ss:
COUNTY OF _____)

_____, being duly sworn, deposes and says for and on behalf of

_____ that:

1. Our (my) firm, _____, is an independent firm or company, and has this date submitted a bid, proposal, or quote to provide goods and/or services to the Onondaga County Resource Recovery Agency.
2. I certify on behalf of the bidder, proposer, or quoter that it and its employees have no interest, direct or indirect, which could conflict in any manner or degree with the performance or provision of these goods and/or services to the Onondaga County Resource Recovery Agency.
3. If awarded a contract my (our) firm agrees that in providing the goods or in the rendering of services to the Onondaga County Resource Recovery Agency, no persons having any such interest shall be employed by the firm. I assume full responsibility for knowing whether my (our) employees or agents have any such interest and hereby certify that no such interest exists.

Dated: _____, 20____

By: _____

For and on Behalf of: _____

Sworn before me this _____ day of _____, 20____.

Notary Public

Important State Finance Law Procurement Compliance Provisions

OCRRA Procurement regarding: _____

OCRRA Designated Procurement Contact Person(s): _____

OCRRA conducts its procurements to provide all vendors with an opportunity to compete fairly to maximize competition. New York State has enacted provisions in its State Finance Law, applicable to any contract over \$15,000.00, that further promotes fair competition. This law now requires that all communications i.e. "contacts" with the Agency regarding this procurement, after the Request to Bid, Request for Proposals, or Request for Quotes go out, must be through a designated OCRRA Procurement Contact Person. Our Designated Procurement Contact Person is listed above. All contacts by potential vendors should be through the Designated Procurement Contact Person and NO ONE ELSE! All such contacts will be recorded by the Designated Procurement Contact Person and any responding information given to a potential vendor will also be shared with all potential vendors, so no one has a competitive advantage. As a potential vendor on this procurement, you will need to fill in the Permissible Contacts Affirmation form, attached, and submit it with your bid/proposal/quote. You will also need to fill in the other part of this two page form that advises OCRRA of any Non-Responsibility Determinations under this law. If you fail to comply with the above Procurement contacts restrictions or you submit knowingly false, inaccurate or incomplete information, or you violate our OCRRA Ethics Code, you may be found to be a "Non-Responsible" vendor. This can result in a rejection of your firm for contract award, a cancellation of the contract, if later discovered (the Contract will include a cancellation provision for such a contingency), and in the event of two such findings in a four year period, debarment from obtaining any further OCRRA procurement contract for a period of four years from the time of the second violation.

Please be sure to familiarize yourself with these new legal provisions, fill out the attached forms, and contact only the Designated Procurement Contact Person during the procurement process. This will promote fair competition on this procurement and will not disqualify your firm from a potential OCRRA contract award.

**Disclosure to OCRRA During Procurement Process of
Prior Non-Responsibility Determinations**

OCRRA Procurement regarding: _____

OCRRA Designated Procurement Contact Person: _____

OCRRA conducts its procurements to maximize competition and provide all vendors with an opportunity to compete fairly. New York law now provides that, for any procurement over \$15,000.00, all potential vendors must disclose whether a governmental entity in New York has made a finding of "Non-Responsibility:" "Non-Responsibility" is defined in State Finance Law Section 139-j and can include failure of a potential bidder/proposer/quoter to timely disclose truthful, accurate, or complete information that may allow OCRRA to make a determination as to its "responsibility" relative to this procurement as well as unauthorized procurement contacts (including contacts to someone other than the designated procurement contact) and ethics code violations. In order to qualify for consideration on this procurement, the bidder/proposer/quoter must complete and sign the form below.

Name and Address of Bidder/Proposer/Quoter Seeking to Enter into the Procurement Contract with OCRRA: _____

Name, Title, and Phone Number of Person Submitting this Form: _____

Has any Governmental Entity in New York made a finding of Non-Responsibility regarding the bidder/proposer/quoter seeking to enter into the Procurement Contract in the previous four years? (Please circle):

No

Yes

If you answered yes to the above question, please provide details regarding the finding of Non-Responsibility below.

New York Governmental Entity: _____

Date of Finding of Non-Responsibility: _____

Basis of Finding of Non-Responsibility: _____

Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the above-named bidders/proposers/quoters after a finding of intentional provision of false or incomplete information? (Please circle):

No

Yes

If yes, please provide details below.

New York Governmental Entity: _____

Date of Termination or Withholding of Contract: _____

Basis of Termination or Withholding: _____

Bidder/proposer/quoter certifies that all information provided to OCRRA above with respect to State Finance Law §139-k is complete, true, and accurate.

By: _____ Date: _____

Signature _____

PERMISSIBLE CONTACTS AFFIRMATION

As a potential bidder/proposer/quoter on an OCRRA solicitation where the contract amount may exceed \$15,000.00, I recognize that once the solicitation issues, New York law requires that all contacts with OCRRA regarding that procurement must be through the designated OCRRA Procurement Contact Person and no one else. On behalf of my client as a potential bidder/proposer/quoter, I affirm that my client understands and agrees to comply with the procedures of the Onondaga County Resource Recovery Agency relative to permissible contacts as required by New York State Finance Law §139-j (3) and §139- j (6) (b). This form must be submitted with the bid, proposal, or quote.

OCRRA Designated Procurement Contact Person: _____

Vendor Signature

Print Signer's Name

Vendor Title: _____

Date: _____

Vendor Name: _____

Vendor Address: _____

OCRRA CONSTRUCTION CONTRACT

This **AGREEMENT** made as of the _____ day of _____ 20____.

Between: **Onondaga County Resource Recovery Agency**
100 Elwood Davis Road
North Syracuse, NY 13212

hereinafter called "**OCRRA**"

and

hereinafter called "**CONTRACTOR**"

In consideration of the promises and mutual covenants and agreements herein contained, the parties hereto agree as follows:

1. **SUPERSEDING EFFECT**

This Contract supersedes all prior written or oral agreements, if any, between the parties and constitutes the entire agreement between the parties with respect to the work to be performed under this Contract.

2. **SCOPE OF WORK**

The Contractor shall furnish all the services and materials necessary to perform the work associated with the OCRRA Sanitary/Leachate System Rehabilitation, Rock Cut Road Transfer Station, Jamesville, NY, as set forth in Exhibit A attached hereto entitled "**Statement of Work**" (hereinafter "SOW" or the "**Work**"). The Contractor agrees to provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation and other facilities and services necessary for the proper execution and completion of the **Work**, whether temporary or permanent, and whether or not incorporated or to be incorporated in the **Work**.

3. **PERIOD OF PERFORMANCE**

- A. The **Work** to be accomplished under this Contract shall be performed as follows: **Work** should not begin at the project site before receiving "Notice to Proceed" and shall be substantially complete 75 calendar days from said date of "Notice to Proceed," and shall be fully completed 90 calendar days from the date of "Notice to Proceed."
- B. Specific periods of performance and completion dates, if applicable, for Contract line items are set forth in the SOW.

4. **CONSIDERATION AND PAYMENT**

- A. Subject to the limitations and other conditions contained in this Contract, the price of the **Work** to be performed under this Contract ("Contract Sum") shall not exceed _____ Dollars (\$_____).
- B. Payment shall be in accordance with the following schedule:

Monthly progress payments in accordance with the Contract Documents.
- C. The hourly rates to be charged by Contractor to OCRRA for services hereunder, if applicable, are set forth in the SOW.

- D. Scheduled payments will be paid by OCRRA net 30 days after receipt of an invoice by OCRRA for a portion or all of the **Work** completed by Contractor, inspected and accepted by OCRRA in writing. OCRRA will have the right to reduce and set-off against amounts payable by OCRRA hereunder for any indebtedness or amounts previously owed by Contractor to OCRRA, however and whenever arising.

5. **LIQUIDATED DAMAGES**

Contractor agrees that if it fails to complete the SOW within the time articulated in 3. Period of Performance, Contractor will pay OCRRA daily stipulated liquidated damages in the amount of One Thousand Dollars (\$1,000.00) per diem.

6. **NOTICES AND CORRESPONDENCE**

All notices and correspondence shall be sent by either party, in all matters dealing with this Contract, to the following addresses:

A. To OCRRA: **Onondaga County Resource Recovery Agency
Attention: Executive Director
100 Elwood Davis Road
North Syracuse, NY 13212**

B. To Contractor: _____

7. **PERFORMANCE BOND**

Contractor will provide to OCRRA, within five (5) days of execution of this Contract, a performance bond in the amount of the Contract. The performance bond provided must be with an A Rated Insurance Company as determined by the New York State Insurance Department.

8. **CONTRACT ADMINISTRATION**

The names of the individuals specifically authorized to make changes or re-direct the **Work** required by this Contract when permitted pursuant to the provisions hereunder are:

For OCRRA: Dereth Glance For Contractor: _____
Executive Director _____

9. **PROJECT COORDINATOR**

Contractor shall employ a competent Project Coordinator who shall be in attendance at the Project Site during the progress of the **Work**. The Project Coordinator shall represent the Contractor and all communications given to the Project Coordinator will be as binding as if given to the Contractor.

10. **PROGRESS REPORTS**

Contractor shall, within five (5) days after date of commencement of the **Work**, prepare and submit to OCRRA for approval a practicable schedule, showing the order in which the Contractor proposes to carry on the **Work**, the date on which it will start, the most important features, including procurement of materials, plant and equipment, and the contemplated dates for completing the same.

11. RISK OF LOSS

The Contractor assumes the risk of, and shall be responsible for, any loss or damage to equipment or materials furnished under this Contract until delivered to OCRRA, installed (if required) and accepted in writing by OCRRA. The Contractor shall maintain adequate insurance to cover this risk.

12. REQUIRED INSURANCE

Before commencing the **Work** to be performed under this Contract, Contractor shall procure and maintain insurance of the kinds and limits enumerated hereunder. The proposed insurance carrier must have an A.M. Best rating of A or better and be admitted to do business in New York State. Certificates of such insurance issued by the Contractor's insurance carrier shall be filed with OCRRA before commencement of Project **Work** and shall name OCRRA and Onondaga County as Additional Insureds. Contractor will provide the following insurance:

- A.** Worker's Compensation: Contractor's possession of worker's compensation insurance in accordance with the laws of the State of New York.
- B.** Comprehensive General Liability:
 - General Aggregate –Each Occurrence (Bodily Injury and Property Damage): Single limit Policy - \$1,000,000
- C.** Comprehensive Automobile Liability:
 - Each Occurrence (Bodily Injury and Property Damage: Combined single limit \$1,000,000
- D.** Builder's Risk Insurance
- E.** Continuity and Extent of Coverage: Contractor shall purchase and maintain the insurance required hereunder, effective for the full period of its performance as set forth in Paragraph 3 above. The insurance coverage shall be for protection of claims which may arise out of or result from Contractor's operations under this Contract, whether the operations be by the Contractor or by the Subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.
- F.** Notice of Termination or Cancellation: The insurance coverage to be required under this Contract may not be terminated or cancelled unless OCRRA is given 30 days prior written notice by the insurance carrier and Contractor provides proof of equivalent alternative coverage.

13. HOLD HARMLESS

Contractor shall, to the fullest extent permitted by applicable law, indemnify, defend, and hold harmless OCRRA from any and all actions, claims, damages, losses and expenses, including but not limited to attorneys' fees, arising directly or indirectly out of Contractor's performance of the **Work**, regardless of whether OCRRA is partially negligent, excluding liability created by OCRRA's sole and exclusive negligence. OCRRA and Contractor agree to reservation by OCRRA of the right to contribution or indemnification from Contractor that would otherwise be barred by Section 11 of the Workers' Compensation Law.

14. INSPECTION OF SERVICES

Contractor agrees that the Construction **Work** and/or other services it provides to OCRRA under this Contract will be subject to periodic inspection and testing by OCRRA or its outside designated inspection service, at its option, without unduly delaying the **Work**. Contractor will also maintain an adequate inspection system and perform its own such inspections as will assure that the **Work** performed under the Contract conforms to the Contract specifications and other requirements and make records of such inspections available to OCRRA. The **Work** will also be subject to a final inspection by OCRRA.

15. MATERIAL AND WORKMANSHIP

All equipment, material, and articles used in the **Work** covered by this Contract are to be of the most suitable grade for the purpose intended. Contractor will provide new equipment, materials, and articles to be used or incorporated into the **Work** unless the invitation to submit bids/proposals specifically permits the use of used goods and, the responsive Bid/Proposal specifies what used equipment, materials, and articles are intended to be used or incorporated into the **Work**. Reference to any equipment, materials, or articles by trade name or make shall be regarded as establishing a standard and the Contractor may, with OCRRA's prior written approval, substitute any material, equipment, or article which in the judgment of OCRRA is equal to that named.

16. ERRORS AND OMISSIONS

Contractor will be responsible for any defect, error, or omission in the execution of the **Work** plans, drawings, and specifications submitted, regardless of whether or not OCRRA had approved such plans, drawings, and specifications. Contractor will correct any such errors or omissions and any defective **Work** associated therewith during the performance of this Contract.

17. WARRANTY OF CONSTRUCTION/SERVICES

With respect to the Construction/Service **Work** performed by Contractor hereunder, Contractor agrees that, in addition to any other warranties set forth in the Contract, Contractor warrants that the **Work** performed under this Contract will conform to the Contract requirements and be free from defects in equipment, material, design, or workmanship for the entire warranty period set forth in the Contract Documents. Contractor further agrees that all of the services it performs under this Contract, including any goods or equipment supplied under this Contract, will be free from defects and conform to the Bid Specifications and the requirements of this Contract. Contractor agrees to promptly correct or re-perform any defective or non-conforming services at no cost to OCRRA and to replace any defective or non-conforming Goods or Equipment installed as part of the **Work** performed under this Contract. If Contractor fails or refuses to correct or re-perform, OCRRA may, by Contract with a third party, or otherwise, correct or replace same with similar services, goods or equipment and charge to Contractor the entire cost incurred to OCRRA thereby or, alternatively, OCRRA may obtain an equitable adjustment in the Contract Sum set forth in Paragraph 4 above.

18. MANUFACTURERS' WARRANTIES

Contractor agrees that the manufacturers' warranties it receives that are applicable to any material, equipment, parts or components furnished or installed by Contractor under this Contract will survive the Contract and will run to OCRRA for the full term provided by the manufacturer, and will not be deemed to be exclusive, but in addition to any warranty provided by Contractor under this Contract.

19. TITLE/LIENS

Title to all drawings, designs, specifications, notes, and other architect-engineering work produced in performance of this Contract will, at the end of the Contract, vest in OCRRA. Title to any materials, parts, equipment or other items installed by Contractor under this Contract will vest in OCRRA immediately upon payment. Contractor will pay for all labor, services, materials, equipment and parts

installed as part of the **Work** under this Contract as well as other expenses incurred by it or its suppliers in connection with the **Work** and Contractor will defend and indemnify OCRRA against all claims arising out of any unpaid accounts.

20. DOCUMENTS AND SAMPLES AT THE SITE

Contractor will maintain at the Project Site, on a current basis, one record copy of all drawings, specifications, addenda, change orders, and other modifications, in good order and marked currently to record all changes made during construction or the performance of other services. Upon completion of the **Work**, Contractor will provide OCRRA with two (2) copies of the "as built" drawings for the completed **Work**.

21. CHANGES

OCRRA may, at its sole option, at any time, and from time-to-time, by a written order, make changes within the general scope of this Contract, including but not limited to the definition of services to be performed, and the time (i.e. hours of the day, days of the week, etc.) and place of performance thereof. If any such change causes an increase or decrease in the cost of or the time required for the performance of any part of the **Work** under this Contract, whether changed or not changed by any such order, an equitable adjustment shall be made in the Contract price or performance schedule, or both, and the Contract shall be modified in writing accordingly. Any claim by the Contractor for an adjustment under this clause must be asserted by the Contractor in writing within fifteen (15) days from the date of receipt by the Contractor of the written change order unless OCRRA grants, in writing, an extension to the fifteen (15) day period. Charges for any extra work or material will not be allowed unless made pursuant to this clause. Other than the above, the terms and conditions contained in this Contract will not be added to, modified, superseded, or otherwise altered except by written notification signed by an authorized representative of OCRRA and the Contractor.

22. ACCEPTANCE OF DEFECTIVE OR NON-CONFORMING WORK

If OCRRA prefers to accept defective or non-conforming **Work**, OCRRA may do so instead of requiring its removal and correction, in which case there will be a reduction in the Contract Sum where appropriate and equitable. Such adjustment shall be effective whether or not final payment has been made.

23. CONCEALED CONDITIONS

Should concealed conditions be encountered in the Performance of the **Work** below the surface of the ground or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Invitation to Bid or Request for Proposals, or should unknown physical conditions below the surface of the ground or should concealed or unknown conditions in an existing structure, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in **Work** of the character provided for in this Contract, be encountered, the Contract Sum will be equitably adjusted upon a written request by either party made within twenty days after the first observance of such concealed conditions.

24. USE AND POSSESSION PRIOR TO COMPLETION

Unless it actually interferes with Contractor's performance of the **Work**, OCRRA shall have the right to take possession of or use any completed or partially completed part of the **Work** and such possession or use shall not be deemed an acceptance of any **Work** not completed in accordance with this Contract.

25. NO WAIVER OF CONDITIONS

Failure of OCRRA to insist on strict performance shall not constitute a waiver of any of the provisions of this Contract by OCRRA or waiver of any other default of the Contractor.

26. TERMINATION

OCRRA reserves the right to terminate this Contract upon thirty (30) days written notice to Contractor. If this Contract is so terminated, OCRRA shall be liable only for the payment of services performed and approved prior to the effective date of termination, which for purposes herein is the date of mailing of the Notice of Termination. If Contractor refuses or fails to prosecute the **Work**, or any separate part thereof, with such diligence as will ensure its completion within the time specified herein, or any extension thereof, or fails to complete the **Work** within such time set forth in Paragraph 3, Period of Performance, OCRRA may, by written notice to the Contractor, terminate the Contractor's right to proceed with the **Work** or such part of the **Work** as to which there has been such a delay.

27. TERMINATION FOR FAILURE TO COMPLY WITH STATE FINANCE LAW

If the goods or services to be provided hereunder by Contractor to OCRRA exceeds \$15,000.00, in total, OCRRA reserves the right to terminate this contract, at any time during its term, by written notification to Contractor, in accordance with the notification provisions above, in the event it is found that the certification filed by the Contractor during the procurement process was intentionally false or intentionally incomplete or in the event that Contractor engages in an impermissible contact under State Finance Law Sections 139-j and 139-k.

28. PREVAILING WAGES

Where applicable, Contractor shall pay its employees the prevailing wages for work, labor or services as required by New York Labor Law Article 8 and Article 9.

29. TAXES

OCRRA is exempt from the payment of sales and compensating use taxes of the State of New York and of cities and counties on all materials, equipment, and supplies sold to OCRRA pursuant to this Contract. Also exempt from such taxes are purchases by the Contractor of materials, equipment, and supplies to be sold to OCRRA pursuant to this Contract, including tangible personal property to be incorporated into any structure, building or other real property hereunder.

30. PROTECTION OF BUILDINGS, EQUIPMENT AND VEGETATION

The Contractor shall use reasonable care to avoid damaging existing buildings, structures, equipment, and vegetation at OCRRA's facility. If the Contractor fails to do so, Contractor shall promptly replace or repair the damage at Contractor's expense. If Contractor refuses or fails to promptly make such repair or replacement, the Contractor shall be liable for the cost thereof which may be deducted by OCRRA from payments due or which may become due to the Contractor.

31. INDEPENDENT CONTRACTOR/APPLICABILITY TO SUBCONTRACTORS AND SUPPLIERS

In all matters relating to this Contract, Contractor shall be acting as an independent contractor. Contractor shall not have any authority to assume or create any obligation, express or implied on behalf of OCRRA and Contractor shall not have the authority to represent himself/herself/itself as an agent or employee of OCRRA. Each subcontractor and supplier shall be bound by all OCRRA Construction Services Contract documents to the same extent and with the same effect as if the subcontractor or supplier were the Contractor.

32. BANKRUPTCY

Contractor agrees that if it becomes insolvent or makes a general assignment for the benefit of creditors, OCRRA may, at its option, terminate the balance of this Contract, in whole or in part.

33. NOTICE TO OCRRA OF LABOR DISPUTES

Contractor agrees that whenever it has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of its obligations under this Contract, it will immediately give OCRRA notice thereof, including all relevant information with respect to its effect on the timing or completion of the **Work**.

34. CONFIDENTIAL RELATIONSHIP

Contractor shall treat as confidential all information supplied by OCRRA to Contractor, to assist Contractor in its performance under this Contract, unless such information is in the public domain. Contractor shall not disclose any such information related to this Contract to any person not authorized by OCRRA to receive it.

35. CONFLICT OF INTEREST

Contractor hereby warrants that there is no conflict of interest with Contractor's other contracts or other employment, if any, with the activities to be performed by Contractor hereunder and that Contractor shall advise OCRRA if any conflict or potential conflict of interest exists or arises in the future.

36. NON-DISCRIMINATION

Contractor agrees that, in the hiring of employees and subcontractors to perform any **Work**, hereunder, it will not discriminate against any individual or firm on the basis of race, creed, color, gender, sexual orientation, or national origin.

37. EMERGENCIES

In the case of an emergency affecting the safety of persons or property, Contractor will act to prevent threatened damage, injury, or loss.

38. SAFETY

The Contractor shall be responsible for safety related to and during the performance hereunder. The Contractor shall ensure that its employees are notified of and observe and abide by all applicable safety regulations and laws. The Contractor shall take any additional precautions necessary or proper under the circumstances to prevent injury to or death of persons and/or damage to property.

39. CLEANING UP

Contractor agrees that it will keep the **Work** Site and storage areas free from accumulations of waste material or rubbish.

40. PROHIBITION OF ASSIGNMENT

This Contract cannot be assigned by Contractor without the prior written consent of OCRRA. Should OCRRA agree to such an assignment of this Contract, Contractor agrees, notwithstanding OCRRA's approval of such an assignment, to remain fully liable for the performance of the **Work** in the event that its assignee does not fully perform all of the **Work** within the Period of Performance specified herein. Contractor will, in such event, also be responsible to OCRRA with respect to all covenants, obligations, and warranties set forth herein.

41. COMPLIANCE WITH LAWS

The Contractor shall comply with all applicable laws, ordinances, rules, and regulations including Federal, State and Municipal authorities, agencies and departments relating to or affecting the **Work** hereunder or any part thereof, and shall secure and obtain any and all permits, licenses, and consents as may be necessary in connection therewith.

42. APPLICABLE LAW

This Contract shall be interpreted in accordance with the laws of the State of New York.

43. GENERAL CONDITIONS

The General Conditions are attached hereto and incorporated by reference herein.

In Witness Whereof, the parties have executed this Contract.

A T T E S T:

Company Name:

Onondaga County Resource Recovery Agency

By: _____
Dereth Glance, Executive Director

100 Elwood Davis Road,
North Syracuse, NY 13212

(Signature)

(Print Name)

(Print Title)

Dated: _____

EXHIBIT A

**STATEMENT OF WORK
OCRRA TRANSFER STATION MODIFICATIONS
5808 ROCK CUT ROAD, JAMESVILLE, NY 13078**

EXHIBIT A

**STATEMENT OF WORK
OCRRA TRANSFER STATION MODIFICATIONS
5808 ROCK CUT ROAD, JAMESVILLE, NY 13078**

OCRRA is seeking bids for construction of the modifications to the Rock Cut Road Transfer Station in Jamesville, NY with work items outlined in the Contract Documents (Drawings and Specifications).

EXHIBIT B

COMPETITIVE BID OR PROPOSAL SUBMITTED

EXHIBIT C

CONTRACTOR SPECIFICATIONS, LITERATURE, WARRANTIES

EXHIBIT D

PERFORMANCE BOND

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

Effective Date of Agreement:

Amount:

Description (*Name and Location*):

BOND

Bond Number:

Date (*Not earlier than Effective Date of Agreement*):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

Contractor's Name and Corporate Seal

Surety's Name and Corporate Seal

By: _____
Signature

By: _____
Signature (Attach Power of Attorney)

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Note: Provide execution by additional parties, such as joint venturers, if necessary.

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; or
 2. 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:
 1. 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
 2. 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 the 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 of 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 non-performance 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.

11. 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 otherwise comply with the other terms thereof.

FOR INFORMATION ONLY – (*Name, Address and Telephone*)

Surety Agency or Broker:

Owner's Representative (*Engineer or other party*):

EXHIBIT E

INSURANCE REQUIREMENTS/CERTIFICATE OF INSURANCE

EXHIBIT E

INSURANCE REQUIREMENTS

HOLD HARMLESS

Regarding the operations and responsibilities concerning this agreement, the Contractor further covenants and agrees to indemnify, defend and hold harmless OCRRA and Onondaga County, its officers, agents, the owner's hired Project Engineer, GHD Consulting Services Inc., and employees from and against any and all loss or expense that may arise by reason of liability for damage, injury or death, or for invasion of personal or property rights, of every name and nature, and whether casual or continuing trespass or nuisance, and any other claim for damages arising at law and equity alleged to have been caused or sustained in whole or in part by or because of any omission of duty, negligence or wrongful act on the part of the Contractor, its employees or agents, or because of any joint omission of duty, negligence or wrongful act on the part of the Contractor and OCRRA, their officers, agents or employees in connection with this agreement.

INSURANCE BROAD FORM PROPERTY DAMAGE

The Contractor agrees to obtain and maintain General Liability Insurance including comprehensive Form, Premises/Operations, Products/Completed Operations, Broad Form Contractual, Independent Contractors and Personal Injury, with minimum limits of not less than five million dollars (\$5,000,000) combined single limit for bodily injury, including wrongful death, and property damage.

The Contractor also agrees to obtain and maintain Automobile Liability Insurance, including for owned, hired and non-owned vehicles with minimum limits of not less than one million dollars (\$1,000,000) combined single limit for bodily injury and property damage.

The Contractor also agrees to obtain and maintain Builder's Risk Insurance.

THE CONTRACTOR SHALL PROVIDE TO THE OWNER, OCRRA, A CERTIFICATE OF INSURANCE EVIDENCING THE ABOVE INSURANCE REQUIREMENTS AND SHALL NAME OCRRA, ONONDAGA COUNTY, AND GHD CONSULTING SERVICES INC. AS ADDITIONAL INSURED. THE CERTIFICATE SHALL CONTAIN A PROVISION THAT THE ISSUING COMPANY WILL NOTIFY OCRRA BY CERTIFIED MAIL THIRTY (30) DAYS PRIOR TO ANY CHANGE IN OR CANCELLATION OF THE POLICY.

STATUTORY COMPLIANCE

In acceptance of this agreement, the Contractor covenants and agrees to comply in all respects with all Federal, State and County laws which pertain hereto regarding services for municipal corporations including but not limited to Workers' Compensation and Employers' Liability Insurance, hours of employment, wages and Human Rights.

MAILING INSTRUCTIONS

The Certificate of Insurance shall be mailed to:

OCRRA
100 Elwood Davis Road
North Syracuse, NY 13212-4312
Attn: Ms. Cristina Albunio, PE

CERTIFICATE OF INSURANCE

THIS CERTIFIES to OCRRA, 100 Elwood Davis Road, North Syracuse, NY 13212-4312, that the following described policies have been issued to, and are in force now for:

NAME & ADDRESS

OF INSURED:

COVERING:

Kind of Insurance	Company and Policy No.	Expiration Date	Limits of Liability
(X) Worker's Compensation			Statutory
(X) Disability Benefits Law			Statutory
(X) Comprehensive General Liability			CSL of \$2,000,000 OCC/\$5,000,000 Agg in the Primary Policy
(X) Comprehensive Auto Liability			CSL of \$1,000,000 per OCC Primary Policy

The above described policies provide the following features or contain the following provisions, by endorsement for this project:

1. The above policies will not expire and/or non-renew by canceled, for any reason or restricted in coverage until at least thirty (30) days prior to written notice has been given, by certified mail, to OCRRA.
2. The Comprehensive General Liability policy specifically includes premises/operations, products/completed operations, blanket broad form contractual, and independent contractors liability coverage.
3. Personal injury liability coverage is provided under bodily injury liability insurance.
4. Broad form property damage coverage is provided.
5. The exclusion for actions on a contract by a third party beneficiary arising out of a project for a public authority is deleted from the contractor's and the owner's contractual liability policies.
6. The above described policies have been endorsed as necessary to provide the limits of liability indicated.
7. The CGL policy has been endorsed to include OCRRA and GHD Consulting Services Inc. as an additional insured.

Name of Insurance Agency

Signature of Authorized Representative

Address of Insurance Agency

Telephone Number

Date

Rock Cut Road Transfer Station Sanitary/Leachate System Rehabilitation
11123638.3

EXHIBIT F

CERTIFICATE OF NON-COLLUSION

EXHIBIT F

CERTIFICATE OF NON-COLLUSION

Non-collusive Certifications required of all bidders/proposers/quoters under Section 103-d of the General Municipal Law as amended by Chapter 751 of the Laws of 1965 and Chapter 675 of the Laws of 1966 effective September 1, 1966, is as follows:

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

(1) The prices in this bid/proposal/quote have been arrived at independently without collusion, consultation, communications, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other bidder/proposer/quoter or with any competitor.

(2) Unless otherwise required by law, the prices which have been quoted in this bid/proposal/quote have not been knowingly disclosed by the bidder/proposer/quoter and will not knowingly be disclosed by the bidder/proposer/quoter prior to opening, directly or indirectly, to any other bidder/proposer/quoter or to any competitor; and

(3) No attempt has been made or will be made by the bidder/proposer/quoter to induce any other person, partnership, or corporation to submit or not to submit a bid/proposal/quote for the purpose of restricting competition.

Legal Name of Bidder/Proposer/Quoter (Typed)

Address (Typed)

City State Zip

BY:

Signature

Name (Typed)

Title (Typed)

Dated _____, 20____

EXHIBIT G

CONFLICT OF INTEREST AFFIDAVIT

EXHIBIT G

CONFLICT OF INTEREST AFFIDAVIT

STATE OF _____)
) ss:
COUNTY OF _____)

_____, being duly sworn, deposes and says for and on behalf of

_____ that:

1. Our (my) firm, _____, is an independent firm or company, and has this date submitted a bid, proposal, or quote to provide goods and/or services to the Onondaga County Resource Recovery Agency.
2. I certify on behalf of the bidder, proposer, or quoter that it and its employees have no interest, direct or indirect, which could conflict in any manner or degree with the performance or provision of these goods and/or services to the Onondaga County Resource Recovery Agency.
3. If awarded a contract my (our) firm agrees that in providing the goods or in the rendering of services to the Onondaga County Resource Recovery Agency, no persons having any such interest shall be employed by the firm. I assume full responsibility for knowing whether my (our) employees or agents have any such interest and hereby certify that no such interest exists.

Dated: _____, 20____

By: _____

For and on Behalf of: _____

Sworn before me this _____ day of _____, 20_____.

EXHIBIT H

**NOTICE OF AWARD
NOTICE TO PROCEED**

Notice of Award

Date: _____

Project: _____

Owner: _____

Owner's Contract No.: _____

Contract: _____

Engineer's Project No.: _____

Bidder: _____

Bidder's Address: *[send Notice of Award Certified Mail, Return Receipt Requested]*

You are notified that your Bid dated _____ for the above Contract has been considered. You are the Successful Bidder and are awarded a Contract for _____.

[Indicate total Work, alternates, or sections of Work awarded.]

The Contract Price of your Contract is _____ Dollars \$_____).

[Insert appropriate data if unit prices are used. Change language for cost-plus contracts.]

_____ copies of the proposed Contract Documents (except Drawings) accompany this Notice of Award.

_____ sets of the Drawings will be delivered separately or otherwise made available to you immediately.

You must 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 counterparts of the Contract Documents.
2. Deliver with the executed Contract Documents the Contract security [Bonds] as specified in the Instructions to Bidders (Article 20), General Conditions (Paragraph 5.01), and Supplementary Conditions (Paragraph SC-5.01).
3. Other conditions precedent: _____

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Contract Documents.

Owner

By: _____
Authorized Signature

Title

Copy to Engineer

Notice to Proceed

Date: _____

Project:	
Owner:	Owner's Contract No.:
Contract:	Engineer's Project No.:
Contractor:	
Contractor's Address: <i>[send Certified Mail, Return Receipt Requested]</i>	

You are notified that the Contract Times under the above Contract will commence to run on _____. On or before that date, you are to start performing your obligations under the Contract Documents. In accordance with Article 4 of the Agreement, the date of Substantial Completion is _____, and the date of readiness for final payment is _____[(or) the number of days to achieve Substantial Completion is _____, and the number of days to achieve readiness for final payment is _____].

Before you may start any Work at the Site, Paragraph 2.01.B of the General Conditions provides that you and Owner must each deliver to the other (with copies to Engineer and other identified additional insureds and loss payees) certificates of insurance which each is required to purchase and maintain in accordance with the Contract Documents.

Also, before you may start any Work at the Site, you must:

_____ *[add other requirements]*.

_____	Owner
_____	Given by:
_____	Authorized Signature
_____	Title
_____	Date

Copy to Engineer

EXHIBIT I

SAMPLE PARTIAL PAYMENT ESTIMATE FORM

Form RD 1924-18
(Rev. 6-97)

UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL DEVELOPMENT
FARM SERVICE AGENCY

PARTIAL PAYMENT ESTIMATE

CONTRACT NO. _____

PARTIAL PAYMENT ESTIMATE NO. _____

PAGE _____

OWNER: _____

CONTRACTOR: _____

PERIOD OF ESTIMATE

FROM _____ TO _____

CONTRACT CHANGE ORDER SUMMARY

ESTIMATE

No.	Agency Approval Date	Amount		
		Additions	Deductions	
				1. Original Contract
				2. Change Orders
				3. Revised Contract (1 + 2)
				4. Work Completed*
				5. Stored Materials*
				6. Subtotal (4 + 5)
				7. Retainage*
				8. Previous Payments
				9. Amount Due (6-7-8)
TOTALS				* Detailed breakdown attached
NET CHANGE				

CONTRACT TIME

Original (days) _____
Revised _____
Remaining _____

On Schedule

☐ Yes

☐ No

Starting Date _____

Projected Completion _____

CONTRACTOR'S CERTIFICATION:

The undersigned Contractor certifies that to the best of their knowledge, information and belief the work covered by this payment estimate has been completed in accordance with the contract documents, that all amounts have been paid by the contractor for work for which previous payment estimates was issued and payments received from the owner, and that current payment shown herein is now due.

Contractor _____

By _____

Date _____

APPROVED BY OWNER:

Owner _____

By _____

Date _____

ARCHITECT OR ENGINEER'S CERTIFICATION:

The undersigned certifies that the work has been carefully inspected and to the best of their knowledge and belief, the quantities shown in this estimate are correct and the work has been performed in accordance with the contract documents.

Architect or Engineer _____

By _____

Date _____

ACCEPTED BY AGENCY:

The review and acceptance of this estimate does not attest to the correctness of the quantities shown or that the work has been performed in accordance with the contract documents.

By _____

Title _____

Date _____

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0575-0042. The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

[illegible]

ITEM	DESCRIPTION	SCHEDULED VALUE	WORK COMPLETED		% COM- PLETE	MATERIALS STORED AT END OF THIS PAYMENT PERIOD				
			THIS PERIOD	TO DATE		DESCRIPTION	QUANTITY	UNIT VALUE	AMOUNT	
		\$	\$	\$				\$		\$
						RETAINAGE				
						WORK COMPLETED:	THIS ESTIMATE	PERCENT	RETAINED	
							\$	%	\$	
						STORED MATERIALS:				
						OTHER (<i>explain</i>)				
	TOTALS					TOTAL				

RD 1924-18
REVERSE

EXHIBIT J

SAMPLE CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS

EXHIBIT J

SAMPLE CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS

OWNER

CONTRACTOR

ENGINEER

FUNDING AGENCIES

TO (Owner):

CONTRACT FOR:

PROJECT (Name, address):

CONTRACT DATE:

STATE OF _____)
) ss:
COUNTY OF _____)

RELEASE OF LIENS

The undersigned, having received payment in full for all labor, materials, supplies or equipment, in the construction or repair of the improvements upon the property located at _____, and furnished in the execution and fulfillment of contract between said Contractor and _____ Owner, dated _____ day of 20_____, do (does) hereby release and waive any and all claims, liens, and lien rights, of any kind, nature, or description whatsoever, against said property and the owner thereof.

Lien or Claimant	Work or Materials	Amount	Date

(Provide attachments as needed.)

Contractor: _____

By (Owner/Officer): _____

Address: _____

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

Notary Public: _____ My Commission Expires: _____

Seal:

EXHIBIT K

SAMPLE CONTRACT CHANGE ORDER FORM

**UNITED STATES DEPARTMENT OF AGRICULTURE
RURAL DEVELOPMENT AND
FARM SERVICE AGENCY**

CONTRACT CHANGE ORDER

CONTRACT FOR

OWNER

ORDER NO.

DATE _____

STATE

COUNTY

To

(Contractor)

You are hereby requested to comply with the following changes from the contract plans and specifications:

Description of Changes (Supplemental Plans and Specifications Attached)	DECREASE in Contract Price	INCREASE in Contract Price
	\$	\$
TOTALS	\$	
NET CHANGE IN CONTRACT PRICE	\$	

JUSTIFICATION:

The amount of the Contract will be (Decreased) (Increased) By The Sum Of: _____

Dollars (\$ _____).

The Contract Total Including this and previous Change Orders Will Be: _____

Dollars (\$ _____).

The Contract Period Provided for Completion Will Be (Increased) (Decreased) (Unchanged): _____ Days.

This document will become a supplement to the contract and all provisions will apply hereto.

Requested _____ (Owner)

(Date)

Recommended _____
(Owner's Architect/Engineer)

(Date)

Accepted _____
(Contractor)

(Date)

Approved by Agency _____
(Name and Title)

(Date)

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to U.S. Department of Agriculture, Clearance Officer, STOP 7602, 1400 Independence Avenue, S.W., Washington, D.C. 20250-7602. Please DO NOT RETURN this form to this address. Forward to the local USDA office only. You are not required to respond to this collection of information unless it displays a currently valid OMB control number.

EXHIBIT L

IDENTIFICATION OF CONTRACT DRAWINGS

EXHIBIT L

IDENTIFICATION OF CONTRACT DRAWINGS

The Contract Drawings show the character and scope of the work to be performed and have been prepared or approved by Engineer. Contractor shall refer to all Drawings. The drawings, all of which constitute an integral part of the Contract Documents as approved for construction on the date so designated on said drawings, carry the Engineer's identifying Job No. 11123638 and are listed below by sheet number and title:

GENERAL (CONTRACT NO. 5)

<u>Sheet No.</u>	<u>Title</u>
G001	SITE PLAN
M001	BUILDING NO. 01 PUMP STATION
M002	HOLDING TANK PUMP STATION
E001	ELECTRICAL ABBREVIATIONS, LEGENDS, AND NOTES
E002	ELECTRICAL DETAILS
E003	ELECTRICAL NOTES AND PLAN VIEW
E004	PARTIAL EXISTING AND PROPOSED ONE-LINE DIAGRAMS
E005	BUILDING 1, THIRD FLOOR ELECTRICAL ROOM PLAN

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 Laws and Regulations.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly by



AMERICAN COUNCIL OF ENGINEERING COMPANIES

ASSOCIATED GENERAL CONTRACTORS OF AMERICA

AMERICAN SOCIETY OF CIVIL ENGINEERS

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
A Practice Division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

Endorsed by



CONSTRUCTION SPECIFICATIONS INSTITUTE

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor (EJCDC C-520 or C-525, 2007 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 Narrative Guide to the EJCDC Construction Documents (EJCDC C-001, 2007 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (EJCDC C-800, 2007 Edition).

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American Society of Civil Engineers
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(800) 548-2723
www.asce.org

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www.agc.org

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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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 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 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.
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.
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. *Resident Project Representative*—The authorized representative of Engineer who may be assigned to the Site or any part thereof.
37. *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.
38. *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.

39. *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.
40. *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.
41. *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.
42. *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.
43. *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.
44. *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.
45. *Successful Bidder*—The Bidder submitting a responsive Bid to whom Owner makes an award.
46. *Supplementary Conditions*—That part of the Contract Documents which amends or supplements these General Conditions.
47. *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 Subcontractor.
48. *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.
49. *Unit Price Work*—Work to be paid for on the basis of unit prices.
50. *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.

51. *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 words and terms discussed in Paragraph 1.02.B through F are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated 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 adjectives “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 information in the Contract Documents and with the design concept of the 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 that 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; Designation of Authorized Representatives*

- 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.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

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 reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated 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 Regulations 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, Engineer, or any of their officers, directors, members, partners,

employees, agents, consultants, or subcontractors, 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 discovers, or has actual knowledge of, 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 (a) any applicable Law or Regulation, (b) any standard, specification, manual, or code, or (c) any instruction of any Supplier, then 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 had actual knowledge 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, or code, or the instruction of any Supplier (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 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 its consultants, including electronic media editions; or
 - 2. reuse any 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 adaptation by Engineer.
- B. The prohibitions 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. Unless otherwise stated in the Supplementary Conditions, the data furnished by Owner or Engineer to Contractor, or by 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 known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site; and
 - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
- B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the 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 officers, directors, members, partners, employees, agents, consultants, or subcontractors 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 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, exploration, 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, neither Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall 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 provided by others; 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:* The Supplementary Conditions identify those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at the Site.
- B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the 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 officers, directors, members, partners, employees, agents, consultants, or subcontractors 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. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 4.06.E.
- 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 written notice to Contractor: (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, members, 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, members, 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 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.

ARTICLE 5 – BONDS AND INSURANCE

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 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 or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed each bond.
- 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 and loss payee 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 and loss payee 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.
- C. Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- D. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor.
- E. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.

5.04 *Contractor's Insurance*

- A. Contractor shall purchase and maintain such 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, be written on an occurrence basis, include as additional insureds (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, members, 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 contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;
 4. 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);
 5. 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
 6. include completed operations coverage:
 - a. Such insurance shall remain in effect for two years after final payment.
 - b. 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, members, 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 a loss payee;
 2. be written on a Builder's Risk "all-risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, 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 that 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 loss payee to whom a certificate of insurance has been issued.
- B. Owner shall purchase and maintain such equipment breakdown 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,

members, 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 a loss payee.

- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this 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 loss payee 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 this 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 as loss payees (and the officers, directors, members, 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 loss payees thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, members, partners, employees, agents, consultants and 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 as loss payees (and the officers, directors, members, 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, members, 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, members, 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 loss payees, 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.

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; and
 - 3) it has a proven record of performance and availability of responsive service.
- 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 if 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 by 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 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 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; and
- 4) 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 a Change Order in the case of a substitute and 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 so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable 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 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 appropriate agreement between Contractor and the 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 a loss payee 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, Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or loss payees (and the officers, directors, members, 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, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors 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 specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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.

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 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, members, 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. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. 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. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. 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 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).
- F. 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 accepted 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:*

- 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:
 - a. 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;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
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 Drawings 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 officers, directors, members, partners, employees, agents, consultants, and subcontractors 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, members, 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 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 officers, directors, members, partners, employees, agents, consultants, or subcontractors 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, members, 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 or 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 through 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, provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and 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 such work; provided, however, that Contractor may cut or alter others' 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 wrongful actions or inactions.
- C. Contractor shall be liable to Owner and any other contractor under direct contract to Owner for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's wrongful 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.

8.04 *Pay When Due*

- 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 with respect to 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 relating to existing surface or subsurface structures at the Site.

8.06 *Insurance*

- A. Owner's responsibilities, if any, with 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 with 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. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents.

8.12 *Compliance with Safety Program*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed pursuant to Paragraph 6.13.D.

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.

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 believes 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.

9.10 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Engineer has been informed pursuant to Paragraph 6.13.D.

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.D.

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 the provisions of any bond require notice to be given to a surety 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), 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 Times 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 not include any of the costs itemized in Paragraph 11.01.B, and shall include only the following items:
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 on the Work. 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, as 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, express and courier services, 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, expeditors, 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.

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 to 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 Paragraphs 12.01.C.2.a and 12.01.C.2.b 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 their officers, directors, members, partners, employees, agents, consultants, or subcontractors 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. 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, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's 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 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, Contractor shall, if requested by Engineer, uncover such Work 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 written 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 for 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 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, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and 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. 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 remedies the reasons for such action.
- 3. Upon a subsequent determination 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 and subject to interest as provided in the Agreement.

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 remove its property and 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, Owner, and Engineer will follow the procedures of Paragraph 14.04.A through D 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.6;
 - 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 might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, 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 repeated 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.

15.03 *Owner May Terminate For Convenience*

- 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 the 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, EJCDC C-700 (2007 Edition). All provisions which are not so amended or supplemented remain in full force and effect.

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

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

SC-1.01 *Defined Terms*

SC-1.01 Modify existing definitions as follows:

3. Replace the phrase "acceptable to Engineer" in Paragraph 1.01.A.3 of the General Conditions with the phrase "furnished by the Engineer"

ARTICLE 2 - PRELIMINARY MATTERS

SC-2.02 *Copies of Documents*

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

- A. Owner shall furnish to Contractor up to six 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 *Commencement of Contract Times; Notice to Proceed*

SC-2.03 In the last sentence of Paragraph 2.03.A, replace "later than the sixtieth day after the day of Bid Opening" with "later than the 90th day after the day of Bid Opening".

SC-2.05 *Before Starting Construction*

SC-2.05 Add the following language at the end of the second sentence of Paragraph 2.05.A.3:

The Schedule of Values shall be subdivided into categories matching each line item on the Bid Form. Additional requirements for the Schedule of Values are supplemented in Section 01019, Contract Considerations.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

SC-3.01 *Intent*

SC-3.01 Add the following new paragraph immediately after Paragraph 3.01.C:

- D. Contractor Documents are written in the imperative mood. When direction is given, it shall be understood that the direction is given to Contractor. For example, the phrase "Provide two pumps" shall be understood to mean "Contractor shall provide two pumps."

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SC-3.03 *Reporting and Resolving Discrepancies*

SC-3.03 Add the following new paragraph immediately after Paragraph 3.03.B.1.b:

2. In determining Contract Price with respect to a conflict, error, or discrepancy within the Contract Documents, the Contract Documents shall be given precedence in the following order with Change Orders being the highest precedence:
 1. Change Orders
 2. Work Change Directives
 3. Field Orders
 4. Agreement
 5. Addenda
 6. Laws and Regulations
 7. Supplementary Conditions
 8. General Conditions
 9. Drawings
 10. Specifications

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

SC-4.06 *Hazardous Environmental Condition at Site*

SC-4.06 Delete Paragraphs 4.06.A and 4.06.B in their entirety and insert the following:

- A. No reports or drawings related to Hazardous Environmental Conditions at the site are known to Owner. Contractor shall be aware that the sand traps in the interior pump station collects liquids from ongoing equipment maintenance and may contain oils, grease, petroleum, etc. associated with that maintenance.

ARTICLE 5 - BONDS AND INSURANCE

SC-5.04 *Contractor's Liability Insurance*

See Certificate of Insurance requirements provided in the Agreement.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

SC-6.05 *Substitutes and "Or Equals"*

SC-6.05 Add the following subparagraph immediately after Subparagraph 6.05.A.1.b:

- c. Contractor provides a line-by-line comparison of the proposed product to the specified product. Line-by-line comparison shall not only include all specified features, but shall also include all other design and/or manufacturing differences between the proposed product and the specified product. Line-by-line comparison shall show no significant design or manufacturing differences that, in the Engineer's opinion, could result in lesser quality, performance, or reliability of the proposed product compared to the specified product.

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SC-6.05.A.2. Add the following subparagraph immediately after Subparagraph 6.05.A.2.d of the General Conditions:

- e. If the substitute item requires modifications to the structures, piping, layouts, etc., detailed on the Drawings or described in the Contract Documents, the application shall also include details of proposed modifications necessary to accommodate the substitute item. Such details shall include scaled layouts, dimensions, and other pertinent information to enable Engineer to evaluate the entire application. If the substitute item and proposed modifications are approved, Contractor, at no additional cost to Owner, shall do all work necessary to make such modifications and absorb all costs of any related changes imposed on other contractors. Final details of such modifications shall be prepared and submitted for approval by Contractor in accordance with Specification Section 01300, Submittals.

SC-6.05.A. Add the following paragraph immediately after Paragraph 6.05.A.2 of the General Conditions:

3. Time Constraints: All applications for use of substitutes or 'or equal' items shall be submitted to Engineer within 15 days of the Effective Date of the Agreement. No applications will be considered thereafter unless Contractor produces satisfactory evidence that the specified item is no longer manufactured or is unavailable for the Project.

SC-6.05.C. Add the following subparagraph after Paragraph 6.05.C of the General Conditions:

1. In order to aid Engineer in determining the equality of a proposed 'or equal' or substitute item (when compared to the item actually specified), Contractor shall arrange for the performance of any tests requested by Engineer. The nature, extent, tester and supervisions of such tests including engineering costs, shall be borne by Contractor. Certified test results shall be mailed directly to Engineer for all tests requested.

SC-6.06 *Concerning Subcontractors, Suppliers, and Others*

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

- H. Owner may furnish to any Subcontractor or Supplier, to the extent practical, information about amounts paid to Contractor on account of Work performed for Contractor by a particular Subcontractor or Supplier.

SC-6.08 *Permits*

SC-6.08.A. Add the following subparagraph to Paragraph 6.08.A of the General Conditions:

1. Owner has obtained the following permits in connection with this Project:
 - NYSDEC Part 360 Permit Modification
 - Onondaga County Building Permit

Contractor is required to comply with all requirements of permits imposed upon Owner in the same manner required by Owner.

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SC-6.10 *Taxes*

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 *Record Documents*

SC-6.12 Add the following paragraph immediately after Paragraph 6.12.A:

- B. If Owner utilizes any part of the Project in accordance with paragraph GC-14.05, Contractor shall provide Engineer for Owner's use, a complete set of record drawings current to the date of Owner's utilization.

SC-6.16 *Emergencies*

Add the following paragraph after Paragraph 6.16.A of the General Conditions:

- B. Contractor shall designate one person to respond to emergencies and act on the Contractor's behalf during off-work hours at the Site. The person's name, address, and telephone number shall be provided to Owner during the preconstruction conference and the designated person shall be on call during off-work hours. Response time shall not exceed one hour after notification is given by Owner and/or Engineer that an emergency exists at the Site.

SC-6.17 *Shop Drawings and Samples*

SC-6.17.C.2 Replace "or specific written certification" with "certifying".

SC-6.17.D.1 In the first sentence of Paragraph 6.17.D.1, replace "in accordance with the Schedule of Submittals acceptable to Engineer" with "in accordance with Specification Section 01300, Submittals".

SC-6.17 Add the following new paragraphs immediately after Paragraph 6.17.E:

- F. Furnish required submittals with sufficient information and accuracy in order to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing subsequent submittals of Shop Drawings, Samples, or other items requiring approval. Owner will deduct costs for such services from progress payments made to Contractor.
- G. In the event that Contractor requests a change of a previously approved item, OWNER will deduct costs for Engineer's charges for its review time unless the need for such change is beyond the control of Contractor.

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ARTICLE 7 - OTHER WORK

SC-7.01 *Related Work at Site*

Add the following after paragraph SC-7.01.A.2:

3. Owner has executed the following contracts associated with work currently ongoing at the site:
 - a. Contract No. 1 - General Transfer Station Modifications
 - b. Contract No. 2 - Electrical Transfer Station Modifications
 - c. Contract No. 3 - HVAC Transfer Station Modifications
 - d. Contract No. 4 - Plumbing and Fire Suppression Transfer Station Modifications
4. The current date of Substantial Completion for these contracts is October.

SC-7.04 *Claims Between Contractors*

SC-7.04 Add the following new paragraph immediately after Paragraph 7.03:

SC-7.04 *Claims Between Contractors*

- A. Should Contractor cause damage to the work or property of any other contractor at the Site, or should any claim arising out of Contractor's performance of the Work at the Site be made by any other contractor against Contractor, Owner, or Engineer, then Contractor (without involving Owner or Engineer) shall either (1) remedy the damage, (2) agree to compensate the other contractor for remedy of the damage, or (3) remedy the damage and attempt to settle with such other contractor by agreement, or otherwise resolve the dispute by arbitration or at law.
- B. Contractor shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner, Engineer, and the officers, directors, partners, employees, agents and other consultants and subcontractors of each and any of them from and against all claims, costs, losses and damages (including, but not limited to, fees and charges of engineers, architects, attorneys, and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any other contractor against Owner or Engineer consultants, to the extent said claim is based on or arises out of Contractor's performance of the Work. Should another contractor cause damage to the Work or property of Contractor or should the performance of work by any other contractor at the Site give rise to any other Claim, Contractor shall not institute any action, legal or equitable, against Owner, Engineer, or the Construction Coordinator or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any arbiter which seeks to impose liability on or to recover damages from Owner or Engineer on account of any such damage or Claim.
- C. If Contractor is delayed at any time in performing or furnishing the Work by any act or neglect of another contractor, and Owner and Contractor are unable to agree as to the extent of any adjustment in Contract Times attributable thereto, Contractor may make a Claim for an extension of times in accordance with Article 12. An extension of the Contract Times shall be Contractor's exclusive remedy with respect to Owner and Engineer for any delay, disruption, interference, or hindrance caused by any other contractor. This

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paragraph does not prevent recovery from Owner or Engineer for activities that are their respective responsibilities.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

SC-8.09 *Limitations on Owner's Responsibilities*

Add the following paragraph immediately after Paragraph 8.09.A of the General Conditions:

- B. Owner will let other direct Contracts and will have authority and responsibility for coordination of the various contractors. The extent of Owner's responsibilities under this arrangement are set forth in paragraph SC-7.02.A of the Supplementary Conditions.

SC-8.11 Add the following new paragraph immediately after Paragraph 8.11.A:

- B. On request of Contractor prior to execution of any Change Order involving a significant increase in Contract Price, Owner shall furnish to Contractor reasonable evidence that adequate financial arrangements have been made by Owner to enable Owner to fulfill the increased financial obligations to be undertaken by Owner as a result of such Change Order.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

SC-9.03 *Project Representative*

SC-9.03 Add the following new paragraphs immediately after Paragraph 9.03.A:

- B. The Resident Project Representative (RPR) will be Engineer's employee or agent at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions. RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall be through or with the full knowledge and approval of Contractor. The RPR shall:
 - 1. *Schedules:* Review the progress schedule, schedule of Shop Drawing and Sample submittals, and schedule of values prepared by Contractor and consult with Engineer concerning acceptability.
 - 2. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
 - 3. *Liaison:*
 - a. Serve as Engineer's liaison with Contractor, working principally through Contractor's authorized representative, assist in providing information regarding the intent of the Contract Documents.
 - b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.

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- c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.
- 4. *Interpretation of Contract Documents:* Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.
- 5. *Shop Drawings and Samples:*
 - a. Record date of receipt of Samples and approved Shop Drawings.
 - b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
- 6. *Modifications:* Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.
- 7. *Review of Work and Rejection of Defective Work:*
 - a. Conduct on-Site observations of Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Report to Engineer whenever RPR believes that any part of Contractor's work in progress will not produce a completed Project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
- 8. *Inspections, Tests, and System Startups:*
 - a. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.
 - b. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.
- 9. *Records:*
 - a. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.

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- b. Maintain records for use in preparing Project documentation.

10. *Reports:*

- a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
- b. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
- c. Immediately notify Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, damage to property by fire or other causes, or the discovery of any Hazardous Environmental Condition.

11. *Payment Requests:* Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

12. *Certificates, Operation and Maintenance Manuals:* During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Specifications to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

13. *Completion:*

- a. Participate in a Substantial Completion inspection, assist in the determination of Substantial Completion and the preparation of lists of items to be completed or corrected.
- b. Participate in a final inspection in the company of Engineer, Owner, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied.
- c. Observe whether all items on the final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work.

C. The RPR shall not:

- 1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).

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2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.
3. Undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or Contractor's superintendent.
4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor's work unless such advice or directions are specifically required by the Contract Documents.
5. Advise on, issue directions regarding, or assume control over safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
8. Authorize Owner to occupy the Project in whole or in part.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

(No Amendments to General Conditions.)

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

SC-11.01 *Cost of the Work*

SC-11.01.A.5.c. Delete Paragraph 11.01.A.5.c in its entirety and insert the following in its place:

- c. Construction Equipment and Machinery
 - 1) Rentals of all construction equipment and machinery, and the parts thereof 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.
 - 2) Costs for equipment and machinery owned by Contractor will be paid at a rate shown for such equipment in the cite the rate book appropriate for the Project. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs. Costs will include the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, shall cease to accrue when the use thereof is no longer necessary for the changed Work. Equipment or machinery with a value of less than \$1,000 will be considered small tools.

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SC-11.01.D. Add the following to the end of Paragraph 11.01.D of the General Conditions:

When requested by Engineer, Contractor shall identify sources used to determine rental rates of equipment and submit related evidence to Engineer to support such data.

SC-11.03 *Unit Price Work*

SC-11.03.D. Delete Paragraph 11.03.D in its entirety and insert the following in its place:

- D. The unit price of an item of Unit Price Work shall be subject to re-evaluation and adjustment under the following conditions:
1. if the Bid price of a particular item of Unit Price Work amounts to 25 percent or more of the Contract Price and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than 25 percent from the estimated quantity of such item indicated in the Agreement; and
 2. if there is no corresponding adjustment with respect to any other item of Work; and
 3. if Contractor believes that Contractor has incurred additional expense as a result thereof; or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, either Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Article 10 if the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed.
 4. Adjusted unit prices, if any, shall be applied as follows:
 - a. Quantity Overruns: Applied only to the difference between the total quantity of completed Work and the calculated quantity of Work at the variation limit for a particular item of Unit Price Work.
 - b. Quantity Underruns: The difference between the adjusted unit price and the original unit price (stated in the Agreement) shall be applied to the total quantity of completed Work for a particular item of Unit Price Work.

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

SC-12.01 *Change of Contract Price*

SC-12.01.C *Contractor's Fee*. Delete the semicolon at the end of Subparagraph 12.01.C.2.c, and add the following language:

, provided, however, that on any subcontracted work the total maximum fee to be paid by Owner under this subparagraph shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;

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

(No Amendments to General Conditions.)

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ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

SC-14.01 *Schedule of Values*

SC-14.01.A. Replace the phrase "form of Application for Payment acceptable to Engineer" in the first sentence with the phrase "form of Application for Payment furnished by Engineer."

SC-14.02.A. Add the following to the end of Subparagraph 14.02.A.1 of the General Conditions:

By signing the Application and Certificate for Payment, Contractor certifies that all items, units, quantities, and prices of Work and material in the estimate are correct, that all claimed Work has been performed and materials supplied in full accordance with the Contract, and that Contractor has no claims for damages, losses or expense against Owner for compensation in addition to that provided for in the application except such claims for change of Contract Price as Contractor has filed with Engineer and Owner in writing (in accordance with Article 10) prior to the date of his certifying the application.

SC-14.02.B. Add the following subparagraph after subparagraph 14.02.B.5.d of the General Conditions:

- e. or because of Contractor's failure to submit certifications, affidavits, schedules, or other written information when and as required in the Contract Documents, or Contractor's failure to make submittals in accordance with the Schedule of Submittals.

SC-14.02.C. *Payment Becomes Due*

SC-14.02.C.1. In Subparagraph 14.02.C.1, replace "Ten days," with "30 days."

SC-14.07 *Final Payment*

SC-14.07.A. Add the following subparagraph immediately after Paragraph 14.07.A.3:

- 4. The application shall be made on forms provided by Engineer. By signing the application and certificate for payment, Contractor certifies that the total cost of the Work and the amount due Contractor for payment is full compensation for all Work done under the terms of the Contract in its original form; that the payment is full compensation for all Work ordered to be done under Change Orders; and that the payment is full compensation for all other Work done by Contractor and for all damages, losses, and expense incurred by Contractor for doing and furnishing everything relating to or arising out of the Work, and that Contractor waives all right to claim or receive any further compensation in addition to that provided for in the final payment except as provided in paragraph 14.09.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

(No Amendments to General Conditions.)

ARTICLE 16 - DISPUTE RESOLUTION

SC-16.01 *Methods and Procedures*

SC-16.01 Delete Paragraph 16.01.C in its entirety and insert the following in its place:

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- 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 demand arbitration of the Claim, pursuant to Paragraph SC-16.02; or
 2. agrees with the other party to submit the Claim to another dispute resolution process.

SC-16.02 Add the following new paragraph immediately after Paragraph 16.01.

SC-16.02 *Arbitration*

- A. All Claims or counterclaims, disputes, or other matters in question between Owner and Contractor arising out of or relating to the Contract Documents or the breach thereof (except for Claims which have been waived by the making or acceptance of final payment as provided by Paragraph 14.09) including but not limited to those not resolved under the provisions of Paragraphs SC-16.01A and 16.01.B will be decided by arbitration in accordance with the rules of American Arbitration Association subject to the conditions and limitations of this Paragraph SC-16.02. This agreement to arbitrate and any other agreement or consent to arbitrate entered into will be specifically enforceable under the prevailing law of any court having jurisdiction.
- B. The demand for arbitration will be filed in writing with the other party to the Contract and with the selected arbitrator or arbitration provider, and a copy will be sent to Engineer for information. The demand for arbitration will be made within the 30 day period specified in Paragraph SC-16.01.C, and in all other cases within a reasonable time after the Claim or counterclaim, dispute, or other matter in question has arisen, and in no event shall any such demand be made after the date when institution of legal or equitable proceedings based on such Claim or other dispute or matter in question would be barred by the applicable statute of limitations.
- C. No arbitration arising out of or relating to the Contract Documents shall include by consolidation, joinder, or in any other manner any other individual or entity (including Engineer, and Engineer's consultants and the officers, directors, partners, agents, employees or consultants of any of them) who is not a party to this Contract unless:
1. the inclusion of such other individual or entity is necessary if complete relief is to be afforded among those who are already parties to the arbitration; and
 2. such other individual or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration and which will arise in such proceedings.
- D. The award rendered by the arbitrator(s) shall be consistent with the agreement of the parties, in writing, and include: (i) a concise breakdown of the award; (ii) a written explanation of the award specifically citing the Contract Document provisions deemed applicable and relied on in making the award.

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- E. The award will be final. Judgment may be entered upon it in any court having jurisdiction thereof, and it will not be subject to modification or appeal, subject to provisions of the Controlling Law relating to vacating or modifying an arbitral award.
- F. The fees and expenses of the arbitrators and any arbitration service shall be shared equally by Owner and Contractor.

ARTICLE 17 - MISCELLANEOUS

Add the following new paragraphs immediately after Paragraph 17.06:

SC-17.07 *Labor and Legal Requirements*

- A. Contractor shall abide by all regulations and laws that relate to labor that may affect the Work of this Contract, including Federal, State, County, and Town regulations.
- B. The latest Prevailing Wage Rate Schedules setting forth minimum wages and supplements for this area of the state, together with labor standard provisions and non-discrimination in employment provisions are appended to the Agreement.
- B. The Contractor shall make provision for the disability benefits, unemployment insurance and social security required by law.
- D. The Contractor shall keep himself fully informed of all laws of the State (in which the Project is located) and of the United States of America, and of all municipal laws and ordinances in any manner affecting the Work of this Contract, and of all orders or decrees of any body or tribunal having any jurisdiction or authority in any manner affecting such Work, and shall be responsible for strict compliance therewith. If any clause of this Contract does not conform to any such law, such clause shall be void insofar as it conflicts with such law, and such law shall be operative in lieu thereof.
- E. Each and every provision of law and clause required by law to be inserted in this Contract should be, is and is deemed to be inserted herein, and if through a mistake or otherwise any such provision is not inserted, or it is not correctly inserted, then upon the application of either party the Contract shall forthwith be amended physically to make such insertion.
- F. If any provision herein shall be as to destroy the mutuality of this Contract or to render it invalid or illegal, then if such provision shall not appear to have been so material that without it the Contract would not have been made by the parties, it shall not be deemed to form part thereof but the balance of the Contract shall remain in full force and effect.

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MINIMUM HOURLY WAGE RATES

The Contractor and every subcontractor shall post in a prominent and accessible place at the site of the Work, a legible copy of the Federal Wage Determination Rate Schedule (if such is included in the Contract Documents).

The rates established by each schedule are minimum, and all employees shall be paid no less than the established rate listed for each trade or occupation. In case of conflict between schedules in any one trade or occupation, the higher rate listed shall control and such higher rate shall be considered to be the minimum.

State: The minimum rates of wages and schedule of supplements to be provided for the various trades shall be in accordance with the Prevailing Wage Rate Schedule which is included herein. The rate of wage and schedule of supplements for any trade not appearing or mentioned in this schedule shall be in accordance with the prevailing rates established for that particular trade by the New York State Industrial Commissioner, or if the Owner be a City, by the Comptroller or other analogous officer of such City. Minimum Wages required to be paid shall include supplements for hospital, surgical, medical or other benefits as determined by Article 8 of the State Labor Law. If for any reason at any time the State of New York or the proper City Office, shall in any way supplement, change or amend such Prevailing Wage Rate Schedule, then the Contractor, Subcontractor or other person about or upon such public Work shall follow such Schedule as supplemented, changed or amended. In no case shall the Contractor be entitled to any additional compensation or extras because of any supplement, change, redetermination or amendment of the Prevailing Wage Rate Schedule.

Federal: If this project is to receive a grant-in-aid from the Federal Government, then the Contractor shall comply with the requirements of the Labor Standards and with such other Federal requirements specifically issued by the Federal Government, including compliance with the specific Federal Wage Determination Rate for this project. The above requirements are reproduced in these Contract Documents if the project is to receive Federal Aid. The appropriate form shall be used to record weekly payrolls, including amounts paid to employees and certifications by employer. Such records will be examined by the Federal Government and shall be carefully maintained by each Contractor and Subcontractor.

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Andrew M. Cuomo, Governor

Roberta Reardon, Commissioner

OCRRA

Jaron Case, Engineer
GHD
One Remington Park Drive
Cazenovia NY 13035

Schedule Year 2019
Date Requested 07/26/2019
PRC# 2019009750

Location Rock Cut Road Transfer Station
Project ID#
Project Type Improvements to the existing Sanitary/Leachate System at the OCRRA Rock Cut Road Transfer Station

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 2019 through June 2020. 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 "[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 from 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.ny.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. Payrolls must be maintained for at least three (3) years from the project's date of completion. 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.



Andrew M. Cuomo, Governor

Roberta Reardon, Commissioner

OCRRA

Jaron Case, Engineer
GHD
One Remington Park Drive
Cazenovia NY 13035

Schedule Year 2019
Date Requested 07/26/2019
PRC# 2019009750

Location Rock Cut Road Transfer Station
Project ID#
Project Type Improvements to the existing Sanitary/Leachate System at the OCRRA Rock Cut Road Transfer Station

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 Number: _____		
Name: _____		
Address: _____ _____		
City: _____	State: _____	Zip: _____
Amount of Contract: \$ _____	Contract Type:	
Approximate Starting Date: ____/____/____	<input type="checkbox"/> (01) General Construction	
Approximate Completion Date: ____/____/____	<input type="checkbox"/> (02) Heating/Ventilation	
	<input type="checkbox"/> (03) Electrical	
	<input type="checkbox"/> (04) Plumbing	
	<input type="checkbox"/> (05) Other : _____	

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

IMPORTANT NOTICE

FOR

CONTRACTORS & CONTRACTING AGENCIES

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' concerns with regard to 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.*

NOTE: This change does not affect the Department's ability to request and receive the entire social security number from employers during the course of its public work / prevailing wage investigations.

**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.

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, www.labor.ny.gov.

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.state.ny.us.



New York State Department of Labor
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 such as
 - unemployment benefits, if 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 required by New York State and Federal Law.

Penalties for paying 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, 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 1(866)435-1499 or send an email to dol.misclassified@labor.ny.gov. All complaints of fraud and violations are taken seriously and you can remain anonymous.

Employer Name:

WORKER NOTIFICATION

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

Effective February 24, 2008

This provision is an addition to the existing prevailing 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 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 particular job classification. The required notification will be provided with each wage schedule, may be downloaded from our website www.labor.ny.gov or made available upon request by contacting the Bureau of Public Work at 518-457-5589.

* In the event that the required information will not fit on the pay stub, an accompanying sheet or attachment of the information will suffice.

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:**
www.labor.ny.gov

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: _____

OSHA 10-hour Construction Safety and Health Course – S1537-A

Effective July 18, 2008

This provision is an addition to the existing prevailing wage rate law, Labor Law §220, section 220-h. It requires that on all public work projects of at least \$250,000.00, all laborers, workers and mechanics working on the site, be certified as having successfully completed the OSHA 10-hour construction safety and health course. It further requires that the advertised bids and contracts for every public work contract of at least \$250,000.00, contain a provision of this requirement.

NOTE: The OSHA 10 Legislation only applies to workers on a public work project that are required, under Article 8, to receive the prevailing wage.

Where to find OSHA 10-hour Construction Course

1. NYS Department of Labor website for scheduled outreach training at:

https://labor.ny.gov/workerprotection/safetyhealth/dosh_training.shtm

2. OSHA Training Institute Education Centers:

Rochester Institute of Technology OSHA Education Center

Rochester, NY

Donna Winter

Fax (585) 475-6292

e-mail: dlwtpo@rit.edu

(866) 385-7470 Ext. 2919

www.rit.edu/~outreach/course.php3?CourseID=54

Atlantic OSHA Training Center

UMDNJ – School of Public Health

Piscataway, NJ

Janet Crooks

Fax (732) 235-9460

e-mail: crooksje@umdnj.edu

(732) 235-9455

<https://ophs.umdj.edu/wconnect/ShowSchedule.awp?~~GROUP~AOTCON~10~>

Atlantic OSHA Training Center

University at Buffalo

Buffalo, New York

Joe Syracuse

Fax (716) 829-2806

e-mail: <mailto:japs@buffalo.edu>

(716) 829-2125

http://www.smbs.buffalo.edu/CENTERS/trc/schedule_OSHA.php

Keene State College

Manchester, NH

Leslie Singleton

e-mail: lsingletin@keene.edu

(800) 449-6742

www.keene.edu/courses/print/courses_oshacfm

3. List of trainers and training schedules for OSHA outreach training at:

www.OutreachTrainers.org

Requirements for OSHA 10 Compliance

Chapter 282 of the Laws of 2007, codified as Labor Law 220-h took effect on July 18, 2008. The statute provides as follows:

The advertised specifications for every contract for public work of \$250,000.00 or more 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 518-485-5696.

WICKS Reform 2008

(For all contracts advertised or solicited for bid on or after 7/1/08)

- Raises the threshold for public work projects subject to the Wicks Law requiring separate specifications and bidding for the plumbing, heating and electrical work. The total project's threshold would increase from \$50,000 to: \$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 work 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 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 requirements 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.
- Reduces from 15 to 7 days the period in which contractors must pay subcontractors.

IMPORTANT INFORMATION

Regarding Use of Form PW30.1 (Previously 30R)

“Employer Registration for Use of 4 Day / 10 Hour Work Schedule”

To use the ‘4 Day / 10 Hour Work Schedule’:

There **MUST** be a *Dispensation of Hours (PW30)* in place on the project

AND

You **MUST** register your intent to work 4 / 10 hour days, by completing the PW30.1 Form.

REMEMBER...

The ‘4 Day / 10 Hour Work Schedule’ applies **ONLY** to Job Classifications and Counties listed on the PW30.1 Form.

Do not write in any additional Classifications or Counties.

(Please note : For each Job Classification check the individual wage schedule for specific details regarding their 4/10 hour day posting.)

Instructions for Completing Form PW30.1

(Previously 30R)

“Employer Registration for Use of 4 Day / 10 Hour Work Schedule”

Before completing Form PW30.1 check to be sure ...

- There is a *Dispensation of Hours* in place on the project.
- The 4 Day / 10 Hour Work Schedule applies to the Job Classifications you will be using.
- The 4 Day / 10 Hour Work Schedule applies to the County / Counties where the work will take place.

Instructions (Type or Print legibly):

Contractor Information:

- Enter the Legal Name of the business, FEIN, Street Address, City, State, Zip Code; the Company's Phone and Fax numbers; and the Company's email address (if applicable)
- Enter the Name of a Contact Person for the Company along with their Phone and Fax numbers, and the personal email address (if applicable)

Project Information:

- Enter the Prevailing Rate Case number (PRC#) assigned to this project
- Enter the Project Name / Type (i.e. Smithtown CSD – Replacement of HS Roof)
- Enter the Exact Location of Project (i.e. Smithtown HS, 143 County Route #2, Smithtown, NY; Bldgs. 1 & 2)
- If you are a Subcontractor, enter the name of the Prime Contractor for which you work
- On the Checklist of Job Classifications -
 - Go to pages 2 and 3 of the form
 - Place a checkmark in the box to the right of the Job Classification you are choosing
 - Mark all Job Classifications that apply

Do not write in any additional Classifications or Counties.

Requestor Information:

- Enter the name of the person submitting the registration, their title with the company, and the date the registration is filled out

Return Completed Form:

- **Mail** the completed PW30.1 form to: NYSDOL Bureau of Public Work, SOBC – Bldg.12 – Rm.130, Albany, NY 12240 **-OR-**
- **Fax** the completed PW30.1 form to: NYSDOL Bureau of Public Work at (518)485-1870



Department of Labor

Bureau of Public Work Harriman
State Office Campus
Building 12, Room 130
Albany, New York 12240
Phone: (518) 457-5589 | Fax: (518) 485-1870
www.labor.ny.gov

Employer Registration for Use of 4 Day / 10 Hour Work Schedule

Before completing this form, make sure that:

- There is a **Dispensation of Hours** in place on the project.
- The 4 Day / 10 Hour Work Schedule applies to the Job Classifications you will be using.
- The 4 Day / 10 Hour Work Schedule applies to the County / Counties where the work will take place.

Please **type or print** the requested information and then **mail or fax** to the address above.

Contractor Information

Company Name: _____ FEIN: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Phone No: _____ Fax No: _____ Email: _____

Contact Person: _____

Phone No: _____ Fax No: _____ Email: _____

Project Information

Project PRC#: _____ Project Name/Type: _____

Exact Location
of Project: _____ County: _____

(If you are Subcontractor)

Prime Contractor Name: _____

Job Classification(s) to Work 4/10 Schedule: *(Choose all that apply on Job Classification Checklist - Pages 3-8)*
*** Do not write in any additional Classifications or Counties***

Requestor Information

Name: _____

Title: _____ Date: _____

Please use the list below with the number assigned to each county as a reference to the corresponding numbers listed in the following pages under **Entire Counties & Partial Counties**.

- | | |
|---------------------------------|-------------------------------------|
| 1. Albany County | 33. Oneida County |
| 2. Allegany County | 34. Onondaga County |
| 3. Bronx County | 35. Ontario County |
| 4. Broome County | 36. Orange County |
| 5. Cattaraugus County | 37. Orleans County |
| 6. Cayuga County | 38. Oswego County |
| 7. Chautauqua County | 39. Otsego County |
| 8. Chemung County | 40. Putnam County |
| 9. Chenango County | 41. Queens County |
| 10. Clinton County | 42. Rensselaer County |
| 11. Columbia County | 43. Richmond County (Staten Island) |
| 12. Cortland County | 44. Rockland County |
| 13. Delaware County | 45. Saint Lawrence County |
| 14. Dutchess County | 46. Saratoga County |
| 15. Erie County | 47. Schenectady County |
| 16. Essex County | 48. Schoharie County |
| 17. Franklin County | 49. Schuyler County |
| 18. Fulton County | 50. Seneca County |
| 19. Genesee County | 51. Steuben County |
| 20. Greene County | 52. Suffolk County |
| 21. Hamilton County | 53. Sullivan County |
| 22. Herkimer County | 54. Tioga County |
| 23. Jefferson County | 55. Tompkins County |
| 24. Kings County (Brooklyn) | 56. Ulster County |
| 25. Lewis County | 57. Warren County |
| 26. Livingston County | 58. Washington County |
| 27. Madison County | 59. Wayne County |
| 28. Monroe County | 60. Westchester County |
| 29. Montgomery County | 61. Wyoming County |
| 30. Nassau County | 62. Yates County |
| 31. New York County (Manhattan) | |
| 32. Niagara County | |

Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

*** Do not write in any additional Classifications or Counties***

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Carpenter – Building	276B-All	7	2 ,5	
Carpenter – Building	276B-Cat	15	5	
Carpenter – Building	276-B-LIV	26, 28, 35, 59	61	
Carpenter – Building	276B-Gen	19, 32, 37	61	
Carpenter – Heavy & Highway	276HH-All	2, 5, 7		
Carpenter – Heavy & Highway	276HH-Erie	15		
Carpenter – Heavy & Highway	276HH- Gen	19, 32, 37, 61		
Carpenter – Heavy & Highway	276HH-Liv	26, 28, 35, 59		
Carpenter – Residential	276R-All	7	2, 5	
Carpenter – Building	277B-Bro	4, 54		
Carpenter – Building	277B-CAY	6, 50, 62		
Carpenter – Building	277B-CS	8, 12, 49, 51, 55	2	
Carpenter – Building	277 JLS	23, 25, 45		
Carpenter – Building	277 omh	22, 27, 33		
Carpenter – Building	277 On	34		
Carpenter – Building	277 Os	38		
Carpenter – Building	277CDO Bldg	9, 13, 39		
Carpenter – Heavy & Highway	277CDO HH	9, 13, 39		
Carpenter – Heavy & Highway	277HH-BRO	4, 6, 8, 12, ,22, 23, 25, 27, 33, 34, 38, 45, 49, 50, 51, 54, 55, 62		
Carpenter – Building	291B-Alb	1, 18, 20, 29, 42, 47, 48		
Carpenter – Building	291B-Cli	10, 16, 17		
Carpenter – Building	291B-Ham	21, 57, 58		
Carpenter – Building	291B-Sar	46		
Carpenter – Heavy & Highway	291HH-Alb	1, 10, 16, 17,18, 20, 21, 29, 42, 46, 47, 48, 57, 58		
Electrician	25m	30, 52		
Electrician – Teledata Cable Splicer	43	12, 22, 27, 33, 38	6, 9, 34, 39, 55, 59	

Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

*** Do not write in any additional Classifications or Counties***

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Electrician	86	26, 28	19, 35, 37, 59, 61	
Electrician	840 Teledata and 840 Z1	62	6, 34, 35, 50, 59	
Electrician	910	10, 16, 17, 23, 25, 45		
Electrical Lineman	1049Line/Gas	30, 41, 52		
Electrical Lineman	1249a	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 32, 33, 34, 35, 36, 37, 38, 39, 40, 42, 44, 46, 47, 48, 49, 50, 45, 51, 53, 54, 55, 56, 57, 58, 59, 61, 62		
Electrical Lineman	1249a West	60		
Electrical Lineman	1249a-LT	1, 2, 4, 5, 6, 7, 8, 9, 10, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 28, 29, 32, 33, 34, 35, 37, 38, 39, 42, 46, 47, 48, 49, 50, 45, 51, 53, 54, 55, 57, 58, 59, 61, 62		
Electrical Lineman	1249aREG8LT	11, 14, 36, 40, 44, 56		
Electrical Lineman	1249aWestLT	60		
Elevator Constructor	138	11, 14, 20, 36, 40, 53, 56	13, 44, 60	
Elevator Constructor	14	2, 5, 7, 15, 19, 32, 37, 61		
Elevator Constructor	27	8, 26, 28, 35, 49, 50, 51, 59, 62		
Elevator Constructor	35	1, 10, 16, 18, 21, 22, 29, 39, 42, 46, 47, 48, 57, 58		
Elevator Constructor	62.1	4, 6, 9, 12, 23, 25, 27, 33, 34, 38, 45, 54, 55	13	
Glazier	201	1, 10, 11, 16, 17, 18, 20, 21, 29, 42, 46, 47, 48, 57, 58		
Glazier	660r	2, 5, 7, 15, 19, 32, 37, 61		
Glazier	660	2, 5, 7, 15, 19, 32, 37, 61		
Glazier	677.1	23, 25, 26, 28, 35, 45, 50, 59, 62		
Glazier	677Z-2	6, 12, 22, 27, 33, 34, 38		
Glazier	677z3	4, 8, 9, 13, 39, 49, 51, 54, 55		
Glazier	677r.2	6, 12, 22, 27, 33, 34, 38		
Insulator – Heat & Frost	30-Syracuse	4, 6, 8, 9, 12, 22, 23, 25, 27, 33, 34, 38, 39, 49, 50, 45, 54, 55		
Laborer – Building	621b	2, 7	5	
Laborer – Building	633 bON	34		

Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

*** Do not write in any additional Classifications or Counties***

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Laborer – Building	633b Cay	6		
Laborer – Building	633bOS	38		
Laborer – Building	785(7)	4	9, 13, 54	
Laborer – Building	785B-CS	8, 51	49	
Laborer – Building	7-785b	12, 55	49, 54	
Laborers – Heavy & Highway	157h/h	47	18, 29, 46	
Laborers – Heavy & Highway	190 h/h	1, 42, 58	11, 20, 46	
Laborers – Heavy & Highway	35/2h	21, 22, 27, 33	18, 29	
Laborer – Residential	621r	2, 7	5	
Laborers – Tunnel	157	47	18, 29, 46	
Laborers – Tunnel	35T	21, 22, 27, 33	18, 29	
Laborers – Tunnel	190	1, 42, 58	11, 20, 46	
Mason – Building	2TS.1	1, 10, 11, 16, 17, 18, 20, 21, 29, 42, 46, 47, 48, 57, 58		
Mason – Building	2TS.2	22, 23, 25, 33, 45	27	
Mason – Building	2TS.3	6, 34, 38	27	
Mason – Building	2b-on	34		
Mason – Building	2b.1	1, 11, 18, 20, 21, 29, 42, 46, 47, 48, 58	57	
Mason – Building	2b.2	22, 33	25	
Mason – Building	2b.3	6, 34	27	
Mason – Building	2b.4	38		
Mason – Building	2b.5	23	25	
Mason – Building	2b.6	45		
Mason – Building	2b.8	10, 16, 17	57	
Mason – Building	3b-Co-Z2	8, 49, 51	2	
Mason – Building	3B-Z1	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Building – Residential	3B-Z1R	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Building	3B-Bing-Z2	4, 9, 13, 39, 54		
Mason – Building	3B-lth-Z2	12, 55		

Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

*** Do not write in any additional Classifications or Counties***

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Mason – Building	3B-Jam-Z2	7	2, 5	
Mason – Building – Residential	3B-Jam-Z2R	2, 4, 8, 7, 9, 12, 39, 13, 49, 51, 54, 55	5	
Mason – Building	3B-Z3	15, 32	5	
Mason – Building	3B-Z3.Orleans	37		
Mason – Residential	3B-Z3R	15, 32	5	
Mason – Residential	3B-z3R.Orleans	37		
Mason - Heavy & Highway	3h	2, 4, 8, 7, 9, 12, 13, 19, 26, 28, 35, 37, 39, 49, 50, 51, 54, 55, 59, 61, 62	5, 15, 32	
Mason – Tile Finisher	3TF-Z1	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Finisher	3TF-Z2	2, 4, 8, 7, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Finisher	3TF-Z3	15, 32, 37	5	
Mason – Tile Finisher	3TF-Z1R	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Finisher	3TF-Z2R	2, 4, 7, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Finisher	3TF-Z3R	15, 32, 37	5	
Mason – Tile Setter	3TS-Z1	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Setter Residential	3TS-Z1R	19, 26, 28, 35, 50, 59, 61, 62		
Mason – Tile Setter	3TS-Z2	2, 4, 7, 8, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Setter Residential	3TS-Z2R	2, 4, 7, 8, 9, 12, 13, 39, 49, 51, 54, 55	5	
Mason – Tile Setter	3TS-Z3	15, 32, 37	5	
Mason – Tile Setter Residential	3TS-Z3R	15, 32, 37	5	
Mason – Building/Heavy & Highway	780	3, 24, 30, 31, 41, 43, 52		
Operating Engineer - Heavy & Highway	137H/H	40, 60	14	
Operating Engineer – Heavy & Highway	158-832H	2, 8, 26, 28, 35, 49, 51, 59, 62	19	
Operating Engineer – Heavy & Highway	158-H/H	1, 4, 9, 10, 11, 14, 16, 17, 18, 20, 21, 22, 29, 39, 42, 46, 47, 48, 54, 57, 58		
Operating Engineer – Heavy & Highway	158-545h	6, 12, 23, 25, 27, 33, 38, 45, 50, 55		
Painter	1456-LS	1, 3, 10, 11, 14, 16, 17, 18, 20, 21, 24, 29, 30, 31, 36, 40, 41, 42, 43, 44, 46, 47, 48, 52, 53, 56, 57, 58, 60		
Painter	150	28, 59, 62	26, 35	

Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

*** Do not write in any additional Classifications or Counties***

Job Classification	Tag #	Entire Counties	Partial Counties	Check Box
Painter	178 B	4, 9, 54		
Painter	178 E	8, 49	51	
Painter	178 I	12, 55		
Painter	178 O	13, 39		
Painter	31	6, 22, 27, 33, 34, 50	25, 35, 38	
Painter	38.O		38	
Painter	38.W	23, 45	25	
Painter	4- Buf,Nia,Olean	2, 15, 19, 32, 37, 61	5, 7, 26, 51	
Painter	4-Jamestown		5, 7	
Sheetmetal Worker	46	26, 28, 35, 50, 59, 62		
Sheetmetal Worker	46r	26, 28, 35, 50, 59, 62		
Teamsters – Heavy & Highway	294h/h	1, 11, 18, 20, 29, 42, 46, 47, 48, 58	57	
Teamsters – Heavy & Highway	317bhh	6, 12, 50, 51, 55, 62	2	
Teamsters - Building/Heavy & Highway	456	40, 60		

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 than 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

Onondaga County General Construction

Boilermaker	07/01/2019
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JOB DESCRIPTION Boilermaker

DISTRICT 6

ENTIRE COUNTIES

Cayuga, Clinton, Cortland, Franklin, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence, Tompkins

WAGES

Per hour:	07/01/2019	01/01/2020
Boilermaker	\$ 33.93	Additional \$ 1.59

SUPPLEMENTAL BENEFITS

Per hour:	
Journeyman	\$ 26.36**

** IMPORTANT NOTE: Portion of supplemental benefits per hour paid at same premium as shown for overtime.

Journeyman	\$ 25.13
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OVERTIME PAY

See (B, E, Q) 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. When Christmas Day and New Year's fall on Saturday, Friday will be observed as the holiday.

REGISTERED APPRENTICES

WAGES per hour:

Six month terms at the following percentage of Journeyman's wage.

	1st 65%	2nd 65%	3rd 70%	4th 75%	5th 80%	6th 85%	7th 90%	8th 95%
07/01/2019	\$ 22.05	\$ 22.05	\$ 23.75	\$ 25.45	\$ 27.14	\$ 28.84	\$ 30.54	\$ 32.23

SUPPLEMENTAL BENEFITS per hour:

07/01/2019	\$ 20.04	\$ 20.04	\$ 20.95	\$ 21.84	\$ 22.73	\$ 23.65	\$ 24.57	\$ 25.46
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*IMPORTANT NOTE: Portion of supplemental benefits per hour paid at same premium as shown for overtime.

07/01/2019	\$ 18.81*	\$ 18.81*	\$ 19.72*	\$ 20.61*	\$ 21.50*	\$ 22.42*	\$ 23.34*	\$ 24.23*
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6-175

Carpenter - Building	07/01/2019
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JOB DESCRIPTION Carpenter - Building

DISTRICT 6

ENTIRE COUNTIES

Onondaga

WAGES

Per hour:	07/01/2019
Carpenter	\$ 28.05
Floorlayer	28.05
Piledriver	28.30
Diver - Wet Day***	61.25
Diver - Dry Day	29.05
Dive Tender	29.05

NOTE: Additional premiums for the following work listed below:
Hazardous Waste Worker* \$ 1.50

Certified Welder** 1.00

*For work within a contaminated area on a State or Federally designated hazardous waste site, and where relevant State and/or Federal regulations require employees to wear required forms of personal protection.

**When the employee is required to be certified and performs DOT or ABS specified welding work.

***Depth pay:	0' to 80'	no additional fee
	81' to 100'	additional \$0.50 per foot
	101' to 150'	additional \$0.75 per foot
	151' and deeper	additional \$1.25 per foot

***Penetration pay:	0' to 50'	no additional fee
	51' to 100'	additional \$0.75 per foot
	101' and deeper	additional \$1.00 per foot

Diver Note: Diver rates apply to all hours worked on the day of the dive. The deepest dive of the day shall constitute the depth pay.

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 \$ 19.35

OVERTIME PAY

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

* NOTE - Saturday is payable at straight time if the employee misses work, except where a doctor's or hospital's 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

APPRENTICES INDENTURED BEFORE 01/01/16.

WAGES: One year terms.

Appr 1st term	\$ 14.03
Appr 2nd term	16.83
Appr 3rd term	19.64
Appr 4th term	22.44

SUPPLEMENTAL BENEFITS per hour:

Appr 1st term	\$ 11.59
Appr 2nd term	11.59
Appr 3rd term	14.19
Appr 4th term	14.19

APPRENTICES INDENTURED AFTER 01/01/16.

Wages: 1300 hour terms.

Appr 1st term 0-1300	\$ 14.03
Appr 2nd term 1301-2600	16.83
Appr 3rd term 2601-3900	18.23
Appr 4th term 3901-5200	19.64
Appr 5th term 5201-6500	22.44

SUPPLEMENTAL BENEFITS per hour:

Appr 1st term 0-1300	\$ 11.59
Appr 2nd term 1301-2600	11.59
Appr 3rd term 2601-3900	14.19
Appr 4th term 3901-5200	14.19
Appr 5th term 5201-6500	14.19

Carpenter - Building / Heavy&Highway

07/01/2019

JOB DESCRIPTION Carpenter - Building / Heavy&Highway

DISTRICT 2

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

PARTIAL COUNTIES

Orange: The area lying on Northern side of Orange County demarcated by a line drawn from the Bear Mountain Bridge continuing east 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:	07/01/2019	07/01/2020 Additional	07/01/2021 Additional
Carpenter - ONLY for Artificial Turf/Synthetic Sport Surface	\$ 30.88	\$ 1.15	\$ 1.15

Note - Does not include the operation of equipment. Please see Operating Engineers rates.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 23.10

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. When 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:

One year terms at the following percentage of Journeyman's wage:

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

Supplemental Benefits per hour:

1st year term	\$ 11.55
2nd year term	11.55
3rd year term	14.15
4th year term	14.15

2-42AtSS

Carpenter - Heavy&Highway

07/01/2019

JOB DESCRIPTION Carpenter - Heavy&Highway

DISTRICT 2

ENTIRE COUNTIES

Broome, Cayuga, Chemung, Chenango, Cortland, Delaware, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Yates

WAGES

Per hour	07/01/2019	07/01/2020 Additional	07/01/2021 Additional
Carpenter	\$ 31.23	\$ 1.50	\$ 1.50
Piledriver	31.23	1.50	1.50
Diver-Wet Day	56.23	1.50	1.50
Diver-Dry Day	32.23	1.50	1.50
Diver-Tender	32.23	1.50	1.50

NOTE ADDITIONAL AMOUNTS PAID FOR THE FOLLOWING WORK LISTED BELOW (not subject to overtime premiums):

- When project owner mandates a single irregular work shift, the employee will receive an additional \$2.00 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 \$2.00 per hour.
- Certified welders when required to perform welding work will receive an additional \$1.50 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 \$ 23.10

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.

REGISTERED APPRENTICES

Wages per hour

FOR APPRENTICES INDENTURED PRIOR TO JANUARY 1, 2016

One year terms at the following percentage of Journeyman's base wage

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

Supplemental Benefits per hour:

1st year term	\$ 11.55
2nd year term	11.55
3rd year term	14.15
4th year term	14.15

FOR APPRENTICES INDENTURED AFTER JANUARY 1, 2016

1,300 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:

1st term	\$ 11.55
2nd term	11.55
3rd term	14.15
4th term	14.15
5th term	14.15

NOTE ADDITIONAL AMOUNTS PAID TO APPRENTICES FOR THE FOLLOWING WORK LISTED BELOW (not subject to overtime premiums):

- When project owner mandates a single irregular work shift, the employee will receive an additional \$2.00 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 \$2.00 per hour.
- Certified welders when required to perform welding work will receive an additional \$1.50 per hour.

2-277HH-Bro

Electrician

07/01/2019

JOB DESCRIPTION Electrician

DISTRICT 7

ENTIRE COUNTIES

Yates

PARTIAL COUNTIES

Cayuga: All Townships except Genoa, Ira, Sterling, Victory, Locke, Sempronius and Summerhill

Onondaga: Townships of Elbridge and Skaneateles

Ontario: Only the Townships of Canadaigua, Farmington, Geneva, Gorham, Hopewell, Manchester, Phelps and Seneca

Seneca: All townships except Covert and Lodi

Wayne: Only the Townships of Arcadia, Galen, Lyons, Savannah and Village of Newark.

WAGES

Per Hour	07/01/2019	06/01/2020 Additional
Electrician	\$ 33.55	\$ 1.90
Teledata, Sound Wireman	33.55	1.90
Work from 4:30PM to 1:00AM*	38.60***	1.90
Work from 12:30AM to 9:00AM*	41.95***	1.90

*Applies when shift work is mandated either in the job specification or by the contracting agency.

***Working above the floor:

0' to 49'	An additional \$.00 per foot per hour.
50' to 99'	An additional \$ 1.00 per foot per hour.
100' and over	An additional \$ 2.00 per foot per hour.

**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	\$ 22.07
	Plus 3% of wage paid

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) on HOLIDAY PAGE

NOTE: If a holiday falls on Saturday, it will be celebrated on the preceding Friday. If a holiday falls on Sunday, it will be celebrated on the following Monday.

REGISTERED APPRENTICES

WAGES: hourly terms at the following percentage of Journeyman's rate

1st term (0-1000 hrs)	40%
2nd term (1001-2000 hrs)	45%
3rd term (2001-3500 hrs)	50%
4th term (3501-5000 hrs)	60%
5th term (5001-6500 hrs)	70%
6th term (6501-8000 hrs)	80%

SUPPLEMENTAL BENEFITS per hour worked:

Appr. 1st and 2nd \$ 12.90*
All others \$ 22.07*

* Plus 3% of wage paid

7-840 Z1

Electrician

07/01/2019

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:	07/01/2019	06/01/2020 Additional
Electrician	\$ 38.75	\$ 2.25
Teledata	38.75	
Cable Splicer	42.63	

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 - 8:00 AM to 4:30 PM: See rates posted above
2nd Shift - 4:30 PM to 1:00 AM: Add 15% to rates posted above
3rd Shift - 12:30 AM to 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 a Sunday 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.

**** 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:	07/01/2019
Journeyman	\$ 24.92 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. 07/01/2019

1st period (0-1000 hrs)	\$ 15.50
2nd period (1001-2000)	17.45
3rd period (2001-3500)	19.40
4th period (3501-5000)	23.25
5th period (5001-6500)	27.15
6th Period (6501-8000)	31.00

SUPPLEMENTAL BENEFITS per hour:

1st period	\$ 11.84 plus *3% of hourly wage paid
2nd period	\$ 11.84 plus *3% of hourly wage paid
3rd period	\$ 23.30 plus *3% of hourly wage paid
4th period	\$ 23.62 plus *3% of hourly wage paid
5th period	\$ 23.95 plus *3% of hourly wage paid
6th period	\$ 24.27 plus *3% of hourly wage paid

*NOTE: The 3% is based on the hourly wage paid, straight time rate or premium rate.

6-43

Elevator Constructor

07/01/2019

JOB DESCRIPTION Elevator Constructor

DISTRICT 6

ENTIRE COUNTIES

Broome, Cayuga, Chenango, Cortland, Franklin, Jefferson, Lewis, Onondaga, Oswego, St. Lawrence, Tioga, Tompkins

PARTIAL COUNTIES

Delaware: Only the towns of: Tompkins, Walton, Masonville, Sidney, Franklin and Deposit.

Madison: Only the towns of: Cazenovia, DeRuyter, Eaton, Fenner, Georgetown, Lebanon, Lenox, Nelson and Sullivan.

Oneida: Only the towns of: Camden, Florence and Vienna.

WAGES

Per hour:	07/01/2019	01/01/2020	01/01/2021	01/01/2022
Elevator Constructor	\$ 46.59	\$ 48.12	\$ 49.73	\$ 51.43
Helper	32.613	33.684	34.81	36.00

** IMPORTANT NOTICE - EFFECTIVE 04/01/2009 **

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday, except work on general repairs and modernization.

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	\$ 33.705*	\$ 34.765*	\$ 35.825*	\$ 37.485*
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*NOTE - add 6% of regular hourly rate for all hours worked. Add 8% of regular 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 a Saturday, it shall be observed on Friday. When a paid holiday falls on Sunday, it shall be observed on Monday.

REGISTERED APPRENTICES

WAGES: 1 year terms at the following percentage of Journeyman's wage.

0-6 months	6-12 months	2nd	3rd	4th
50%	55%	65%	70%	80%

SUPPLEMENTAL BENEFITS

Per hour:

0-6 months: 6% of the hourly apprentice rate paid, no additional supplemental benefits.

All other terms: Same as Journeyman/Helper.

6-62.1

Glazier

07/01/2019

JOB DESCRIPTION Glazier

DISTRICT 5

ENTIRE COUNTIES

Cayuga, Cortland, Herkimer, Madison, Oneida, Onondaga, Oswego

WAGES

Per Hour:	07/01/2019	05/01/2020	05/01/2021
		Additional	Additional
Glazier	\$ 24.75	\$ 1.25	\$ 1.25

** IMPORTANT NOTICE **

Four (4), ten (10) 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	\$ 19.94
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OVERTIME PAY

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

*Note - Or circumstances beyond the control of the employer.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

1000 hour terms at the following percentage of journeyman's wage.

1st.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.
50%	55%	60%	65%	70%	75%	80%	90%

Supplemental Benefits per hour:

Hired after 05/01/2014

Appr. 1st term	\$ 10.10
Appr. 2nd term	10.55
Appr. 3rd term	14.20
Appr. 4th term	14.92
Appr. 5th term	15.64
Appr. 6th term	16.36
Appr. 7th term	17.07
Appr. 8th term	18.51

5-677.Z-2

Insulator - Heat & Frost

07/01/2019

JOB DESCRIPTION Insulator - Heat & Frost

DISTRICT 6

ENTIRE COUNTIES

Broome, Cayuga, Chemung, Chenango, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Tioga, Tompkins

WAGES

Per hour: 07/01/2019

Insulation Installer \$ 32.40
(On mechanical systems only)

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SHIFTS WORKED.

1ST SHIFT	\$ 32.40
2ND SHIFT	37.26
3RD SHIFT	40.50

**** 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 \$ 23.29

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: One year terms at the following percentage of Journeyman's wage

1st	2nd	3rd	4th
50%	60%	70%	80%
\$ 16.20	\$ 19.44	\$ 22.68	\$ 25.92

SUPPLEMENTAL BENEFITS

Per hour:

1st & 2nd years	\$ 21.29
3rd & 4th years	23.29

Ironworker

07/01/2019

JOB DESCRIPTION Ironworker

DISTRICT 6

ENTIRE COUNTIES

Broome, Cayuga, Cortland, Onondaga, Oswego, Seneca, Tioga, Tompkins

PARTIAL COUNTIES

Chenango: Only the Townships of Lincklaen, Otselec, Pitcher, Pharsalia, German, McDonough, Preston, Norwich, Smithville, Oxford, Guilford, Greene, Coventry, Bainbridge and Afton.
Jefferson: Only the Townships of Alexandria, Theresa, Clayton, Orleans, Cape Vincent, Lyme, Brownville, Pamela, LeRay, Hounsfield, Watertown, Rutland, Adams, Henderson, Rodman, Ellisburg, Lorraine and Worth.
Madison: Only the Townships of Sullivan, Lenox, Lincoln, Fenner, Smithfield, Cazenovia, Nelson, DeRuyter and Georgetown.
Schuyler: Only the Townships of Cayuta, Catharine, Hector and Montour.
Wayne: Only the Townships of Galen, Savannah, Rose, Butler, Huron and Wolcott

WAGES

Structural, Reinforcing, Re-bar, Machinery Mover & Rigger, Ornamental & Curtain Wall, Window Wall, Pre-Glazed Metal Framed Windows Attached to Steel or Masonry Including Caulking, Fence Erector (Chain Link/Security), Sheeter/Bridge Rail, Pre-Cast Erector, Stone Derrickman, Pre-Engineered Building Erector, Welder

Per hour:	07/01/2019	01/01/2020	07/01/2020 Additional	01/01/2021 Additional
	\$ 30.00	\$ 30.25	\$ 1.25	\$.50

NOTE: Shift work mandated by the project owner. All shifts will be (8) hours.

1st Shift	\$ 30.00	\$ 30.25
2nd Shift	33.00	33.02
3rd Shift	34.50	34.53

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	\$ 27.30	\$ 27.30
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OVERTIME PAY

See (B, E, 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.

REGISTERED APPRENTICES

WAGES: One year terms at the following rates.

1st	2nd	3rd	4th
\$ 16.50	\$ 18.50	\$ 20.50	\$ 22.50

SUPPLEMENTAL BENEFITS per hour:

1st year	\$ 11.00
2nd year	18.60
3rd year	19.68
4th year	20.77

6-60

Laborer - Building

07/01/2019

JOB DESCRIPTION Laborer - Building

DISTRICT 7

ENTIRE COUNTIES

Onondaga

WAGES

*** If a prime contract is let for site work only, meaning no buildings are involved in their site contract, the heavy/highway rates would be applicable for the laborers classification only.

When a prime contract is let for site work and building excavation is part of that contract, the building rates would be applicable for the laborers classification.

All work outside of the building proper, if not included in the building contract, will fall under the Heavy/Highway rates.

Per hour:	07/01/2019	06/01/2020 Additional	06/01/2021 Additional
Building Laborer	\$ 25.45	\$ 1.30	\$ 1.35
Asbestos, Toxic & Hazardous Waste Work	27.45	1.30	1.35

SUPPLEMENTAL BENEFITS

Per hour:
\$ 20.04

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: When a holiday falls on Sunday, it will be celebrated on Monday.

REGISTERED APPRENTICES

WAGES: 1000 hour terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th
60%	70%	80%	90%

SUPPLEMENTAL BENEFITS per hour worked:

All Terms: Same as Journeyman

7-633 bON

Laborer - Heavy&Highway

07/01/2019

JOB DESCRIPTION Laborer - Heavy&Highway

DISTRICT 7

ENTIRE COUNTIES

Onondaga

WAGES

Per hour:

GROUP A: Drill Helper, Flagmen, Outboard and Hand Boats.

GROUP B: BASIC RATE: Bull Float (where used for strike off only), Chain Saw, Concrete Aggregate Bin, Concrete Bootman, Gin Buggy, Hand or Machine Vibrator, Jack Hammer, Mason Tender, Mortar Mixer, Pavement Breaker, Handlers of All Steel Mesh, Small Generators for Laborers' Tools, Installation of Bridge Drainage Pipe, Pipe Layers, Vibrator Type Rollers, Tamper, Drill Doctor, Water Pump Operator (1-1/2" and Single Diaphragm) Nozzle (Asphalt, Gunite, Seeding, and Sand Blasting), Laborers on Chain Link Fence Erection, Rock Splitter & Power Unit, Pusher Type Concrete Saw and All Other Gas, Electric, Oil, and Air Tool Operators, Wrecking Laborer.

GROUP C: Drilling Equipment - only where a separate air compressor unit supplies power, Acetylene Torch Operators, Asphalt Raker, Powder Man, Tail or Screw Operator on Asphalt Paver.

GROUP D: Blasters, Form Setters, Stone or Granite Curb Setters.

GROUP E: Hazardous Waste Removal Work when designated by State/Federal as hazardous waste site and regulations require employees wear required personal protection.

	07/01/2019	07/01/2020 Additional	07/01/2021 Additional
GROUP A	\$ 29.31	\$ 1.60	\$ 1.60
GROUP B	29.51	1.60	1.60
GROUP C	29.71	1.60	1.60
GROUP D	29.91	1.60	1.60
GROUP E	32.01	1.60	1.60

NOTE: A single irregular work shift starting any time between 5:00 PM and 1:00 AM on governmental mandated night work shall be paid an additional \$2.50 per hour.

IMPORTANT NOTE: Operation of all terrain forklifts or skid steers is the work of the Operating Engineers, please see appropriate rates.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 22.00

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 a holiday falls on Sunday, it will be celebrated on Monday. In the event that men work on this Sunday holiday, they shall be paid double time. In the event that men work on Monday, they shall be compensated at double time plus the holiday pay. Accordingly, the Monday following the Sunday is treated as the holiday.

REGISTERED APPRENTICES

WAGES: 1000 hour terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th
60%	70%	80%	90%

SUPPLEMENTAL BENEFITS per hour worked:

All Terms: Same as Journeyman

7-633 hON

Laborer - Tunnel

07/01/2019

JOB DESCRIPTION Laborer - Tunnel

DISTRICT 7

ENTIRE COUNTIES

Onondaga

WAGES

Per hour:

GROUP A: Change House Man

GROUP B: Miners and all Machine Men, Safety Miner, all Shaftwork, Caisson work, Drilling, Blow Pipe, all Air Tools, Tugger, Scaling, Nipper, Guniting pot to nozzle, Bit Grinder, Signal Man (top to bottom), Concrete Men, Shield driven tunnels, mixed face and soft ground, liner plate tunnels in free air.

GROUP C: Blaster

GROUP D: Hazardous Waste Work**

	07/01/2019	07/01/2020	07/01/2021
		Additional	Additional
Group A	\$ 31.34	\$ 1.60	\$ 1.60
Group B	31.54	1.60	1.60
Group C	32.54	1.60	1.60
Group D**	35.54	1.60	1.60

**Work site required to be designated by State/Federal as hazardous waste site and relevant regulations require employees to use personal protection.

Note - A single irregular work shift shall be paid an additional \$2.50 per hour.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 23.15

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 a holiday falls on Saturday, it will be celebrated on Friday. If a holiday falls on Sunday, it will be celebrated on Monday. In the event that men work on this Sunday holiday, they shall be paid double time. In the event that men work on Monday, they shall be compensated at double time plus the holiday pay. Accordingly, the Monday following the Sunday is treated as the holiday.

REGISTERED APPRENTICES

WAGES: 1000 hour terms at the following percentage of Group B wage

1st	2nd	3rd	4th
60%	70%	80%	90%

SUPPLEMENTAL BENEFITS per hour worked:

All Terms: Same as Journeyman

7-633T (ON)

Lineman Electrician

07/01/2019

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

Per hour:

NOTE: Includes Teledata Work within ten (10) feet of High Voltage Transmission Lines

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)

	07/01/2019	05/04/2020
Lineman, Technician	\$ 52.05	\$ 53.50
Crane, Crawler Backhoe	52.05	53.50
Welder, Cable Splicer	52.05	53.50
Digging Mach. Operator	46.85	48.15
Tractor Trailer Driver	44.24	45.48
Groundman, Truck Driver	41.64	42.80
Equipment Mechanic	41.64	42.80
Flagman	31.23	32.10

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	\$ 52.05	\$ 53.50
Crane, Crawler Backhoe	52.05	53.50
Cable Splicer	57.26	58.85
Certified Welder -		
Pipe Type Cable	54.65	56.18
Digging Mach. Operator	46.85	48.15
Tractor Trailer Driver	44.24	45.48
Groundman, Truck Driver	41.64	42.80
Equipment Mechanic	41.64	42.80
Flagman	31.23	32.10

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	\$ 53.37	\$ 54.82
Crane, Crawler Backhoe	53.37	54.82
Cable Splicer	58.71	60.30
Certified Welder -		
Pipe Type Cable	56.04	57.56
Digging Mach. Operator	48.03	49.34
Tractor Trailer Driver	45.36	46.60
Groundman, Truck Driver	42.70	43.86
Equipment Mechanic	42.70	43.86

Flagman	32.02	32.89
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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	\$ 54.56	\$ 56.01
Crane, Crawler Backhoe	54.56	56.01
Cable Splicer	54.56	56.01
Digging Mach. Operator	49.10	50.41
Tractor Trailer Driver	46.38	47.61
Groundman, Truck Driver	43.65	44.81
Equipment Mechanic	43.65	44.81
Flagman	32.74	33.61

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 %

**** 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.

*Effective 05/06/2013, 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 (also required on non-worked holidays):

The following SUPPLEMENTAL BENEFITS apply to all classification categories of CONSTRUCTION, TRANSMISSION and DISTRIBUTION.

Journeyman	\$ 24.15	\$ 24.90
	*plus 6.75% of hourly wage	*plus 6.75% of hourly wage

*The 6.75% is based on the hourly wage paid, straight time rate or premium rate.

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: 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: Same as Journeyman

6-1249a

JOB DESCRIPTION Lineman Electrician - Teledata

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, Westchester, Wyoming, Yates

WAGES

Per hour:

For outside work, stopping at first point of attachment (demarcation).

	07/01/2019	01/01/2020	01/01/2021
Cable Splicer	\$ 32.78	\$ 33.77	\$ 34.78
Installer, Repairman	\$ 31.12	\$ 32.05	\$ 33.01
Teledata Lineman	\$ 31.12	\$ 32.05	\$ 33.01
Tech., Equip. Operator	\$ 31.12	\$ 32.05	\$ 33.01
Groundman	\$ 16.49	\$ 16.99	\$ 17.50

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:

Journeyman	\$ 4.73	\$ 4.73	\$ 4.73
	*plus 3% of wage paid	*plus 3% of wage paid	*plus 3% of 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

Lineman Electrician - Traffic Signal, Lighting

07/01/2019

JOB DESCRIPTION Lineman Electrician - Traffic Signal, Lighting

DISTRICT 6

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/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/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:

	07/01/2019	05/04/2020
Lineman, Technician	\$ 45.00	\$ 46.20
Crane, Crawler Backhoe	45.00	46.20
Certified Welder	47.25	48.51
Digging Machine	40.50	41.58
Tractor Trailer Driver	38.25	39.27
Groundman, Truck Driver	36.00	36.96
Equipment Mechanic	36.00	36.96
Flagman	27.00	27.72

Above rates applicable on all Lighting and Traffic Signal Systems with the installation, testing, operation, maintenance and repair of all traffic control and illumination projects, traffic monitoring systems, road weather information systems and the installation of Fiber Optic Cable.

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%

**** 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.

*Effective 05/06/2013, 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):

Journeyman	\$ 24.15	\$ 24.90
	*plus 6.75% of	*plus 6.75% of
	hourly wage	hourly wage

*The 6.75% is based on the hourly wage paid, straight time rate or premium rate.

Supplements paid at STRAIGHT TIME rate for holidays.

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.

	07/01/2019	05/04/2020
1st term	\$ 27.00	\$ 27.72
2nd term	29.25	30.03
3rd term	31.50	32.34
4th term	33.75	34.65
5th term	36.00	36.96
6th term	38.25	39.27
7th term	40.50	41.58

SUPPLEMENTAL BENEFITS: Same as Journeyman

6-1249a-LT

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

Per hour:

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.

07/01/2019

Tree Trimmer	\$ 25.79
Equipment Operator	22.81
Equipment Mechanic	22.81
Truck Driver	18.99
Groundman	15.64
Flag person	11.27

SUPPLEMENTAL BENEFITS

Per hour worked (but also required on non-worked holidays):

Journeyman	\$ 9.98
	*plus 3% of hourly wage

* 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, 16, 25) 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

Mason - Building

07/01/2019

JOB DESCRIPTION Mason - Building

DISTRICT 12

ENTIRE COUNTIES

Cayuga, Onondaga, Oswego

PARTIAL COUNTIES

Madison: The townships of Sullivan and Cazenovia ONLY

WAGES

Per hour

07/01/2019

Tile/Terrazzo/Marble Setter	\$ 31.72
Finisher	25.67

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 worked

Journeyman Setter	\$ 18.74
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Journeyman Finisher 18.09

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

Hour terms at the following percentage of journeyman's wage

Setter:

1st term 500 hours	60%
2nd term 1000 hours	70%
3rd term 1000 hours	80%
4th term 1000 hours	85%
5th term 1000 hours	90%
6th term 1500 hours	95%

Finisher:

1st term 500 hours	70%
2nd term 1000 hours	80%
3rd term 1000 hours	90%
4th term 1200 hours	95%

Supplemental Benefits per hour worked

Setter:

1st & 2nd Term	\$ 12.61
3rd & 4th Term	15.63
5th Term	17.13
6th Term	18.64

Finisher:

1st & 2nd Term	\$ 12.21
All others	15.51

12-2TS.3

Mason - Building

07/01/2019

JOB DESCRIPTION Mason - Building

DISTRICT 12

ENTIRE COUNTIES

Onondaga

WAGES

Per hour

07/01/2019

Cement Mason	\$ 28.84
Plasterer	28.84
Ext insulation finish systems-plasterer(EIFF)	28.84

Additional \$0.50 per hr for Scaffold work, Swing Stage and Rolling Stage

Additional \$0.25 per hour for Grinder Operator

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 worked

Journeyman \$ 20.36

OVERTIME PAY

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

*Only on EIFF work can Saturday be used as a makeup day.

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

1st	2nd	3rd	4th	5th	6th	7th	8th
55%	60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked

All terms \$ 20.36

12-2b-on

Mason - Building

07/01/2019

JOB DESCRIPTION Mason - Building

DISTRICT 12

ENTIRE COUNTIES

Cayuga, Onondaga

PARTIAL COUNTIES

Madison: The townships of Sullivan and Cazenovia ONLY

WAGES

Per hour 07/01/2019

Bricklayer/Blocker	\$ 34.70
Fireproofing*	34.70
Stone Mason	34.70
Pointer/Caulker/Cleaner	34.70
Cement Mason/Plaster**	34.70

Additional \$.25 per hr. for work in restricted radiation area of atomic plant.

Additional \$5.00 per day more for employees working on a two-point suspension scaffold (Pointer, Caulker, and Cleaner are excluded).

(*)Fireproofing on Structural only.

(**)Refer to Onondaga Mason Building wage sheet 1-2b-on for Cement/Plaster work in Onondaga County

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 worked

Journeyman \$ 20.63

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

750 hour terms at the following percentage of journeyman's wage

1st	2nd	3rd	4th	5th	6th	7th	8th
55%	60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked

All terms \$ 20.63

12-2b.3

Mason - Heavy&Highway

07/01/2019

JOB DESCRIPTION Mason - Heavy&Highway

DISTRICT 12

ENTIRE COUNTIES

PARTIAL COUNTIES

Onondaga: This rate only applies to Heavy & Highway Cement Mason or Plaster Work in Onondaga County.

WAGES

Per hour 07/01/2019

Cement Mason \$ 32.07

- Additional \$0.50 per hour if working on swing scaffolding or staging (scaffold suspended by means of ropes or cabled from hooks placed over parapet walls or windows, etc).

- Additional \$0.25 per hour when operating a hand held power grinder.

SUPPLEMENTAL BENEFITS

Per hour worked

Journeyman \$ 20.36

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

If the holiday falls on Sunday, holiday pay for next day Monday.

REGISTERED APPRENTICES

Wages per hour

750 hour terms at the following percentage of journeyman's wage

1st	2nd	3rd	4th	5th	6th	7th	8th
55%	60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked

All terms \$ 20.36

12-2h/h on

Mason - Heavy&Highway

07/01/2019

JOB DESCRIPTION Mason - Heavy&Highway

DISTRICT 12

ENTIRE COUNTIES

Albany, Cayuga, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Madison, Montgomery, Oneida, Oswego, Rensselaer, Saratoga, Schenectady, Schoharie, St. Lawrence, Warren, Washington

PARTIAL COUNTIES

Onondaga: For Heavy & Highway Cement Mason or Plaster Work in Onondaga County, refer to Mason-Heavy&Highway tag 1-2h/h on.

WAGES

Per hour 07/01/2019

Mason &
Bricklayer \$38.24

Additional \$1.00 per hour for work on any swing scaffold or staging suspended by means of ropes or cables.

SUPPLEMENTAL BENEFITS

Per hour worked

Journeyman
\$ 19.90

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: If a holiday falls on Sunday, the Monday following shall constitute the day of the legal holiday.

REGISTERED APPRENTICES

Wages per hour

750 HR TERMS at the following percent of Journeyman's wage

1st	2nd	3rd	4th	5th	6th	7th	8th
55%	60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked

\$ 19.90

12-2hh.1

Millwright

07/01/2019

JOB DESCRIPTION Millwright

DISTRICT 2

ENTIRE COUNTIES

Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, Oneida, Onondaga, Oswego, St. Lawrence, Warren, Washington

WAGES

Per hour:	07/01/2019	07/01/2020
		Additional
Building	\$ 28.59	\$ 1.25
Heavy & Highway	30.59	1.25

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 \$0.50. This amount will increase to \$1.00 on 7/1/2020.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 23.30

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:

(1)year terms at the following percentage of journeymans rate.

1st	2nd	3rd	4th
60%	70%	80%	90%

Supplemental Benefits per hour:

Apprentices:

1st term	\$ 10.60
2nd term	19.49
3rd term	20.76
4th term	22.03

Operating Engineer - Building

07/01/2019

JOB DESCRIPTION Operating Engineer - Building

DISTRICT 6

ENTIRE COUNTIES

Cayuga, Cortland, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence, Tompkins

WAGES

NOTE:

---If a prime contract is let for site work only, meaning no buildings are involved in their site contract, the Heavy/Highway rates would be applicable. When a prime contract is let for site work and building excavation is part of that contract, the Building rates would be applicable for the Operators classification.

---In the event that equipment listed below is operated by robotic control, the classification covering the operation will be the same as if manually operated.

---If a second employee is required by the employer for operation of any covered machine, they shall be an Engineer Class C.

CLASSIFICATION A1: Cranes, all types* (Includes Boom Truck, Cherry Picker, Dragline, Overhead Crane, Pile Driver, Truck Crane)

CLASSIFICATION A: Air Plako, Asphalt & Blacktop Roller, Automated Concrete Spreader (CMI or equivalent), Automated Fine Grade Machine (CMI), Backhoe, Barrel Shredder, Belt Placer, Blacktop Spreader (such as Barber-Greene & Blaw Knox), Blacktop Plant (automated), Blast or Rotary Drill (Truck or Cat mounted), Burning Plant Operator, Cableway, Caisson Auger, Central Mix Plant (automated), Concrete Pump, Crusher (Rock), Derrick, De-watering Press, Diesel Power Unit, Dirt Filter Press with Operation Equipment, Dredge, Dual Drum Paver, Elevating Grader (self-propelled or towed), Elevator Hoist - Two Cage, Excavator - all purpose hydraulically operated, Fork Lift (Loaded/Lull and other rough terrain type), Front End Loader (4 c.y. and over), Gradall, Grader (Power), Head Tower (Saurman or equal), Hoist (2 or 3 Drum), Hydroblaster (Laser Pump), Light Plants - Compressors and Generators, Locomotive, Maintenance Engineer, Maintenance Welder, Mine Hoist, Mucking Machine or Mole, Quarry Master or Equivalent, Refrigeration Equipment (for soil stabilization), Scraper, Sea Mule, Shovel, Side Boom, Slip Form Paver, Straddle Buggy (Ross Carrier, Lumber Carrier), Tractor Drawn Belt Type Loader (Euclid Loader), Trenching Machine (digging capacity of over 4ft. depth), Truck or Trailer Mounted Log Chipper (self-feeder), Tug Operator (Manned, rented equipment excluded), Tunnel Shovel, Vibro or Sonic Hammer Controls (when not mounted in proximity to Rig Operator), Work Boat Operator including LCM's.

CLASSIFICATION B: "A" Frame Truck, Back Dumps, Blacktop Plant (non-automatic), Boring Machine, Bulldozer, Cage-Hoist, Central Mix Plant (non-automated), Compressor, Pump, Generator or Welding machine (when used in battery of not more than five (5)), Concrete Paver (single drum over 16'), Core boring machine, Drill Rigs - tractor mounted, Elevator - as material hoist, Farm Tractor (with or without accessories), Fork Lift (over 10 ton with or without attachments), Front End Loader (under 4 c.y.), Grout Pump, Guniting Machine, High Pressure Boiler (15 lbs. & over), Hoist (one drum), Hydraulic Breaking Hammer (Drop Hammer), Kolman Plant Loader (screening gravel), Maintenance Grease Man, Mixer for stabilized base - self-propelled (Seaman Mixer), Monorail Machine, Parapet Concrete or Pavement Grinder, Parts Man, Post Driver (truck or tractor mounted), Post Hole Digger (truck or tractor mounted), Power Sweeper (Wayne or similar), Pump-Crete or Squeeze-Crete, Road Widener (front end of Grader or self-propelled), Roller, Self-contained hydraulic bench drill, Shell Winder (motorized), Skid steer (Bobcat type loader), Snorkel (overhead arms), Snowblower control man, Tractor (with or without accessories), Trenching Machine (digging capacity of 4 ft. or less), Tugger Hoist, Vacuum Machine (self-propelled or mounted), Vibro Tamp, Well Drill / Well Point System (Submersible pumps when used in lieu of Well Point System), Winch (Motor driven), Winch Cat, Winch Truck

CLASSIFICATION C: Compressor (up to 500 cfm), Concrete Paver or Mixer (under 16'), Concrete Pavement Spreaders & Finishers (not automated), Conveyor (over 12 ft), Electric Submersible Pump (4" and over), Fine Grade Machine (not automated), Fireman, Fork Lift ("with or without" attachments, 10 ton and under), Form Tamper, Generator (2,500 watts and over), Hydraulic Pump, Mechanical Heaters (More than two (2) Mechanical Heaters or any Mechanical Heater or Heaters whose combined output exceeds 640,000 BTU per hour (manufacturer's rating) plus one self-contained heating unit - i.e. Sundog or Air Heat type - New Holland Hay Dryer type excluded), Mulching Machine, Oiler, Power Driven Welding Machine (300 amp and over, other than all electric. One Welding Machine under 300 amp will not require an engineer unless in a battery), Power Heaterman (hay dryer), Pumps (water and trash), Revinus Widener (road widener), Single Light Plant, Steam Cleaner or Jenny.

Per Hour:

	07/01/2019	07/01/2020	07/01/2021	07/01/2022
Building:				
Master Mechanic	\$ 40.68	\$ 41.55	\$ 42.46	\$ 43.42
Asst. Master Mechanic	39.68	40.55	41.46	42.42
Class A1*	40.18	41.05	41.96	42.92
Class A1-Tower Crane*	42.68	43.55	44.46	45.42
Class A	38.68	39.55	40.46	41.42
Class B	36.56	37.43	38.34	39.30
Class C	32.34	33.21	34.12	35.08

Additional \$2.50 per hour if work requires Personal Protective Equipment for hazardous waste site activities with a level C or over rating.

(*) TONNAGE PREMIUMS:

All cranes 65 ton to 199 ton capacity - A1 rate plus \$ 1.50

All cranes 200 ton to 399 ton capacity - A1 rate plus \$ 2.50

All cranes 400 ton capacity and over - A1 rate plus \$ 3.50

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	\$ 25.79	\$ 26.89	\$ 27.99	\$ 29.09
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OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

NOTE: All hours worked on designated holidays shall be paid at 2x the hourly rate of pay, plus 8 hours of straight time.

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.

REGISTERED APPRENTICES

WAGES: 1000 hour terms

	07/01/2019	07/01/2020	07/01/2021	07/01/2022
1st term	\$ 23.21	\$ 23.73	\$ 24.28	\$ 24.85
2nd term	25.14	25.71	26.30	26.92
3rd term	27.08	27.69	28.32	28.99
4th term	30.94	31.64	32.37	33.14

SUPPLEMENTAL BENEFITS per hour: Same as Journeyman

6-158-545b.s

Operating Engineer - Heavy&Highway

07/01/2019

JOB DESCRIPTION Operating Engineer - Heavy&Highway

DISTRICT 6

ENTIRE COUNTIES

Cayuga, Cortland, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence, Tompkins

WAGES

NOTE:

---In the event that equipment listed below is operated by robotic control, the classification covering the operation will be the same as if manually operated.

---If a second employee is required by the employer for operation of any covered machine, they shall be an Engineer Class C

CLASS 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; Cableway; Bull Dozer being operated with active GPS; Caisson Auger; Central Mix Concrete Plant (automated); Cherry Picker*; Concrete Curb Machine (self-propelled, slipform); Concrete Pump; Crane*; Derricks*; Directional Boring/Drilling Machine; Dragline*; Dredge; Dual Drum Paver; Excavator (all purpose-hydraulic, Gradall or similar); Front End Loader (4 cu. yd. & over); Head Tower (Sauerman or equal); Hoist (two or three drum); Holland Loader; Maintenance Engineer; Mine Hoist; Mucking Machine or Mole; Overhead Crane* (gantry or straddle type); Pavement Breaker (SP Wertgen; PB-4 and similar type); Profiler (over 105 h.p.); Pile Driver*; Power Grader; Quad 9; Quarry Master (or equivalent); Scraper; Shovel; Side Boom; Slip Form Paver; Tractor Drawn Belt-Type Loader; Truck Crane*; Truck or Trailer Mounted Chipper (self-feeder); Tug Operator (manned rented equipment excluded); Tunnel Shovel

CLASS B: Backhoe (tractor mounted, rubber tired); Bituminous Recycler Machine; Bituminous Spreader and Mixer; Blacktop Plant (non-automated); Blast or Rotary Drill (truck or tractor mounted); Boring Machine; Bridge Deck Finishing Machine; Brokk; Cage Hoist; Central Mix Plant (non-automated) and All Concrete Batching Plants; Concrete Paver (over 16'); Crawler Drill (self-contained); Crusher; Diesel Power Unit; Drill Rigs (truck or tractor mounted); Front End Loader (under 4 cu. yd.); Greaseman - Lubrication Engineer; HiPressure Boiler (15 lbs & over); Hoist (one drum); Hydro-Axe; Kolman Plant Loader & similar type loaders; Locomotive; Material Handling Knuckle Boom; Mini Excavators (under 18,000 lbs.); Mixer (for stabilized base, self-propelled); Monorail Machine; Profiler (105 h.p. and under); Plant Engineer; Prentice Loader; 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; Vacuum Machine (mounted or towed); Vermeer Saws (ride-on, any size or type); Welder; Winch and Winch Cat; Work Boat Operator including L.C.M.'s

CLASS C: "A" Frame Winch Hoist (On Truck); Aggregate Plant; Articulated Heavy Hauler; Asphalt or Concrete Grooving Machine (ride-on); Ballast Regulator (ride-on); Bituminous Heater (self-propelled); Boat (powered); Boiler (used in conjunction with production); Cement & Bin Operator; Compressors**; Concrete Pavement Spreader and Finisher; Concrete Paver or Mixer (16' & under); Concrete Saw (self-propelled); Conveyor; Deck Hand; Directional Boring/Drilling Machine Locator; Drill (Core); Drill (Well); Dust Collectors**; Electric Pump When Used in Conjunction with Well Point System; Farm Tractor with accessories; Fine Grade Machine; Fireman; Fork Lift; Form Tamper; Generators**; Grout Pump; Gunite Machine; Hammers (hydraulic self-propelled); Heaters**; Hydra-Spiker (ride-on); Hydraulic Pump (jacking system); Hydro-Blaster (water); Light Plants**; Mulching Machine; Oiler; Parapet Concrete or Pavement Grinder; Post Hole Digger (excluding hand-held); Post Driver; Power Broom (towed); Power Heaterman; Power Sweeper; Pumps**; Revinus Widener; Roller (subgrade & 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 Handlers (ride-on); Tie Inserters (ride-on); Tie Spacers (ride-on); Tire Repair; Track Liner (ride-on); Tractor; Tractor (with towed accessories); Vacuum Machine (self-propelled); Vibratory Compactor; Vibro Tamp; Welding Machines**; Well Point

**CLASS C NOTE: Considered Hands-Off (unmanned). Includes only operation and maintenance of the equipment.

WAGES per hour:

	07/01/2019	07/01/2020	07/01/2021	07/01/2022
Master Mechanic	\$ 44.90	\$ 46.35	\$ 47.90	\$ 49.50
CLASS A*	43.55	45.00	46.55	48.15
CLASS B	42.67	44.12	45.67	47.27
CLASS C	39.39	40.84	42.39	43.99

(*) 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 manufacturer's rating of fifty 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.

Additional \$2.50 per hour for EPA or DEC classified toxic or hazardous waste work OR where an employee is required by regulations to use or wear personal protection.

SINGLE IRREGULAR WORK SHIFT: 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.

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:	07/01/2019	07/01/2020	07/01/2021	07/01/2022
Journeyman	\$ 27.15	\$ 28.30	\$ 29.45	\$ 30.60

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 a holiday falls on Sunday, it will be celebrated on Monday. If an employee works on this Monday, they shall be compensated at double time plus the holiday pay (triple time). If a holiday falls on a Saturday, employees who work a Saturday Holiday shall be paid double time plus the holiday pay.

REGISTERED APPRENTICES

WAGES: 1000 hour terms	07/01/2019	07/01/2020	07/01/2021	07/01/2022
1st term, 0-1000 hrs	\$ 25.60	\$ 26.47	\$ 27.40	\$ 28.36
2nd term, 1001-2000 hrs	29.87	30.88	31.97	33.09
3rd term, 2001-3000 hrs	34.14	35.30	36.54	37.82
4th term, 3001-4000 hrs	38.40	39.71	41.10	42.54

SUPPLEMENTAL BENEFITS per hour: Same as Journeyman

6-158-545h

Operating Engineer - Survey Crew

07/01/2019

JOB DESCRIPTION Operating Engineer - Survey Crew

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, Niagara, 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.

07/01/2019

Party Chief	\$ 41.51
Instrument Person	39.15
Rod Person	27.10

Additional \$3.00/hr. for Tunnel Work

Additional \$2.50/hr. for Hazardous Work Site

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman	\$ 26.80
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OVERTIME PAY

See (B, E, P, T) on OVERTIME PAGE

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:

07/01/2019

0-1000	60%
1001-2000	70%
2001-3000	80%

SUPPLEMENTAL BENEFIT per hour worked:

0-1000	\$ 16.21
1001-2000	18.92
2001-3000	21.63

12-158-545 D.H.H.

Operating Engineer - Survey Crew - Consulting Engineer

07/01/2019

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, Niagara, 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.

07/01/2019

Party Chief	\$ 42.86
Instrument Person	39.37
Rod Person	29.14

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	\$ 25.60
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OVERTIME PAY

See (B, E, P, T) on OVERTIME PAGE

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:

07/01/2019

0-1000	60%
1001-2000	70%
2001-3000	80%

SUPPLEMENTAL BENEFIT per hour worked:

0-1000	\$ 17.43
1001-2000	\$ 20.35
2001-3000	\$ 23.26

12-158-545 DCE

Operating Engineer - Tunnel

07/01/2019

JOB DESCRIPTION Operating Engineer - Tunnel

DISTRICT 7

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 Bedelt Road then east along Bedelt 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 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; 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 Insertor (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

WAGES per hour:

	07/01/2019	07/01/2020	07/01/2021	07/01/2022
Master Mechanic	\$ 48.00	\$ 49.45	\$ 51.00	\$ 52.60
CLASS A	45.59	47.04	48.59	50.19
CLASS B	44.37	45.82	47.37	48.97
CLASS C	41.58	43.03	44.58	46.18
CLASS D	38.57	40.02	41.57	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	\$ 49.59	\$ 51.04	\$ 52.59	\$ 54.19
Crane 2	48.59	50.04	51.59	53.19
Crane 3	47.59	49.04	50.59	52.19

SUPPLEMENTAL BENEFITS

Per hour:

\$ 28.40	\$ 30.75	\$ 31.90	\$ 33.05
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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 wage.

1st term	60% of Class B
2nd term	65% of Class B
3rd term	70% of Class B
4th term	75% of Class B

SUPPLEMENTAL BENEFITS per hour paid: Same as Journeyman

7-158-832TL.

Painter

07/01/2019

JOB DESCRIPTION Painter

DISTRICT 6

ENTIRE COUNTIES

Cayuga, Herkimer, Madison, Oneida, Onondaga, Seneca

PARTIAL COUNTIES

Lewis: Only the Townships of High Market, Lewis, Leyden, Lyonsdale, Osceola, Turin and West Turin.

Ontario: The City and Township of Geneva.

Oswego: Only the Townships of Amboy, Constantia, Williamstown and Oneida Lake.

WAGES

Per hour: 07/01/2019

Basic Rate (Brush & Roll)	\$ 23.25
Sign painting, Wallcovering	23.25
Parking Lot, Hwy Striping	23.25
Lead based Paint Abatement	23.25
Drywall Taper, Finisher	23.25
Drywall Machine Operator	23.75
Spray	23.75
Epoxy (Brush-Roller)	23.75
Epoxy (Spray)	23.75
Sandblasting (Operator)	23.75
Boatswain Chair	23.75
Swing Scaffold	23.75
Structural Steel	23.75
(except bridges,tunnels,tanks)	
Coal Tar epoxy	24.75
Asbestos Encapsulation	25.45

NOTE: FOR ANY SHIFT WHICH STARTS PRIOR TO 6:00 AM OR AFTER 12:00 NOON, ALL EMPLOYEES WHO WORK A SINGLE IRREGULAR WORK SHIFT ON GOVERNMENTAL MANDATED WORK SHALL BE PAID AN ADDITIONAL \$2.00 PER HOUR ABOVE THE APPLICABLE WAGE SCALE.

**** 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 worked:

Journeyman \$ 24.10

OVERTIME PAY

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

NOTE: 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 per hour:

Painter/Decorator: 750 hour terms at the following percentage of the Journeyman Basic wage rate:

1st	2nd	3rd	4th	5th	6th	7th	8th
50%	55%	60%	65%	70%	75%	80%	90%

Taper/Drywall Finisher: 750 hour terms at the following percentage of the Journeyman Taper wage rate:

1st	2nd	3rd	4th	5th	6th
55%	60%	65%	70%	75%	80%

SUPPLEMENTAL BENEFITS per hour worked:

Painter/Decorator:

1st	2nd	3rd	4th	5th	6th	7th	8th
\$ 5.42	\$ 5.42	\$ 5.42	\$ 5.42	\$ 6.74	\$ 6.74	\$ 7.90	\$ 7.90

Taper/Drywall Finisher:

1st	2nd	3rd	4th	5th	6th
\$ 5.42	\$ 5.42	\$ 5.42	\$ 6.74	\$ 6.74	\$ 7.90

6-31

Painter

07/01/2019

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:	07/01/2019	05/01/2020 Additional
Bridge	\$ 38.50	\$ 1.05
Tunnel	38.50	1.05
Tank*	36.50	1.05

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 \$2.00 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:
\$ 28.70

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
50%	55%	60%	65%	75%	85%

Supplemental benefits per hour:

1st & 2nd terms	\$ 5.45
3rd & 4th terms	5.45
5th & 6th terms	6.45

3-4-Bridge, Tunnel, Tank

Painter - Metal Polisher

07/01/2019

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

	07/01/2019
Metal Polisher	\$ 30.58
Metal Polisher*	31.53
Metal Polisher**	34.08

*Note: Applies on New Construction & complete renovation

** Note: Applies when working on scaffolds over 34 feet.

SUPPLEMENTAL BENEFITS

Per Hour:	07/01/2019
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Journeyworker:	
All classification	\$ 7.72

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:

	07/01/2019
1st year	\$ 15.00
2nd year	15.00
3rd year	15.75
1st year*	\$ 17.39
2nd year*	17.44
3rd year*	18.29
1st year**	\$ 19.50
2nd year**	19.50
3rd year**	20.25

*Note: Applies on New Construction & complete renovation

** Note: Applies when working on scaffolds over 34 feet.

Supplemental benefits:

Per hour:	
1st year	\$ 5.52
2nd year	5.52
3rd year	5.52

8-8A/28A-MP

Plumber	07/01/2019
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JOB DESCRIPTION Plumber

DISTRICT 6

ENTIRE COUNTIES

Chemung, Cortland, Onondaga, Schuyler, Tompkins

PARTIAL COUNTIES

Madison: Only the Townships of Sullivan, Cazenovia and DeRuyter.

Seneca: Only the Townships of Covert and Lodi.

Steuben: Only the Townships of Addison, Bath, Bradford, Campbell, Caton, Corning, Erwin, Hornby, Lindley, Pulteney, Rathbone, Thurston, Tuscarora, Urbana and Wayne.

Tioga: Only the Townships of Barton, Berkshire, Candor, Richford, Spencer, Nichols and Tioga.

WAGES

Per hour:	07/01/2019
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Plumber/Steamfitter	\$ 35.51
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Pipefitter/Welder/HVAC	35.51
Refrigeration	35.51

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SHIFTS FOR AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

Shifts

1st	7:30AM to 4PM	\$ 35.51
2nd	4PM to 12AM	RATE PLUS 15%
3rd	12AM to 7:30AM	RATE PLUS 20%

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	\$ 24.57
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OVERTIME PAY

Time and one half for the 9th & 10th hours Monday thru Friday and first 10 hours on Saturday. All other O.T. hours are double-time.

HOLIDAY

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

NOTE: If a holiday falls on Saturday, the holiday will be observed on the prior Friday. If a holiday falls on Sunday, it will be observed on the following Monday.

REGISTERED APPRENTICES

WAGES: One year terms

1st	2nd	3rd	4th	5th
\$ 17.76	\$ 19.53	\$ 21.31	\$ 24.86	\$ 30.18

SUPPLEMENTAL BENEFITS per hour:

\$ 12.00	\$ 21.85	\$ 22.15	\$ 22.75	\$ 23.67
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6-267-SF

Roofer	07/01/2019
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JOB DESCRIPTION Roofer

DISTRICT 6

ENTIRE COUNTIES

Cayuga, Cortland, Franklin, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence

WAGES

Per hour:	07/01/2019	06/01/2020	06/01/2021
		Additional	Additional
Roofer, Waterproofer	\$ 27.00	\$ 1.75	\$ 1.75

Additional per hour:

Green Roofing*	\$.25	\$.25	\$.25
Pitch Removal & Appl.	.90	1.15	1.40
Asbestos Abatement	1.30	1.40	1.50
Irregular Shift(s)**	3.75	4.00	4.00

NOTES:

Does not include metal flashing, gravel stop and metal roofing; see Sheetmetal Worker wage schedule.

* Green Roofing is any component of green technology or living roof above the roof membrane. Including but not limited to the fabric, dirt and plantings.

** WHEN MANDATED BY THE OWNER OR CONTRACTING AGENCY, THERE IS AN ADDITIONAL PREMIUM FOR HOURS WORKED BEFORE 5:30AM AND AFTER 5:30PM.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	\$ 23.35
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Additional contribution
on any Asbestos Abatement work. 0.75

OVERTIME PAY

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

*NOTE - If a holiday falls in that week and 32 hours were worked, Saturday will be paid at 1 1/2 times the rate.

HOLIDAY

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

NOTE: When any of these holidays falls on Sunday, the following day shall be observed as a holiday.

REGISTERED APPRENTICES

WAGES: 1000 hour terms

1st term (0 to 999)	\$ 17.52
2nd term (1000 to 1999)	18.55
3rd term (2000 to 2999)	20.25
4th term (3000 to 3999)	22.95

Additional per hour:

Green Roofing**	\$ 0.25
Pitch Removal & Appl.	0.90
Asbestos Abatement	1.30

SUPPLEMENTAL BENEFITS per hour:

1st term	\$ 17.58
2nd term	18.90
3rd term	22.35
4th term	23.35

Additional contribution
on any Asbestos Abatement work 0.75

6-195

Sheetmetal Worker

07/01/2019

JOB DESCRIPTION Sheetmetal Worker

DISTRICT 6

ENTIRE COUNTIES

Cayuga, Chenango, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, St. Lawrence

WAGES

Per hour:	07/01/2019	05/01/2020
		Additional
		\$ 1.00
Sheetmetal Worker:		
** (under \$10 million)	\$ 29.00	
** (over \$10 million)	30.00	

**For total cost of Sheetmetal contract only.

TO INCLUDE METAL STANDING SEAM ROOFING, METAL ROOF FLASHINGS, AND GRAVEL STOP.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	\$ 20.47
	plus 3% of
	hourly wage
	paid

NOTE: The 3% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

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

When any holiday falls on a Saturday, the Friday before such holiday shall be recognized as the legal holiday. Any holiday falling on Sunday, the following Monday shall be recognized as the legal holiday.

REGISTERED APPRENTICES

WAGES: Six month terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
40%	45%	50%	55%	60%	65%	70%	75%	80%	85%
\$ 11.60	\$ 13.05	\$ 14.50	\$ 15.95	\$ 17.40	\$ 18.85	\$ 20.30	\$ 21.75	\$ 23.20	\$ 24.65

SUPPLEMENTAL BENEFITS per hour:

11.67*	12.13*	12.59*	13.06*	13.52*	13.98*	15.48*	15.94*	16.40*	16.87*
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*Plus 3% of hourly wage paid. The 3% is based on the hourly wage paid, straight time or premium rate.

6-58

Sprinkler Fitter

07/01/2019

JOB DESCRIPTION Sprinkler Fitter

DISTRICT 1

ENTIRE COUNTIES

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	07/01/2019
Sprinkler	\$ 34.91
Fitter	

SUPPLEMENTAL BENEFITS

Per hour

Journeyman	\$ 24.93
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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

For Apprentices HIRED ON OR AFTER 04/01/2010:

One Half Year terms at the following percentage of journeyman's wage.

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
45%	50%	55%	60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$ 9.18	\$ 9.22	\$ 17.89	\$ 17.93	\$ 18.48	\$ 18.52	\$ 18.57	\$ 18.61	\$ 18.66	\$ 18.70

For Apprentices HIRED ON OR AFTER 04/01/2013:

One Half Year terms at the following percentage of journeyman's wage.

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
45%	50%	55%	60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$ 8.27	\$ 8.27	\$ 18.04	\$ 18.04	\$ 18.29	\$ 18.29	\$ 18.29	\$ 18.29	\$ 18.29	\$ 18.29

1-669

Teamster - Building

07/01/2019

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, Pulteney, Canisteo, Howard, Fremont, Avoca, Wheeler, Wayland, 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

Per hour:

GROUP A: Straight Trucks

GROUP B: Tractor Trailer, Farm Tractor, Fuel Truck.

GROUP C: Euclid.

GROUP D: On site Mechanic.

	07/01/2019	06/01/2020	06/01/2021	06/01/2022
Building: (under \$ 5 million*)				
GROUP A	\$ 21.43	\$ 22.43	\$ 23.43	\$ 24.43
GROUP B	21.43	22.43	23.43	24.43
GROUP C	21.43	22.43	23.43	24.43
GROUP D	21.43	22.43	23.43	24.43
Building: (over \$ 5 million*)				
GROUP A	\$ 22.48	\$ 23.48	\$ 24.48	\$ 25.48
GROUP B	22.58	23.58	24.58	25.58
GROUP C	22.83	23.83	24.83	25.83
GROUP D	22.63	23.63	24.63	25.63

* Total project cost including General Construction, Plumbing, HVAC and Electrical

SUPPLEMENTAL BENEFITS

Per hour:

(under \$5 million*)	\$ 26.50	\$ 27.26	\$ 27.97	\$ 28.75
(over \$5 million*)	27.15	27.89	28.58	29.36

* Total project cost including General Construction, Plumbing, HVAC and Electrical

OVERTIME PAY

(D, O) on OVERTIME PAGE

HOLIDAY

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

6-317

Teamster - Heavy&Highway	07/01/2019
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JOB DESCRIPTION Teamster - Heavy&Highway

DISTRICT 6

ENTIRE COUNTIES

Onondaga

PARTIAL COUNTIES

Madison: Only the Townships of Cazenovia, De Ruyter, Fenner, Georgetown, Lenox, Nelson and Sullivan.

Oswego: All Townships except Redfield, Sandy Creek and Boylston

WAGES

Per hour:

GROUP 1: Warehousemen, Yardmen, Truck Helpers, Pickups, Panel Trucks, Flatboy Material Trucks(straight jobs), Single Axle Dump Trucks, Dumpsters, Material Checkers & Receivers, Greasers, Truck Tiremen, Mechanics Helpers and Parts Chasers. Tandems and Batch Trucks, Mechanics, Semi-Trailers, Low-boy Trucks, Asphalt Distributor Trucks and Agitator, Mixer Trucks and Dumpcrete type vehicles, Truck Mechanic, Fuel Trucks.

GROUP 2:

Specialized Earth Moving Equipment-Euclid type, or similar off-highway equipment, where not self-loading, Straddle (Ross) Carrier and self-contained concrete mobile unit, Off-highway Tandem Back-Dump, Twin Engine Equipment and Double-Hitched Equipment where not self-loading.

WAGES per hour: 07/01/2019

Heavy/Highway:

Group #1 \$ 25.98

Group #2 26.18

NOTE: For all work bid, there shall be a twelve month carryover of the rates in effect at the time of the bid.

Additional \$ 1.50 per hour on City, County, Federal and/or State designated hazardous waste site when personal protection is required by regulation to be used or worn.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman \$ 25.09

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 a holiday falls on Sunday, it will be celebrated on Monday.

6-317h

Welder

07/01/2019

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 07/01/2019

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
- (I) 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:

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
- (28) Easter Sunday



New York State Department of Labor - Bureau of Public Work
State Office Building Campus
Building 12 - Room 130
Albany, New York 12240

REQUEST FOR WAGE AND SUPPLEMENT INFORMATION

As Required by Articles 8 and 9 of the NYS Labor Law

Fax (518) 485-1870 or mail this form for new schedules or for determination for additional occupations.

This Form Must Be Typed

Submitted By:

(Check Only One)

☐

Contracting Agency

☐

Architect or Engineering Firm

☐

Public Work District Office

Date:

A. Public Work Contract to be let by: (Enter Data Pertaining to Contracting/Public Agency)

1. Name and complete address ☐ (Check if new or change)

Telephone: ()

Fax: ()

E-Mail:

2. NY State Units (see Item 5)

☐ 01 DOT

☐ 02 OGS

☐ 03 Dormitory Authority

☐ 04 State University
Construction Fund

☐ 05 Mental Hygiene
Facilities Corp.

☐ 06 OTHER N.Y. STATE UNIT

☐ 07 City

☐ 08 Local School District

☐ 09 Special Local District, i.e.,
Fire, Sewer, Water District

☐ 10 Village

☐ 11 Town

☐ 12 County

☐ 13 Other Non-N.Y. State
(Describe)

3. SEND REPLY TO ☐ (check if new or change)
Name and complete address:

Telephone:()

Fax: ()

E-Mail:

4. SERVICE REQUIRED. Check appropriate box and provide project information.

☐ New Schedule of Wages and Supplements.

APPROXIMATE BID DATE :

☐ Additional Occupation and/or Redetermination

PRC NUMBER ISSUED PREVIOUSLY FOR
THIS PROJECT :

OFFICE USE ONLY

B. PROJECT PARTICULARS

5. Project Title _____

Description of Work _____

Contract Identification Number _____

Note: For NYS units, the OSC Contract No. _____

6. Location of Project:
Location on Site _____

Route No/Street Address _____

Village or City _____

Town _____

County _____

7. Nature of Project - Check One:

- ☐ 1. New Building
☐ 2. Addition to Existing Structure
☐ 3. Heavy and Highway Construction (New and Repair)
☐ 4. New Sewer or Waterline
☐ 5. Other New Construction (Explain)
☐ 6. Other Reconstruction, Maintenance, Repair or Alteration
☐ 7. Demolition
☐ 8. Building Service Contract

8. OCCUPATION FOR PROJECT :

- ☐ Construction (Building, Heavy
Highway/Sewer/Water)
☐ Tunnel
☐ Residential
☐ Landscape Maintenance
☐ Elevator maintenance
☐ Exterminators, Fumigators
☐ Fire Safety Director, NYC Only
- ☐ Guards, Watchmen
☐ Janitors, Porters, Cleaners,
Elevator Operators
☐ Moving furniture and
equipment
☐ Trash and refuse removal
☐ Window cleaners
☐ Other (Describe)

9. Has this project been reviewed for compliance with the Wicks Law involving separate bidding? YES ☐ NO ☐

10. Name and Title of Requester

Signature



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.

Debarment Database: 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, or 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

NYSDOL Bureau of Public Work Debarment List 07/22/2019

Article 8

AGENCY	Fiscal Officer	FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	DOL	*****0996	A-1 CONSTRUCTION & RENOVATION INC		1973 81ST ST - SUITE A-5 BROOKLYN NY 11214	01/08/2015	01/08/2020
DOL	NYC		ABDUL KARIM		C/O NORTH AMERICAN IRON W 1560 DECATUR STREETRIDGWOOD NY 11385	05/15/2015	05/15/2020
DOL	DOL	*****4539	ACCOMPLISHED WALL SYSTEMS INC		112 OSCAWANNA HEIGHTS RD PUTNAM VALLEY NY 10542	03/13/2015	03/12/2020
DOL	DOL	*****3344	ACT INC		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL	*****4018	ADIRONDACK BUILDING RESTORATION INC.		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	DOL	*****1687	ADVANCED SAFETY SPRINKLER INC		261 MILL ROAD P.O BOX 296EAST AURORA NY 14052	07/29/2015	07/29/2020
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	DOL		AJ TORCHIA		10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL	*****3344	ALL CATASTROPHE CONSTRUCTION TEAM INC	ACT INC	6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL	*****8740	ALLSTATE ENVIRONMENTAL CORP		C/O JOSE MONTAS 27 BUTLER PLACEYONKERS NY 10710	03/18/2011	03/19/2020
DOL	DOL		AMADEO J TORCHIA	TORCHIA'S HOME IMPROVEMENT	10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL		ANGELO F COKER			12/04/2018	12/04/2023
DOL	NYC		ANISUL ISLAM		C/O RELIANCE GENERAL CONS 644 OCEAN PARKWAYBROOKLYN NY 11230	09/02/2015	09/02/2020
DOL	DOL		ANITA SALERNO		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DOL	*****7004	ANNEX CONTRACTING LTD		3005 WYNSUM AVENUE MERRICK NY 11566	08/18/2014	08/18/2019
DOL	DOL	*****7004	ANNEX GENERAL CONTRACTING INC		3005 WYNSUM AVENUE MERRICK NY 11566	08/18/2014	08/18/2019
DOL	DA		ANTHONY CARDINALE		58-48 59TH STREET MASPETH NY 11378	05/16/2012	05/08/2020
DOL	DOL		ANTHONY J MINGARELLI JR		C/O T & T CONCRETE INC 2560 HAMBURG TURNPIKELACKAWANNA NY 14218	07/08/2015	07/08/2020
DOL	DOL		ANTHONY PERGOLA		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10323	01/23/2017	01/23/2022
DOL	DOL		ANTONIO ESTIVEZ		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL	*****3020	APCO CONTRACTING CORP		24 SOUTH MARYLAND AVENUE PORT WASHINGTON NY 11050	09/24/2012	09/02/2020
DOL	NYC	*****9232	ARKAY CONSTRUCTION INC		102-104 GREYLOCK AVENUE BELLEVILLE NJ 07109	07/15/2015	07/15/2020
DOL	NYC	*****4779	ASTORIA GENERAL CONTRACTING CORP		35-34 31ST STREET LONG ISLAND CITY NY 11106	09/02/2015	09/02/2020
DOL	NYC	*****7217	ASTRO COMMUNICATIONS OF NY CORP		79 ALEXANDER AVE- STE 36A BRONX NY 10454	10/30/2015	10/30/2020
DOL	NYC	*****6046	ATLANTIC SUN CONSTRUCTION CORP		58-46 59TH AVENUE MASPETH NY 11378	05/08/2015	05/08/2020
DOL	NYC	*****6683	ATLAS RESTORATION CORP.		35-12 19TH AVENUE ASTORIA NY 11105	08/02/2017	08/02/2022
DOL	NYC		AUDLEY O'BRIEN		1273 NORTH AVENUE/#1 CP NEW ROCHELLE NY 10804	04/07/2015	04/07/2020
DOL	NYC	*****2591	AVI 212 INC.		260 CROSEY AVENUE APT 11GBROOKLYN NY 11214	10/30/2018	10/30/2023
DOL	DOL		AVIS R HILL		3510 HICKORY WALK LANE ELLENWOOD GA 32094	01/22/2015	01/22/2020

NYSDOL Bureau of Public Work Debarment List 07/22/2019

Article 8

DOL	AG		AVTAR SINGH		116-24 127TH STREET SOUTH OZONE PARK NY 11420	12/22/2015	12/22/2020
DOL	AG		BALDEV SINGH		116-24 127TH STREET SOUTH OZONE PARK NY 11420	12/22/2015	12/22/2020
DOL	NYC		BALWINDER SINGH		421 HUDSON ST SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	DOL		BARBARA CASSIDY		7 BLENIS PLACE VALHALLA NY 10595	04/02/2015	04/02/2020
DOL	DOL		BARRY KINNEY		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	NYC	*****3915	BEACON RESTORATION INC		SUITE B-8 782 PELHAM PARKWAY SOUTHBRONX NY 10462	04/21/2016	04/21/2021
DOL	NYC	*****8416	BEAM CONSTRUCTION, INC.		50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
DOL	DOL		BIAGIO CANTISANI			06/12/2018	06/12/2023
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	*****8551	BRANDY'S MASONRY		216 WESTBROOK STREET P O BOX 304SAYRE PA 18840	08/09/2016	08/09/2021
DOL	NYC	*****6555	BROOKLYN WELDING CORP		1273 NORTH AVENUE/ #1 CP NEW ROCHELLE NY 10804	04/07/2015	04/07/2020
DOL	DOL	*****1449	BRRESTORATION NY INC		140 ARCADIA AVENUE OSWEGO NY 13126	09/12/2016	09/12/2021
DOL	DOL		BRUCE MORSEY		C/O KENT HOLLOW SIDING LL 29A BRIDGE STREETNEW MILFORD CT 06776	01/15/2016	01/15/2021
DOL	DOL		BRUCE P. NASH JR.		5841 BUTTERNUT ROAD EAST SYRACUSE NY 13057	09/12/2018	09/12/2023
DOL	DOL	*****8809	C.B.E. CONTRACTING CORPORATION		310 MCGUINESS BLVD GREENPOINT NY 11222	03/07/2017	03/07/2022
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		CANTISANI & ASSOCIATES LTD		442 ARMONK RD MOUNT KISCO NY 10549	06/12/2018	06/12/2023
DOL	DOL		CANTISANI HOLDING LLC			06/12/2018	06/12/2023
DOL	DOL		CARIBBEAN POOLS		C/O DOUGLAS L MALARKEY 64 VICTORIA DRIVEBINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	*****3812	CARMODY "2" INC			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	NYC	*****9172	CASSIDY EXCAVATING INC		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL	*****6745	CATSKILL FENCE INSTALLATIONS INC		5445 ROUTE 32 CATSKILL NY 12414	08/22/2014	08/22/2019
DOL	DOL	*****8809	CBE CONTRACTING CORP		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	AG		CESAR J. AGUDELO		81-06 34TH AVENUE APT. 6EJACKSON HEIGHTS NY 11372	02/07/2018	02/07/2023
DOL	DOL	*****7655	CHAMPION CONSTRUCTION SERVICES CORP		2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020

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DOL	NYC		CHARLES CASSIDY JR		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL		CHARLES ZIMMER JR		216 WESTBROOK STREET P O BOX 304SAYRE PA 18840	08/09/2016	08/09/2021
DOL	DOL		CHRISTINE J HEARNE		C/O CJ-HEARNE CONSTRUCTIO 131 PONCE DE LEON AVE NEATLANTA GA 30308	12/01/2015	12/01/2020
DOL	DOL		CHRISTOPHER J MAINI		19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL		CHRISTOPHER PAPASTEFANO A/K/A CHRIS PAPASTEFANO		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL	*****0671	CJ-HEARNE CONSTRUCTION CO		SUITE 204 131 PONCE DE LEON AVENUEATLANTA GA 30308	12/01/2015	12/01/2020
DOL	DOL	*****1927	CONSTRUCTION PARTS WAREHOUSE, INC.	CPW	5841 BUTTERNUT ROAD EAST SYRACUSE NY 13057	09/12/2018	09/12/2023
DOL	NYC	*****4468	CRAFT CONTRACTING GROUP INC		3256 BRUNER AVENUE BRONX NY 10469	07/29/2014	07/29/2019
DOL	NYC	*****8507	CRAFT FENCE INC		3256 BRUNER AVENUE BRONX NY 10469	07/29/2014	07/29/2019
DOL	NYC	*****2164	CREATIVE TRUCKING INC		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	DOL	*****2524	CSI ELECTRICAL & MECHANICAL INC		42-32 235TH ST DOUGLSTON NY 11363	01/14/2019	01/14/2024
DOL	DOL	*****7761	D L MALARKEY CONSTRUCTION		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	*****7888	D L MALARKEY CONSTRUCTION INC		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	*****5629	DAKA PLUMBING AND HEATING LLC		2561 ROUTE 55 POUGHQUAG NY 12570	02/19/2016	02/19/2021
DOL	DOL		DANICA IVANOSKI		61 WILLETT ST. PASSAIC NJ 07503	10/26/2016	10/26/2021
DOL	DOL		DARIAN L COKER		2610 SOUTH SALINA ST SUITE 2CSYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL		DARYL T RIEKS		C/O RIEKS CONTRACTING LLC 4804 GAHWILER ROAD AUBURN NY 13021	05/01/2015	05/01/2020
DOL	NYC	*****7707	DASSLE CONTRACTING INC		213-37 39TH AVE/SUITE 120 BAYSIDE NY 11360	05/08/2015	05/08/2020
DOL	DOL		DAVID MARTINEZ		C/O EMPIRE TILE INC 6 TREMONT COURTHUNTINGTON STATION NY 11746	03/08/2016	03/08/2021
DOL	DOL		DEBBIE STURDEVANT		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	AG		DEBRA MARTINEZ		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		DEDA GAZIVODAN		C/O DAKA PLUMBING AND H 2561 ROUTE 55POUGHQUAG NY 12570	02/19/2016	02/19/2021
DOL	DOL		DELPHI PAINTING & DECORATING CO INC		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL		DENNIS SCHWANDTNER		C/O YES SERVICE AND REPAI 145 LODGE AVEHUNTINGTON STATION NY 11476	08/09/2016	08/09/2021
DOL	DOL		DF CONTRACTORS OF ROCHESTER, INC.		1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	DOL		DF CONTRACTORS, INC.		1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	NYC		DIMITRIOS KOUTSOUKOS		C/O ASTORIA GENERAL CONTR 35-34 31ST STREETLONG ISLAND CITY NY 11106	09/02/2015	09/02/2020
DOL	NYC		DIMITRIOS TSOUHAS		35-12 19TH AVENUE ASTORIA NY 11105	08/02/2017	08/02/2022
DOL	DOL	*****3242	DONALD R. FORSAY	DF LAWN SERVICE	1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	DOL		DONALD R. FORSAY		1835 DAANSEN RD. PALMYRA NY 14522	05/16/2017	05/16/2022
DOL	DOL		DORIS SKODA		C/O APCO CONTRACTING CORP 24 SOUTH MARYLAND AVENUEPORT WASHINGTON NY 11050	09/24/2012	09/02/2020
DOL	NYC	*****7404	DOSANJH CONSTRUCTION CORP		9439 212TH STREET QUEENS VILLAGE NY 11428	02/25/2016	02/25/2021

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DOL	DOL		DOUGLAS L MALARKEY	MALARKEY CONSTRUCTI ON	64 VICTORIA DRIVE B INGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL		E C WEBB		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL		EARL L WILSON	WILSON BROTHER DRYWALL CONTRACTOR S	36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
DOL	DOL		EAST COAST PAVING		2238 BAKER RD GILLET PA 16923	03/12/2018	03/12/2023
DOL	DOL	*****0780	EMES HEATING & PLUMBING CONTR		5 EMES LANE MONSEY NY 10952	01/20/2002	01/20/3002
DOL	DOL	*****3270	EMPIRE TILE INC		6 TREMONT COURT HUNTINGTON STATION NY 11746	03/08/2016	03/08/2021
DOL	DOL	*****7403	F & B PAINTING CONTRACTING INC		2 PARKVIEW AVENUE HARRISON NY 10604	09/26/2016	09/26/2021
DOL	DOL		FAIGY LOWINGER		11 MOUNTAIN RD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL		FAY MATTHEW		C/O CHAMPION CONSTRUCTION 2131 SCHENECTADY AVENUEBROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	DOL		FAZIA GINA ALI-MOHAMMED	C/O CHAMPION CONSTRUCTI ON	2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	DOL		FRANK BENEDETTO		19 CATLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL		FRANK BENEDETTO		C/O F & B PAINTING CONTRA 2 PARKVIEW AVENUEHARRISON NY 10604	09/26/2016	09/26/2021
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	DOL		FRANK DEMARTINO		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL		FRANK DEMARTINO		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL		GABRIEL FRASSETTI			04/10/2019	04/10/2024
DOL	DOL		GALINDA ROTENBERG		C/O GMDV TRANS INC 67-48 182ND STREETFRESH MEADOWS NY 11365	06/24/2016	06/24/2021
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	*****5674	GMDV TRANS INC		67-48 182ND STREET FRESH MEADOWS NY 11365	06/24/2016	06/24/2021
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 LATT A BROOK PARKHORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	NYC	*****0346	H N H CONTRACTORS CORP		4558 BROADWAY # 6 NEW YORK NY 10040	08/04/2014	08/04/2019
DOL	NYC		HAMEEDUL HASAN		240 HOME STREET TEANECK NJ 07666	08/04/2014	08/04/2019
DOL	NYC		HARMEL SINGH		15 CLINTON LANE HICKSVILLE NY 11801	02/25/2016	02/25/2021
DOL	NYC		HAROLD KUEMMEL		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	DOL		HENRY VAN DALRYMPLE		2663 LANTERN LANE ATLANTA GA 30349	12/01/2015	12/01/2020
DOL	DOL	*****6370	HILLIANO CONSTRUCTION & ELECTRICAL INC		354 MAGNOLIA STREET ROCHESTER NY 14611	01/22/2015	01/22/2020
DOL	DOL	*****8282	IDEMA DEVELOPMENT INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL	*****8282	IDEMA GENERAL CONTRACTORS INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL	*****7001	INTEGRATED CONSTRUCTION & POWER SYSTEMS INC		SUITE 100 2105 W GENESEE STREETSYRACUSE NY 13219	01/06/2016	01/06/2021

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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	AG		J A M CONSTRUCTION CORP		SUITE 125 265 SUNRISE HIGHWAY ROCKVILLE CENTRE NY 10457	04/07/2016	04/07/2021
DOL	DOL	*****4910	J V MAGIC TOUCH CORPORATION		94-25 57TH AVENUE, APT 5G ELMHURST NY 11373	01/12/2015	01/12/2020
DOL	DOL		J.A. HIRES CADWALLADER		P.O BOX 100 200 LATTA BROOK PARK HORSEHEADS NY 14845	03/08/2018	03/08/2023
DOL	DOL		JAMES B RHYNDERS		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL		JAMES C. DELGIACCO		722 8TH AVE WATERVLIET NY 12189	06/05/2018	06/05/2023
DOL	DOL		JAMES E RHYNDERS		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	AG		JAMES FALCONE		SUITE 125 265 SUNRISE HIGHWAY ROCKVILLE CENTRE NY 10457	04/07/2016	04/07/2021
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		JAMES RHYNDERS SR		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL		JAMES SICKAU		3090 SHIRLEY ROAD NORTH COLLINS NY 14111	04/19/2011	07/08/2020
DOL	DOL		JASON W MILLIMAN		C/O ROCHESTER ACOUSTICAL P O BOX 799 HILTON NY 14468	02/19/2016	02/19/2021
DOL	DOL	*****5368	JCH MASONRY & LANDSCAPING INC.		35 CLINTON AVE OSSINING NY 10562	09/12/2018	09/12/2023
DOL	NYC		JEFFREY CASSIDY		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL		JEROME LACITIGNOLA		C/O CATSKILL FENCE INSTAL 5445 ROUTE 32 CATSKILL NY 12414	08/22/2014	08/22/2019
DOL	DOL		JESSICA WHITESIDE		C/O BRRESTORATION NY INC 140 ARCADIA AVENUE OSWEGO NY 13126	09/12/2016	09/12/2021
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 PARK HORSEHEADS NY 14845	03/08/2018	03/08/2023
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 296 EAST AURORA NY 14052	07/29/2015	07/29/2020
DOL	DOL		JON E DEYOUNG		261 MILL RD P.O BOX 296 EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DOL		JORGE VILLALOBOS		94-25 57TH AVENUE - APT 5 ELMHURST NY 11373	01/12/2015	01/12/2020
DOL	DOL		JORI PEDERSEN		415 FLAGLER AVE #302 STUART 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	DOL		JOSE MONTAS		27 BUTLER PLACE YONKERS NY 10710	03/18/2011	03/19/2020
DOL	AG		JOSEPH FALCONE		SUITE 125 265 SUNRISE HIGHWAY ROCKVILLE CENTRE NY 10457	04/07/2016	04/07/2021
DOL	DOL	*****9273	JOSEPH M LOVETRO		P O BOX 812 BUFFALO NY 14220	08/09/2016	08/09/2021
DOL	NYC		JOSEPH MARTINO		1535 RICHMOND AVENUE STATEN ISLAND NY 10314	12/13/2017	12/13/2022
DOL	DOL		JOSEPH MARTONE		112 OSCAWANA HEIGHTS RD PUTNAM VALLEY NY 10542	03/13/2015	03/13/2020

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DOL	DOL		JUANA MARTINEZ		C/O LEAD CONSTRUCTION 27 BUTLER PLACE YONKERS NY 10710	03/19/2015	03/19/2020
DOL	DOL		JULIUS AND GITA BEHREND		5 EMES LANE MONSEY NY 10952	11/20/2002	11/20/3002
DOL	DOL	*****5062	K R F SITE DEVELOPMENT INC		375 LAKE SHORE DRIVE PUTNAM VALLEY NY 10579	01/23/2017	01/23/2022
DOL	DOL		KATIE BURDICK		2238 BAKER RD GILLET PA 16923	03/12/2018	03/12/2023
DOL	DOL		KENNETH FIORENTINO		375 LAKE SHORE DRIVE PUTNAM VALLEY NY 10579	01/23/2017	01/23/2022
DOL	DOL	*****9732	KENT HOLLOW SIDING LLC		29A BRIDGE STREET NEW MILFORD CT 06776	01/15/2016	01/15/2021
DOL	DOL		KEVIN BABCOCK JR		P O BOX 46 THOMPSON RIDGE NY 10985	08/22/2014	08/22/2019
DOL	DOL		KEVIN M BABCOCK		P O BOX 46 THOMPSON RIDGE NY 10985	08/22/2014	08/22/2019
DOL	DOL		KIM SOROCENSKI		C/O SOLUTION MATTERS INC 198 NORWOOD ROADPORT JEFFERSON NY 11776	11/19/2015	11/19/2020
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	*****6224	LAKESIDE FIRE SPRINKLERS LLC		125 CHAUTAUQUA AVENUE LAKEWOOD NY 14750	06/24/2015	06/24/2020
DOL	AG	*****4643	LALO DRYWALL, INC.		221 OLD FORD ROAD NEW PLATZ NY 12561	05/20/2016	05/20/2021
DOL	DOL	*****4505	LARAPINTA ASSOCIATES INC		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	DOL		LAURI MARTONE		112 OSCAWANA HEIGHTS RD PUTNAM VALLEY NY 10542	03/13/2015	03/13/2020
DOL	DOL		LAVERN GLAVE		161 ROBYN RD MONROE NY 10950	09/15/2014	09/15/2019
DOL	DOL		LAVERN GLAVE		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	DOL	*****1364	LEAD CONSTRUCTION SERVICES INC		3 ALAN B SHEPARD PLACE YONKERS NY 10705	03/19/2015	03/19/2020
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	06/24/2016	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	06/24/2016	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	01/17/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL	*****4388	LEN.J CONSTRUCTION, LLC		PO BOX 10007 ALBANY NY 12201	08/14/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	09/19/2017	09/19/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	08/14/2017	08/14/2022
DOL	DOL		LEROY NELSON JR		PO BOX 10007 ALBANY NY 12201	01/17/2017	09/19/2022
DOL	DOL		LINDSEY R CRILL		143 FILLMORE AVENUE BUFFALO NY 14210	01/08/2015	01/08/2020
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. 6E JACKSON HEIGHTS NY 11372	02/07/2018	02/07/2023
DOL	AG		LUIS MARTINEZ	LALO DRYWALL	211 MAIN ST. NEW PLATZ NY 12561	05/20/2016	05/20/2021

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DOL	DOL		M ANVER BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	AG	*****6957	M B DIN CONSTRUCTION INC		8831 20TH AVENUE/SUITE 6E BROOKLYN NY 11214	11/17/2015	11/17/2020
DOL	NYC	*****6317	M S QUALITY CONSTRUCTION LLC		27 MAPLEWOOD AVENUE COLONIA NJ 07067	02/04/2015	02/04/2020
DOL	DOL		M. ANVER BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	NYC		MACIEJ SONTOWSKI		27 MAPLEWOOD AVENUE COLONIA NJ 07067	02/04/2015	02/04/2020
DOL	NYC	*****9590	MACK GLASSNAUTH IRON WORKS INC		137 LIBERTY AVENUE BROOKLYN NY 11212	12/21/2015	12/21/2020
DOL	DOL	*****1784	MADISON AVE CONSTRUCTION CORP		39 PENNY STREET WEST ISLIP NY 11795	11/02/2016	11/02/2021
DOL	DOL		MALARKEY'S BAR & GRILL LLC		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	*****0705	MALARKEY'S PUB & GRUB LLC		64 VICTORIA DRIVE BINGHAMTON NY 13904	02/04/2016	02/04/2021
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	DOL		MARIACHI'S PIZZERIA		C/O DOUGLAS L MALARKEY 64 VICTORIA DRIVEBINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL		MARK MIONIS		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL		MARVIN A STURDEVANT		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
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	DOL		MATTHEW IDEMA GENERAL CONTRACTORS INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
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	*****6416	MCCALL MASONRY		P O BOX 304 SAYRE PA 18840	08/09/2016	08/09/2021
DOL	DOL		MCLEAN "MIKKI BEANE"		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL		MCLEAN "MIKKI" DRAKE		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL		MCLEAN M DRAKE-BEANE		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL	*****9445	MCLEAN M WALSH	ELITE PROFESSION AL PAINTING OF CNY	1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL	*****9445	MCLEAN M WALSH	ELITE PROFESSION AL PAINTING OF CNY	1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	NYC	*****5330	METRO DUCT SYSTEMS INC		1219 ASTORIA BOULEVARD LONG ISLAND CITY NY 11102	04/16/2014	11/19/2020
DOL	DOL	*****3368	MICEK CONSTRUCTION CO INC		20 CROSS STREET FALCONER NY 14733	12/02/2014	12/02/2019
DOL	DOL		MICHAEL A PASCARELLA		SUITE 100 2105 WEST GENESEE STREET SYRACUSE NY 13219	01/06/2016	01/06/2021
DOL	NYC		MICHAEL HIRSCH		C/O MZM CORP 163 S MAIN STREETNEW CITY NY 10956	01/28/2016	01/28/2021
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		MICHAEL WILSON	WILSON BROTHER DRYWALL CONTRACTOR S	36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
DOL	NYC		MILANCE HADZIC		22 CALIFORNIA AVE - STE 1 PATERSON NJ 07503	03/11/2015	03/11/2020

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DOL	DOL	*****4829	MILESTONE ENVIRONMENTAL CORPORATION		704 GINESI DRIVE SUITE 29MORGANVILLE NJ 07751	04/10/2019	04/10/2024
DOL	AG		MOHAMMED N CHATHA		8831 20TH AVENUE/SUITE 6E BROOKLYN NY 11214	11/17/2015	11/17/2020
DOL	DOL	*****2737	MOUNTAIN'S AIR INC		2471 OCEAN AVENUE- STE 7A BROOKLYN NY 11229	09/24/2012	09/18/2020
DOL	AG		MSR ELECTRICAL CONSTRUCTION CORP.		31 BAY ST BROOKLYN NY 11231	03/28/2018	03/28/2023
DOL	DOL		MUHAMMAD BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	DOL		MUHAMMAD BEIG		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	DOL		MUHAMMAD PERVAIZ		C/O CHAMPION CONSTRUCTION 2131 SCHENECTADY AVENUEBROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	NYC	*****3613	MZM CORP		163 S MAIN STREET NEW CITY NY 10956	01/28/2016	01/28/2021
DOL	DA	*****9786	NATIONAL INSULATION & GC CORP		180 MILLER PLACE HICKSVILLE NY 11801	12/12/2018	12/12/2023
DOL	NYC	*****1284	NEW AMERICAN RESTORATION INC		22 CALIFORNIA AVE - STE 1 PATERSON NJ 07503	03/11/2015	03/11/2020
DOL	DA	*****6988	NEW YORK INSULATION INC		58-48 59TH STREET MASPETH NY 11378	05/16/2012	05/08/2020
DOL	NYC	*****4839	NEW YORK RIGGING CORP		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	NYC	*****1968	NORTH AMERICAN IRON WORKS INC		1560 DECATUR STREET RIDGEWOOD NY 11385	05/15/2015	05/15/2020
DOL	DOL	*****6966	NORTH COUNTRY DRYWALL AND PAINT		23167 COUNTY ROUTE 59 DEXTER NY 13634	10/24/2016	10/24/2021
DOL	DOL	*****0065	NORTHEAST LANDSCAPE AND MASONRY ASSOC		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10523	01/23/2017	01/23/2022
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	NYC		ORSON ARROYO		C/O METRO DUCT SYSTEMS 12-19 ASTORIA BOULEVARDLONG ISLAND CITY NY 11102	04/16/2014	11/19/2020
DOL	NYC	*****9422	PELIUM CONSTRUCTION, INC.		22-33 35TH ST. ASTORIA NY 11105	12/30/2016	12/30/2021
DOL	DOL		PETER M PERGOLA		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10523	01/23/2017	01/23/2022
DOL	DOL		PIERRE LAPORT		224 COUNTY HIGHWAY 138 BROADALBIN NY 12025	03/07/2017	03/07/2022
DOL	DOL	*****1543	PJ LAPORT FLOORING INC		224 COUNTY HIGHWAY 138 BROADALBIN NY 12025	03/07/2017	03/07/2022
DOL	DOL	*****6895	PROLINE CONCRETE OF WNY INC		3090 SHIRLEY ROAD NORTH COLLINS NY 14111	04/19/2011	07/08/2020
DOL	DA	*****6817	QUADRANT METAL BUILDINGS LLC		2740 SW MARTIN DOWNS BLVD PALM CITY FL 34990	08/25/2016	08/25/2021
DOL	NYC		RAMESHWAR ASU		137 LIBERTY AVENUE BROOKLYN NY 11212	12/21/2015	12/21/2020
DOL	DOL		RANA A KAHN		1973 81ST ST - SUITE A-5 BROOKLYN NY 11214	01/08/2015	01/08/2020
DOL	NYC		RANTIK PARIKH		13 LORIANN ROAD WARREN NJ 07059	07/15/2015	07/15/2020
DOL	DOL	*****2633	RAW POWER ELECTRIC CORP		3 PARK CIRCLE MIDDLETOWN NY 10940	09/16/2013	09/15/2019
DOL	DOL	*****2633	RAW POWER ELECTRIC CORP		3 PARK CIRCLE MIDDLETOWN NY 10940	01/30/2018	01/30/2023
DOL	AG	*****7015	RCM PAINTING INC.		69-06 GRAND AVENUE 2ND FLOORMASPETH NY 11378	02/07/2018	02/07/2023
DOL	DOL		REGINALD WARREN		161 ROBYN RD MONROE NY 10950	09/15/2014	09/15/2019
DOL	DOL		REGINALD WARREN		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	NYC	*****3461	RELIANCE GENERAL CONSTRUCTION INC		644 OCEAN PARKWAY BROOKLYN NY 11230	09/02/2015	09/02/2020
DOL	DA		RIANN MULLER		2740 SW MARTIN DOWNS BLVD PALM CITY FL 34990	08/25/2016	08/25/2021
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

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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	*****8618	RIEKS CONTRACTING LLC		4804 GAHWILER ROAD AUBURN NY 13021	05/01/2015	05/01/2020
DOL	DOL		ROBBYE BISSEsar		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	01/11/2003	01/11/3003
DOL	DOL		ROBERT BRUNO		3 GAYLORD ST AUBURN NY 13021	11/15/2016	11/15/2021
DOL	DOL		ROBERT BRUNO		5 MORNINGSIDE DRIVE AUBURN NY 13021	05/28/2019	05/28/2024
DOL	NYC		ROBERT GUIDO		3256 BRUNER AVENUE BRONX NY 10469	07/29/2014	07/29/2019
DOL	DOL		ROBERT TORDELLA		125 CHAUTAUQUA AVENUE LAKEWOOD NY 14750	06/24/2015	06/24/2020
DOL	DOL	*****3859	ROCHESTER ACOUSTICAL CORP		P O BOX 799 HILTON NY 14468	02/19/2016	02/19/2021
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	NYC		RODNEY SCOTT		201 HEMPSTEAD AVENUE WEST HEMPSTEAD NY 11552	10/30/2015	10/30/2020
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	09/16/2013	09/15/2019
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	01/30/2018	01/30/2023
DOL	DOL		ROSEANNE CANTISANI			06/12/2018	06/12/2023
DOL	DOL		RYAN ALBIE		21 S HOWELLS POINT ROAD BELLPORT NY 11713	02/21/2017	02/21/2022
DOL	DOL	*****3347	RYAN ALBIE CONTRACTING INC		21 S HOWELLS POINT ROAD BELLPORT NY 11713	02/21/2017	02/21/2022
DOL	DOL	*****1365	S & L PAINTING, INC.		11 MOUNTAIN ROAD P.O BOX 408MONROE NY 10950	03/20/2019	03/20/2024
DOL	NYC		SABIR MUHAMMED		SUITE B-8 782 PELHAM PARKWAY SOUTHBRONX NY 10462	04/21/2016	04/21/2021
DOL	NYC		SAEED HASAN		4558 BROADWAY #6 NEW YORK NY 10040	08/04/2014	08/04/2019
DOL	NYC	*****2117	SCOTT ELECTRICAL LLC		201 HEMPSTEAD AVENUE WEST HEMPSTEAD NY 11552	10/30/2015	10/30/2020
DOL	DOL	*****9751	SCW CONSTRUCTION		544 OLD ROUTE 23 ACRE NY 12405	02/14/2017	02/14/2022
DOL	AG		SERGIO RAYMUNDO		109 DUBOIS RD. NEW PALTZ NY 12561	05/20/2016	05/20/2021
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 GILLET PA 16923	03/12/2018	03/12/2023
DOL	DOL		SHANE BURDICK		2238 BAKER ROAD GILLET 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	*****4025	SOLUTION MATTERS INC		198 NORWOOD ROAD PORT JEFFERSON NY 11776	11/19/2015	11/19/2020
DOL	NYC	*****4934	SPHINX CONTRACTING CORP		240 HOME STREET TEANECK NJ 07666	08/04/2014	08/04/2019
DOL	DOL	*****3496	STAR INTERNATIONAL INC		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	08/11/2003	08/11/3003
DOL	DOL	*****9933	STEED GENERAL CONTRACTORS, INC.		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024

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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	*****9751	STEPHEN C WAGAR		544 OLD ROUTE 23 ACRE NY 12405	02/14/2017	02/14/2022
DOL	DOL		STEVE TATE		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL		STEVEN P SUCATO		15-68 208TH STREET BAYSIDE NY 11360	06/23/2016	06/23/2021
DOL	DOL		STEVEN SAGGESE		3005 WYNSUM AVENUE MERRICK NY 11566	08/18/2014	08/18/2019
DOL	DOL		STEVEN TESTA		50 SALEM STREET - BLDG B LYNNFIELD MA 01940	01/23/2017	01/23/2022
DOL	NYC	*****9432	SUBLINK LTD		346 THIRD AVENUE PELHAM NY 10803	11/19/2015	11/19/2020
DOL	DOL	*****1060	SUNN ENTERPRISES GROUP, LLC		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
DOL	DOL	*****8209	SYRACUSE SCALES, INC.		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DOL	*****7441	T & T CONCRETE INC		2560 HAMBURG TURNPIKE P O BOX 367LACKAWANNA NY 14218	07/08/2015	07/08/2020
DOL	DOL	*****7417	TADCO CONSTRUCTION		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL		TADCO CONSTRUCTION		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL	*****7417	TADCO CONSTRUCTION CORP		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL		TALAILA OCAMPA		1207 SW 48TH TERRACE DEERFIELD BEACH FL 33442	01/16/2018	01/16/2023
DOL	DOL		TAMMY LACITIGNOLA		C/O CATSKILL FENCE INSTAL 5445 ROUTE 32CATSKILL NY 12414	08/22/2014	08/22/2019
DOL	DOL	*****9852	TAP STEEL INC		ROUTE 26 3101 P O BOX 457CONSTABLEVILLE NY 13325	01/28/2016	01/28/2021
DOL	DOL	*****5570	TESTA CORP		50 SALEM STREET - BLDG B LYNNFIELD MA 01940	01/23/2017	01/23/2022
DOL	DOL	*****0887	THE BRINSON PAINTING CORPORATION		72 TAUNTON PLACE BUFFALO NY 14216	04/14/2015	04/14/2020
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	*****8174	THE DALRYMPLE CORPORATION		UNIT 278 541 10TH STREET NWLANTA GA 30318	12/01/2015	12/01/2020
DOL	DOL	*****8174	THE DALRYMPLE GROUP LLC		289 JONESBORO RD/ STE 216 MCDONOUGH GA 30253	12/01/2015	12/01/2020
DOL	DOL		TIMOTHY A PALUCK		C/O TAP STEEL INC RTE 26 3101/ P O BOX 457CONSTABLEVILLE NY 13325	01/28/2016	01/28/2021
DOL	DOL	*****0600	TOMSON ALLOYS RECYCLING INC		143 FILLMORE AVENUE BUFFALO NY 14210	01/08/2015	01/08/2020
DOL	DOL	*****3453	TORCHIA'S HOME IMPROVEMENT		10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL	*****6914	TRI-COUNTY RESTORATIONS & CONSTRUCTION INC		13 SUMMERSET DRIVE WALLKILL NY 12589	08/22/2014	08/22/2019
DOL	DOL		TRI-COUNTY RESTORATIONS INC		392 ROCK CUT ROAD WALDEN NY 12586	08/22/2014	08/22/2019
DOL	DOL	*****8311	TRIPLE B FABRICATING, INC.		61 WILLETT ST. PASSAIC NJ 07503	10/26/2016	10/26/2021
DOL	DOL	*****9407	TURBO GROUP INC		15-68 208TH STREET BAYSIDE NY 11360	06/23/2016	06/23/2021
DOL	DOL	*****6392	V.M.K CORP.		8617 THIRD AVE BROOKLYN NY 11209	09/17/2018	09/17/2023
DOL	NYC		VALERIE VISCONTI		346 THIRD AVENUE PELHAM NY 10803	11/19/2015	11/19/2020
DOL	DOL		VICTOR ALICANTI		42-32 235TH ST DOUGLSTON NY 11363	01/14/2019	01/14/2024
DOL	DOL		VICTOR ROTENBERG		C/O GMDV TRANS INC 67048 182ND STREETFRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	NYC		VIKTAR PATONICH		2630 CROPSEY AVE BROOKLYN NY 11214	10/30/2018	10/30/2023
DOL	NYC		VITO GARGANO		1535 RICHMOND AVE STATEN ISLAND NY 10314	12/13/2017	12/13/2022

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DOL	DOL		WAYNE LIVINGSTON JR	NORTH COUNTRY DRYWALL AND PAINT	23167 COUNTY ROUTE 59 DEXTER NY 13634	10/24/2016	10/24/2021
DOL	DOL		WHITE PLAINS CARPENTRY CORP		442 ARMONK RD	06/12/2018	06/12/2023
DOL	DOL		WILLIAM C WATKINS		1229 JAMES STREET SYRACUSE NY 13203	05/02/2017	05/02/2022
DOL	DOL		WILLIAM DEAK		C/O MADISON AVE CONSTR CO 39 PENNY STREETWEST ISLIP NY 11795	11/02/2016	11/02/2021
DOL	DOL		WILLIE BRINSON		72 TAUNTON PLACE BUFFALO NY 14216	04/14/2015	04/14/2020
DOL	DOL	*****6195	WILSON BROTHER DRYWALL CONTRACTORS		36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
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	DOL	*****7345	YES SERVICE AND REPAIRS CORPORATION		145 LODGE AVE HUNTINGTON STATION NY 11476	08/09/2016	08/09/2021
DOL	DOL		YURIY IVANIN		C/O MOUNTAIN'S AIR INC 2471 OCEAN AVENUE-STE 7ABROOKLYN NY 11229	09/24/2012	09/18/2020
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

SECTION 01010
SUMMARY OF WORK

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Project - Work covered by Contract Documents.
- B. Work by Owner.
- C. Contractor use of site.
- D. Limits of work area.
- E. Construction permits.
- F. Owner occupancy.

1.02. RELATED SECTIONS

- A. General Conditions
 - 1. Article 4; Paragraph 4.01: Availability of Lands.
 - 2. Article 6; Paragraph 6.08: Permits.
 - 3. Article 6; Paragraph 6.11: Use of Site and Other Areas.
 - 4. Article 7; Paragraph 7.01: Related Work at Site.
- B. Supplementary Conditions - Refer to the appropriate "SC" paragraphs which supplement or modify the above numbered paragraphs of the General Conditions.
- C. Section 01025 - UNIT PRICE ITEMS
- D. Section 01026 - LUMP SUM ITEMS

1.03. PROJECT - WORK COVERED BY CONTRACT DOCUMENTS

- A. Work of this contract comprises the project, for construction of the Onondaga County Resource Recovery Agency Rock Cut Road Transfer Station, Leachate Pump Station Upgrades.
 - 1. Pressure clean all existing drainage lines from the grates in the floor drains to the sand trap. Pressure clean the drainage lines from the sand traps to the pump station. Pressure clean the force main from the pump station to the sanitary manhole on the southwest corner of Building No. 01.
 - 2. Contractor shall remove all wastewater and sludge/grit from each pump station and sand trap. Contractor shall pressure wash each pump station and sand trap and dispose of the liquid and contents in accordance with all applicable regulations.

3. Replace the covers to Building No. 1 pump station with an aluminum cover of equal size and dimension with a HS20 load rating or greater.
 4. Replace the covers to Building No. 1 & No. 2 sand traps with an aluminum cover of equal size and dimension with A HS20 load rating or greater.
 5. Replace all of the internal components of Building No. 1 pump station including but not limited to slide rails, pumps, bases, mounting hardware, anchors, chains, floats, control panel, wiring and any other appurtenances to make a complete system.
 6. Replace all of the internal components of the exterior holding tank pump station including but not limited to slide rails, pumps, bases, mounting hardware, anchors, chains, floats, control panel, wiring and any other appurtenances to make a complete system.
 7. Contractor shall anticipate bypass pumping from the sand traps to the sanitary manhole during Building Nos. 01 and 02 work. Contractor shall anticipate bypass pumping from the sanitary manhole outside Building No. 1 to the downstream manhole from the holding tank pump station during the holding tank pump station repairs.
 8. Contractor shall provide bypass pumping as necessary to perform the work.
- B. Perform work under a single contract including unit and lump sum items with Owner.
- C. Work of this contract is identified on the Drawings and in the Bid Item Description pages of Section 01025, Unit Price Items and Section 01026, Lump Sum Items.
- D. Work not specifically identified on the Drawings or in the Bid Item Description pages, but required in the Contract Documents, shall be performed as specified.

1.04. WORK BY OWNER

- A. The Owner has awarded contracts which are currently ongoing. Work under these contracts includes:
1. General transfer station modifications.
 2. Electrical transfer stations modifications.

1.05. PROJECT REGULATORY REQUIREMENTS

- A. Work in Hazardous and Confined Areas - Contractor is alerted that work will be required within confined spaces and in areas where hazardous gases may be present. Before entering, the Contractor shall investigate the conditions of such spaces and shall determine for himself the proper methods and procedures to be used for working in such spaces safely. The Contractor shall comply with OSHA requirements and any other applicable codes and regulations for confined space entry procedures.

1.06. CONTRACTOR USE OF SITE

- A. Limit use of site to allow:
1. Owner occupancy.

2. Work by others.

1.07. LIMITS OF WORK AREA

- A. Confine construction operations within the Contract Limits shown on the Drawings. Storage of equipment and materials, or erection and use of sheds outside of the Contract Limits, if such areas are the property of Owner, shall be used only with Owner's approval. Such storage or temporary structures, even within the Contract Limits, shall be confined to Owner's property and shall not be placed on properties designated as easements or rights-of-way.

1.08. CONSTRUCTION PERMITS

- A. Contractors shall obtain and pay for necessary construction permits from those authorities or agencies having jurisdiction over land areas, utilities or structures which are located within the Contract Limits and which will be occupied, encountered, used, or temporarily interrupted by Contractor's operations.
- B. When construction permits are accompanied by regulations or requirements issued by a particular authority or agency, it shall be Contractor's responsibility to familiarize himself and comply with such regulations or requirements as they apply to his operations on this project. Any costs associated with additional field supervision by authorities or agencies shall be the Contractor's responsibility.

1.09. OWNER OCCUPANCY

- A. The Owner will occupy the office space and maintenance facilities in Building Nos. 01 and 02 during entire period of construction for the conduct of normal operations.
- B. Cooperate with Owner to minimize conflict, and to facilitate Owner's operations.
- C. Schedule the work to accommodate Owner occupancy.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 01019

CONTRACT CONSIDERATIONS

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Schedule of Values.
- B. Application for Payment.
- C. Change procedures.

1.02. DEFINITIONS

- A. Mobilization - Mobilization includes, but is not limited to, performance of preparatory construction operations, including the movement of personnel and equipment to the project site; application, fee payment, and acquisition of all required permits (i.e., erosion and sediment control plans, temporary and permanent building and trade permits, utility connections, etc.); and the establishment of Engineer's and Contractor's offices, buildings, and other facilities required at the site in order to begin work on a substantial phase of the Contract. The cost of insurance and bonds.

1.03. SCHEDULE OF VALUES

- A. Contractor shall submit one electronic copy in Microsoft Excel of the Schedule of Values in accordance with the time frames identified in the General and Supplementary Conditions.
- B. Line items shall be subdivided into the Bid Items shown on the Bid Form.
- C. The sum of all line items in the Schedule of Values shall equal the Total Bid Price included on the Bid Form.
- D. Each line item shall include a directly proportional amount of the Contractor's overhead and profit.
- E. Schedule of Values shall serve as a breakdown of the work, used to establish progress payments. Progress payments for lump sum items will be made based on the percentages of completion of the work items included in the Schedule of Values for each lump sum item. Progress payments for unit price work will be based on actual quantities of work performed. Progress payments for contingent unit price work will only be made if work is authorized by Owner and/Engineer. Progress payments for allowances will be made as described elsewhere in the Contract Documents.
- F. For lump sum bid items, the following format shall be followed when developing the Schedule of Values.
 - 1. If mobilization is not identified in the Bid Form as a separate bid item, Contractor may include in the Schedule of Values a line item for mobilization as part of a lump sum bid item.
 - a. Lump sum line item shall include all work described in the definition of mobilization included herein.

- b. Costs for bonds and insurance shall be included in the lump sum mobilization line item.
 - c. When Contractor has made utility connections, installed Contractor's field offices, Owner's and/or Engineer's field offices, and all other facilities required to begin work on a substantial portion of the Project, a payment of 50 percent of the lump sum mobilization bid item will be made provided Contractor has already satisfied the requirements of General Condition Article GC-2.07. The remaining 50 percent will be prorated over the next five monthly progress payments.
 - d. Mobilization cost shall not be greater than 5 percent of the Total Bid Price.
- 2. Included separate line items for demobilization and contract closeout.
- 3. Site work shall be subdivided into itemized quantities and unit costs for all individual construction components. Items shall be separated according to specification section titles listed in the Table of Contents.
 - a. Site work shall not include earthwork (such as excavation) or structural work (such as foundations) specific to a particular structure or process.
 - b. Include erosion and sediment control under site work.
 - c. Include off-site hauling of fill material under site work.
 - d. Include site restoration.
 - e. Include yard piping and ductbanks.
 - f. Include valves and hydrants based on valve type and size.
- 4. Each major construction component such as a structure or building (i.e. pumping station, filter, control building, etc.) shall have its own subsection and shall be subdivided into line items for individual construction components itemized by unit costs and quantities. Include yard piping, earthwork, or foundations specific to the major construction component with that construction component (i.e. excavation for a pumping station). Items shall be separated according to specification section titles listed in the Table of Contents. Contractor may provide further divisions within each Specification section if desired or needed for clarity.
 - a. For all mechanical equipment, each item shall be separated into the following two distinct payment items:
 - 1) Furnish equipment.
 - 2) Install equipment.
 - b. Separate line items shall be included for testing and startup including:
 - 1) Functional testing.
 - 2) System demonstration testing.
 - 3) Startup.

4) Training.

- G. Electrical, instrumentation, and controls should be listed under the major construction component (structure or building) in which it is installed. Major electrical components not located in a specific structure or building, such as substations or emergency generators, may have their own line items under the category of "Major Power Distribution".
- H. Revise Schedule of Values to include executed Change Orders with each Application for Payment. List each proposed Change Order that is incorporated into executed Change Orders.

1.04. APPLICATIONS FOR PAYMENT

- A. Engineer to provide Contractor with EJCDC C-620 form for payment applications.
- B. Review draft payment application with RPR.
- C. Submit draft payment application to Engineer for review via email.
- D. Submit three hardcopies of each application with original signatures.
- E. Content and Format - Approved Schedule of Values will be used to list items in Application for Payment. Certification by Contractor must accompany each application.
- F. Payment Period - Monthly.
- G. Attach required documents and Contractor's back-up data, including updated schedule and all invoices for stored materials.
- H. Contractor must have all record drawings current and up to date prior to submitting Application for Payment.

1.05. CHANGE PROCEDURES

- A. Supplementing the General Conditions and Supplementary Conditions, Engineer may issue a Proposal Request or Notice of Change which includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a proposal to perform the indicated work indicating a proposed adjustment in Contract Price and Contract Times within 15 days.
- B. Contractor may propose changes by submitting a request for change to Engineer, describing the proposed change and its full effect on the Work. Include a statement describing the reason for the change, and the effect on the Contract Price and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors.
- C. Execution of Change Orders - Engineer will issue Change Orders for signatures of parties in the following order: Engineer, Contractor, Owner.
- D. The Engineer will advise of minor changes in the work not involving an adjustment to Contract Price or Contract Times by issuing supplemental instructions in a Field Order, as provided in the General Conditions.

- E. Work Change Directive - Engineer may issue a directive, on EJCDC C-700 Work Change Directive signed by the Owner, instructing the Contractor to proceed with a 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 Price or Contract Time. Promptly execute the change.

1.06. GUARANTEES

- A. Manufacturer Warranties During Correction Period
 - 1. Where indicated in the individual specification sections, provide a manufacturer warranty made out in the name of the Owner, coinciding with the correction period defined in General Conditions Article 13.07.A for the particular piece of equipment.
 - 2. One copy of each manufacturer warranty shall be provided to both Owner and Engineer within 30 days of successful completion of startup.
 - 3. All requirements of the correction period defined in General Conditions Article 13.07 shall apply to the manufacturer's warranty and the equipment supplier obligations shall be the same as Contractor obligations defined in General Conditions Article 13.07 for the particular piece of equipment covered by the warranty.
- B. Special Guarantees - Provide both Owner and Engineer one copy of special guarantees required in individual specification sections. Special guarantees shall be made out in the Owner's name.

1.07. STANDARD FORMS

- A. Use standard forms attached to this section.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

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

Approved Change Orders			1. ORIGINAL CONTRACT PRICE.....	\$ _____
Number	Additions	Deductions	2. Net change by Change Orders.....	\$ _____
			3. Current Contract Price (Line 1 ± 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).....	\$ _____
TOTALS				
NET CHANGE BY CHANGE ORDERS				

Contractor's Certification

The undersigned Contractor certifies that to the best of its knowledge: (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 listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to Owner indemnifying Owner against any such Liens, security interest or encumbrances); and (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

By: _____ Date: _____

Payment of: \$ _____
(Line 8 or other - attach explanation of the other amount)

is recommended by: _____
(Engineer) (Date)

Payment of: \$ _____
(Line 8 or other - attach explanation of the other amount)

is approved by: _____
(Owner) (Date)

Approved by: _____
Funding Agency (if applicable) (Date)

Progress Estimate - Lump Sum Work

Contractor's Application

For (Contract):					Application Number:			
Application Period:					Application Date:			
		B	Work Completed		E	F		G
A	Description	Scheduled Value (\$)	C From Previous Application (C+D)	D This Period	Materials Presently Stored (not in C or D)	Total Completed and Stored to Date (C + D + E)	% (F / B)	Balance to Finish (B - F)
Specification Section No.								
	Totals							

Progress Estimate - Unit Price Work

Contractor's Application

For (Contract):							Application Number:			
Application Period:							Application Date:			
A				B	C	D	E	F		
Item		Bid Item Quantity	Unit Price	Bid Item Value (\$)	Estimated Quantity Installed	Value of Work Installed to Date	Materials Presently Stored (not in C)	Total Completed and Stored to Date (D + E)	% (F / B)	Balance to Finish (B - F)
Bid Item No.	Description									
	Totals									

Stored Material Summary

Contractor's Application

[illegible]

Certificate of Substantial Completion

Project:	
Owner:	Owner's Contract No.:
Contract:	Engineer's Project No.:

This [tentative] [definitive] Certificate of Substantial Completion applies to:

- ☐ All Work under the Contract Documents: ☐ The following specified portions of the Work:

Date of Substantial Completion

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Project or portion thereof designated above is hereby declared and is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below.

A [tentative] [definitive] list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance and warranties shall be as provided in the Contract Documents except as amended as follows:

- ☐ Amended Responsibilities ☐ Not Amended

Owner's Amended Responsibilities:

Contractor's Amended Responsibilities:

The following documents are attached to and made part of this Certificate:

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents.

<hr/> Executed by Engineer	<hr/> Date
----------------------------	------------

<hr/> Accepted by Contractor	<hr/> Date
------------------------------	------------

<hr/> Accepted by Owner	<hr/> Date
-------------------------	------------

Work Change Directive

No. _____

Date of Issuance: _____ Effective Date: _____

Project:	Owner:	Owner's Contract No.:
Contract:		Date of Contract:
Contractor:		Engineer's Project No.:

Contractor is directed to proceed promptly with the following change(s):

Item No.	Description

Attachments (list documents supporting change):

Purpose for Work Change Directive:

Authorization for Work described herein to proceed on the basis of Cost of the Work due to:

- ☐ Nonagreement on pricing of proposed change.
- ☐ Necessity to expedite Work described herein prior to agreeing to changes on Contract Price and Contract Time.

Estimated change in Contract Price and Contract Times:

Contract Price \$ _____ (increase/decrease) Contract Time _____ (increase/decrease)
days

Recommended for Approval by Engineer:	Date
Authorized for Owner by:	Date
Received for Contractor by:	Date
Received by Funding Agency (if applicable):	Date:

Change Order

No. _____

Date of Issuance: _____ Effective Date: _____

Project:	Owner:	Owner's Contract No.:
Contract:		Date of Contract:
Contractor:		Engineer's Project No.:

The Contract Documents are modified as follows upon execution of this Change Order:

Description:

Attachments (list documents supporting change):

CHANGE IN CONTRACT PRICE:

Original Contract Price:

\$ _____

[Increase] [Decrease] from previously approved
Change Orders No. _____ to No. _____:

\$ _____

Contract Price prior to this Change Order:

\$ _____

[Increase] [Decrease] of this Change Order:

\$ _____

Contract Price incorporating this Change Order:

\$ _____

CHANGE IN CONTRACT TIMES:

Original Contract Times: ☐ Working days ☐ Calendar days

Substantial completion (days or date): _____

Ready for final payment (days or date): _____

[Increase] [Decrease] from previously approved Change Orders
No. _____ to No. _____:

Substantial completion (days): _____

Ready for final payment (days): _____

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:

Substantial completion (days or date): _____

Ready for final payment (days or date): _____

Contract Times with all approved Change Orders:

Substantial completion (days or date): _____

Ready for final payment (days or date): _____

RECOMMENDED:

By: _____
Engineer (Authorized Signature)

Date: _____

Approved by Funding Agency (if applicable):

ACCEPTED:

By: _____
Owner (Authorized Signature)

Date: _____

ACCEPTED:

By: _____
Contractor (Authorized Signature)

Date: _____

Date: _____

Change Order

Instructions

A. GENERAL INFORMATION

This document was developed to provide a uniform format for handling contract changes that affect Contract Price or Contract Times. Changes that have been initiated by a Work Change Directive must be incorporated into a subsequent Change Order if they affect Price or Times.

Changes that affect Contract Price or Contract Times should be promptly covered by a Change Order. The practice of accumulating Change Orders to reduce the administrative burden may lead to unnecessary disputes.

If Milestones have been listed in the Agreement, any effect of a Change Order thereon should be addressed.

For supplemental instructions and minor changes not involving a change in the Contract Price or Contract Times, a Field Order should be used.

B. COMPLETING THE CHANGE ORDER FORM

Engineer normally initiates the form, including a description of the changes involved and attachments based upon documents and proposals submitted by Contractor, or requests from Owner, or both.

Once Engineer has completed and signed the form, all copies should be sent to Owner or Contractor for approval, depending on whether the Change Order is a true order to the Contractor or the formalization of a negotiated agreement for a previously performed change. After approval by one contracting party, all copies should be sent to the other party for approval. Engineer should make distribution of executed copies after approval by both parties.

If a change only applies to price or to times, cross out the part of the tabulation that does not apply.

Field Order

No. _____

Date of Issuance: _____ Effective Date: _____

Project:	Owner:	Owner's Contract No.:
Contract:		Date of Contract:
Contractor:		Engineer's Project No.:

Attention:

You are hereby directed to promptly execute this Field Order issued in accordance with General Conditions Paragraph 9.04.A, for minor changes in the Work without changes in Contract Price or Contract Times. If you consider that a change in Contract Price or Contract Times is required, please notify the Engineer immediately and before proceeding with this Work.

Reference: _____
(Specification Section(s)) (Drawing(s) / Detail(s))

Description:

Attachments:

	Engineer:
--	-----------

Receipt Acknowledged by Contractor:	Date:
-------------------------------------	-------

Copy to Owner

SECTION 01025

UNIT PRICE ITEMS
(BID ITEM DESCRIPTIONS)

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Price make-up.
- B. Elements of Bid Item Description page.
- C. List of unit price items.
- D. Bid Item Descriptions - Attached pages.

1.02. PRICE MAKE-UP

- A. Unit prices bid by Contractor are deemed to be full compensation for all required labor, products, tools, equipment, plant, transportation, testing, inspection, services, incidentals, administrative, procedures, applicable taxes, permit fees, overhead, profit, and other miscellaneous expenses.

1.03. ELEMENTS OF BID ITEM DESCRIPTION PAGE

- A. Identification of unit price item, as set forth in the Bid Form.
- B. Brief statement of work involved in the item.
- C. Listing of components of work which make-up, the item including reference to the specification section(s) covering each component.
- D. Cross-references to associated work not included in the item.
- E. Criteria to be applied in measuring number of completed units, for payment purposes.
- F. Limitations, if any, imposed on the measurement of completed units, for payment purposes.

1.04. LIST OF UNIT PRICE ITEMS - CONTRACT NO. 5

Bid Item No. and Title	Bid Item Description Number
Removal of Debris	B-1
Cleaning of Pipelines	B-2

1.05. BID ITEM DESCRIPTIONS

- A. Bid Item Description pages are attached at the end of this Specification section.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

UNIT PRICE ITEM

BID ITEM B-1REMOVAL OF DEBRIS

- A. DESCRIPTION Under this item, the Contractor provide all equipment, tools, labor and materials necessary to clean and remove wastewater, dirt, sand, grit, sludge, gravel and all other debris from designated sand traps, pump stations, wet wells, and manholes.
- B. WORK INCLUDED UNDER THIS ITEM Removal of Debris (Section 02131)
- C. ASSOCIATED WORK NOT INCLUDED UNDER THIS ITEM None
- D. METHOD OF PAYMENT Payment for this item will be made on the basis of gallons of debris removed.
- E. MEASUREMENT AND LIMITS The quantity for which payment will be made shall be the total gallons of debris removed, as measured by the hauling Contractor and Engineer in place.

UNIT PRICE ITEM

BID ITEM B-2CLEANING OF PIPELINES

- A. DESCRIPTION Under this item, the Contractor provide all equipment, tools, labor and materials necessary to pressure clean designated pipelines.
- B. WORK INCLUDED UNDER THIS ITEM Cleaning of Underground Pipelines (Section 02762)
- C. ASSOCIATED WORK NOT INCLUDED UNDER THIS ITEM Cleaning and Removal of Debris From Manholes, Pump Stations, and Sand Traps
- D. METHOD OF PAYMENT Payment for this item will be per linear feet of pipe cleaned.
- E. MEASUREMENT AND LIMITS The quantity for which payment will be made shall be the total linear feet of pipe as field measured by the Engineer.

SECTION 01026
LUMP SUM ITEMS
(BID ITEM DESCRIPTIONS)

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Price make-up.
- B. Elements of Bid Item Description page.
- C. List of lump sum items.
- D. Bid Item Descriptions - Attached pages.

1.02. RELATED SECTIONS

- A. Bid Form - Schedule of Prices.
- B. Section 01010 - SUMMARY OF WORK: Work covered by Contract Documents.

1.03. PRICE MAKE-UP

- A. Lump sum prices bid by Contractor are deemed to be full compensation for all required labor, products, tools, equipment, plant, transportation, testing, inspection, services, incidentals, administrative procedures, applicable taxes, permit fees, overhead, profit, and other miscellaneous expenses.

1.04. ELEMENTS OF BID ITEM DESCRIPTION PAGE

- A. Identification of lump sum item, as set forth in the Bid Form.
- B. Brief statement of work involved in the item.
- C. Listing of components of work which make-up the item including reference to the Section(s) covering each component.
- D. Cross-references to associated work not included in the item.

1.05. LIST OF LUMP SUM ITEMS - CONTRACT NO. 5

Bid Item No. and Title	Bid Item Description Number
General Construction	A-1

1.06. BID ITEM DESCRIPTIONS

- A. Bid Item Description pages are attached at the end of this specification section.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

LUMP SUM ITEM

BID ITEM A-1GENERAL CONSTRUCTION

- A. DESCRIPTION Under this Bid Item, the Contractor shall provide all labor, materials, and equipment necessary to construct the work for the OCRRA "Sanitary/Leachate System Rehabilitation" in accordance with the Contract Documents and as described in Section 01010, Article 1.03.
- B. WORK INCLUDED UNDER THIS ITEM Summary of Work (Section 01010)
 Contract Considerations (Section 01019)
 Coordination and Meetings (Section 01039)
 Submittals (Section 01300)
 Quality Control (Section 01400)
 Construction Facilities and Temporary Controls (Section 01500)
 Material and Equipment (Section 01600)
 Equipment-General (Section 01640)
 Starting of Systems (Section 01650)
 Contract Closeout (Section 01700)
 Demolition (Section 02030)
 Protection of Existing Facilities (Section 02205)
 Pressure Test of Force Mains (02741)
 Bypass Pumping (02769)
 Pumping Equipment-General (Section 11300)
 Submersible Pumps (Section 11310)
 Inside Process Piping (Section 15060)
 Inside Process Valves (Section 15100)
- C. ASSOCIATED WORK NOT INCLUDED UNDER THIS ITEM All other Bid Items
- D. METHOD OF PAYMENT Payment will be made on a lump sum basis.
- E. MEASUREMENT AND LIMITS Measurement shall be based on the completion of all activities including labor, equipment and materials necessary to complete specified construction work. Perform the work as listed under Item A-1 as shown on Contract Drawings and as directed by Engineer and Owner.

SECTION 01039
COORDINATION AND MEETINGS

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Coordination.
- B. Openings, chases, sleeves, inserts, etc.
- C. Field engineering.
- D. Preconstruction conference.
- E. Progress meetings.
- F. Alteration project procedures.
- G. Cutting and patching.

1.02. RELATED SECTIONS

- A. General Conditions
 - 1. Article 2; Paragraph 2.06: Preconstruction Conference; Designation of Authorized Representatives.
 - 2. Article 2; Paragraph 2.07: Initial Acceptance of Schedules.
 - 3. Article 4; Paragraph 4.05: Reference Points.
 - 4. Article 6; Paragraph 6.02: Labor; Working Hours.
 - 5. Article 6; Paragraph 6.06.D: Coordination of Subcontractor's Work.
 - 6. Article 7; Paragraphs 7.01.B and 7.01.C: Work by Other Contractors.
 - 7. Article 7; Paragraph 7.02: Coordination of Project.

1.03. COORDINATION

- A. Coordinate scheduled work sequences and related operations beforehand with appropriate local, county, or state officials and agencies including affected property owners, when project is to be located in or adjacent to the public right-of-way.
- B. Coordinate scheduling, submittals, and Work of the various Sections of specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- C. Verify that utility requirement 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, such equipment.

- D. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- E. In finished areas, except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate completion and clean-up of work of separate sections in preparation for Substantial Completion.
- G. 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.

1.04. OPENINGS, CHASES, SLEEVES, INSERTS, ETC.

- A. The Contractor shall provide all openings, chases, etc., in his work to fit his own work and that of other Contractors. All such openings or chases shown on the Contract Drawings, or as required to perform the work, or reasonably implied thereby, or as confirmed or modified by shop drawings approved by the Engineer, or shown on manufacturer's erection drawings, shall be provided by the Contractor.
- B. Where pipes or conduits are to pass through slabs or walls, or where equipment frames or supports are to be installed as an integral part of an opening, the sleeves opening forms or frames shall be furnished by the installer of the pipes, conduits or equipment, but shall be placed by the Contractor. Where hanger inserts, anchor bolts and similar items are to be installed as an integral part of a slab or wall, they shall be furnished by the installer of the pipe or other equipment requiring the same, but shall be placed by the Contractor.
- C. When requested by the Contractor, the installer of the pipes, conduit or equipment, including those Contractors who require openings or chases in slabs and walls for passage of ducts, mounting of equipment, etc., shall furnish all necessary information, instructions and materials to effect accurate installation of the required openings, chases, sleeves, frames, inserts, etc. When such items are secured in position, and just prior to construction of the surrounding slab or wall, the Contractor for whom the items are installed shall ascertain the proper number, locations and settings thereof, and the Contractor shall schedule his operations so as to provide a reasonable opportunity and time interval for such inspection.
- D. After installation of the pipe, conduit or duct is completed, the installer shall be responsible for sealing the annular space around the installed pipe, conduit or duct in accordance with the requirements of the applicable local, state or national building code.
- E. Any cost resulting from correction of defective, ill-timed or misallocated work, or for subsequent work which becomes necessary because of omitted openings, chases, sleeves, frames, inserts, etc, shall be borne by the Contractor responsible therefore. To this end, no Contractor shall arbitrarily cut, drill, alter, damage or otherwise endanger the work of another Contractor. The nature and extent of any corrective or additional work shall be subject to the approval of the Engineer following consultation with the Contractors involved.

1.05. FIELD ENGINEERING

- A. Control datum for survey work is that provided by Engineer as shown on the Drawings.

- B. Engineer reserves right to inspect or check results of field engineering services provided under paragraph 1.05.C for conformance with Contract Documents.
- C. Contractor shall provide field engineering services as follows:
 - 1. Employ a land surveyor licensed in the State of New York and acceptable to Engineer.
 - 2. Protect all control and reference points. Accurately replace any such point which is damaged or moved.
 - 3. Provide correct lines, grades, locations and elevations for construction of all Project components.
 - 4. Provide correct information for preparation of project record documents.
 - 5. Submit a copy of registered site drawing and certificate signed by the land surveyor who provided field engineering services that the locations and elevations of the work are in conformance with the Contract Documents.

1.06. PRECONSTRUCTION CONFERENCE

- A. Engineer will schedule a conference after the Effective Date of Agreement.
- B. Attendance Required - Owner, Engineer, and Contractor.
- C. Agenda
 - 1. Distribution of extra sets of Contract Documents.
 - 2. Submission of list of subcontractors, list of products, Schedule of Values, and progress schedule.
 - 3. Designation of personnel representing the parties in contract, and the Engineer.
 - 4. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, change orders and contract closeout procedures.
 - 5. Scheduling.
 - 6. Scheduling activities of jet cleaning.
 - 7. Requirements of regulatory agencies.
 - 8. Use of premises by Owner and Contractor.
 - 9. Temporary facilities to be provided by Owner; and by Contractor.
 - 10. Procedures for testing.
 - 11. Procedures for maintaining record documents.
 - 12. Maintenance of vehicular traffic detours etc.
 - 13. Periodic cleanup of site.

14. Notification of utilities' owners.

D. Engineer will record minutes and distribute copies to participants.

1.07. PROGRESS MEETINGS

A. Owner will schedule and administer meetings throughout progress of the work at maximum monthly intervals.

B. Owner will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings, record minutes, and distribute copies within five days to participants.

C. Attendance Required - Owner, Engineer, Job superintendent, major subcontractors and suppliers, as appropriate to agenda topics for each meeting.

D. Agenda

1. Review minutes of previous meetings.
2. Review of work progress.
3. Field observations, problems, and decisions.
4. Identification of problems which impede planned progress.
5. Review of submittals schedule and status of submittals.
6. Review of off-site fabrication and delivery schedules.
7. Maintenance of progress schedule.
8. Corrective measures to regain projected schedules.
9. Planned progress during succeeding work period.
10. Coordination of projected progress.
11. Maintenance of quality and work standards.
12. Effect of proposed changes on progress schedule and coordination.
13. Other business relating to work.

1.08. ELECTRONIC COMMUNICATION REQUIREMENTS

A. Submit each shop drawing in electronic format in accordance with Section 01300, Submittals.

B. Request for Information (RFI) – Shall be submitted in electronic format. Information should include, but not be limited to:

1. Document sent from/to information.
2. RFI number.
3. Date created.

4. RFI title/description.
 5. Question.
 6. Proposed solution.
 7. Referenced Drawing.
 8. Referenced specification section.
 9. Attachments - Provide all additional information relative to the RFI such as sketches, drawings, product data, etc. in pdf format.
- C. Submit construction photographs required under Section 01300, Submittals, electronically as attachments in .pdf format.
- D. Submit all letters and memorandums not related to items previously described in this Article in .pdf form via email.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.01. ALTERATION PROJECT PROCEDURES

- A. Materials - As specified in product sections; match existing products and work for patching and extending work.
- B. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity.
- C. Remove, cut, and patch work in a manner to minimize damage and to provide a means of restoring products and finishes to specified condition.
- D. Refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent finishes.
- E. Where new work abuts or aligns with existing, perform a smooth and even transition. Patched work to match existing adjacent work in texture and appearance.
- F. When finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Engineer.
- G. Where a change of plane of 1/4 inch or more occurs, submit recommendation for providing a smooth transition for Engineer review.
- H. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- I. Finish surfaces as specified in individual product sections.

3.02. 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 which affects:
 - 1. 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 which will avoid damage to other work, and provide proper surfaces to receive patching and finishing.
- E. Cut rigid 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 an assembly, refinish entire unit.
- J. Identify any hazardous substance or condition exposed during the work to the Engineer in writing for decision or remedy.

END OF SECTION

SECTION 01300

SUBMITTALS

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Submittal procedures.
- B. Construction progress schedules.
- C. Proposed products list.
- D. Product data.
- E. Shop drawings.
- F. Samples.
- G. Manufacturers' instructions.
- H. Manufacturers' certificates.
- I. Construction photographs.

1.02. RELATED SECTIONS

- A. General Conditions
 - 1. Article 2; Paragraphs 2.05 and 2.07.A: (Schedules).
 - 2. Article 6
 - a. Paragraph 6.04: Progress Schedule.
 - b. Paragraph 6.17: Shop Drawings and Samples.
 - c. Paragraphs 6.17.C through 6.17.E: Submittal Procedures.
 - 3. Article 14; Paragraph 14.07.A: Final Payment (Delivery of Required Documents).
- B. Supplementary Conditions - Refer to the appropriate "SC" paragraphs which supplement or modify the above numbered paragraphs of the General Conditions.
- C. Section 01640 - EQUIPMENT-GENERAL
- D. Section 01700 - CONTRACT CLOSEOUT

1.03. SUBMITTAL PROCEDURES

- A. Transmit each required submittal using Engineer-accepted form. Email submittal is acceptable up to 8 MB. Electronic submittal over 8 MB must be arranged if acceptable to Engineer or delivered as hard copies.

B. Number the submittals as follows:

1. First - Specification section number.
2. Submittal number within the specification section.
3. Review cycle number.
4. Title of submittal.

For example:

15073-01-01 – Field lock gaskets for DIP (first review cycle)
15073-01-02 - Field lock gaskets for DIP (second review cycle)
15073-02-01 – Flange pipe and fittings (first review cycle)
15073-02-02 – Flange pipe and fittings (second review cycle)
15073-02-03 – Flange pipe and fittings (third review cycle)

C. Identify project, Contractor, subcontractor or supplier; pertinent Drawing sheet and detail number(s), and specification section number, as appropriate.

D. Apply Contractor's stamp, signed or initialed certifying that review, verification of products required, field dimensions, adjacent construction work, and coordination of information, is in accordance with the requirements of the work and Contract Documents. Stamp shall show the following information:

1. Shop Submittal Number _____
2. Deviations: None _____; As Listed _____
3. Reference Specification Number _____
4. Reference Drawing Number _____
5. Space Requirement: As Designed _____ Different, As Listed _____
6. Representation is made to the Owner and Engineer that the Contractor has determined and verified all field measurements and quantities, field construction criteria, materials, catalog numbers and similar data, that he has reviewed and coordinated the information in each shop drawing with the requirements of the work and the Contract Documents, and hereby approves this submittal.

Contractor _____

Signature _____

Date _____

E. Schedule submittals to expedite the project, and deliver to Engineer at business address. Coordinate submission of related items.

F. Identify deviations from Contract Documents and product or system limitations which may be detrimental to successful performance of the completed work. Identify space requirements which differ from those designed or shown on the Contract Documents.

- G. Provide space for Contractor and Engineer review stamps.
- H. Revise and resubmit submittals as required, identify all changes made since previous submittal.
- I. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.
- J. Submittals not requested will not be recognized or processed.
- K. Contractor is responsible to reimburse the Owner for costs incurred by Owner for Engineer submittal review for submittals requiring two resubmittals or more.

1.04. CONSTRUCTION PROGRESS SCHEDULES

- A. Submit preliminary progress schedule in duplicate within 10 days after date indicated in the Notice to Proceed for Engineer review.
- B. Submit finalized progress schedule at least 10 days before submission of the first Application for Payment.
- C. Submit revised schedules at each progress meeting, identifying changes since previous version.
- D. Schedule and monitor all work using Critical Path Method (CPM) techniques. Scheduling software shall be Primavera P3 or Microsoft Project.
- E. Show complete sequence of construction by activity, identifying work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates, and duration.
- F. Indicate estimated percentage of completion for each item of work at each progress meeting.
- G. Indicate submittal dates required for shop drawings, product data, samples, and product delivery dates, including those furnished by Owner.

1.05. PROPOSED PRODUCTS LIST

- A. Within 10 days after date indicated in the Notice to Proceed, submit complete list of major products proposed for use, with name of manufacturer, trade name, and model number of each product, and appropriate specification section number.
- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.06. PRODUCT DATA

- A. Submit digital copy to Engineer if under 8 MB in size, if digital file is over 8 MB, submit three copies of which will be retained by the Engineer. Submission of digital files over 8 MB must be prearranged with the Engineer and may require the Contractor to supply a large file transfer service.
- B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this project.

- C. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- D. After review and approval by Engineer, distribute in accordance with Article 1.03. Provide copies for required record documents described in Section 01700, Contract Closeout.

1.07. SHOP DRAWINGS

- A. Submit digital copy to Engineer if under 8 MB in size, if digital file is over 8 MB, submit three copies of which will be retained by the Engineer. Submission of digital files over 8 MB must be prearranged with the Engineer and may require the Contractor to supply a large file transfer service.
- B. After review and approval by Engineer, reproduce and distribute copies in accordance with Article 1.03. Provide copies for required record documents described in Section 01700, Contract Closeout.

1.08. SAMPLES

- A. Submit samples to illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- B. Submit samples of finishes in custom colors selected, textures, and patterns for Engineer's selection.
- C. Include identification on each sample, with full project information.
- D. Submit the number of samples specified in individual specification sections
- E. Reviewed samples which may be used in the work are indicated in individual specification sections.

1.09. MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing, in quantities specified for product data.
- B. When specified in Section 01640, Equipment-General, submit manufacturer's operation and maintenance instructions for equipment supplied for this project. Manuals shall be delivered prior to 60 percent completion point of project, and shall be prepared in accordance with Section 01640, Equipment-General.
- C. Identify conflicts between manufacturers' instructions and Contract Documents.

1.10. MANUFACTURER'S CERTIFICATES

- A. When specified in individual specification sections, submit manufacturer's certificate to Engineer for review, in quantities specified for product data.
- B. Indicate that 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 Engineer.

- D. When specified in Section 01640, Equipment-General, or individual specification sections, submit manufacturer's performance affidavit for equipment to be furnished for this project. Affidavits shall be of format and content prescribed in Section 01640, Equipment-General, and shall be included with the shop drawing or product data submittal for the item of equipment to be furnished.

1.11. CONSTRUCTION PHOTOGRAPHS

- A. Take digital pre-construction photographs of physical features on work areas which may be disturbed by Contractor's operations:
 - 1. Take photographs just prior to start of construction in a particular area.
 - 2. Camera angle, direction, and frequency will be dictated by range and nature of physical features to be recorded.
 - 3. Provide all digital copies of the photographs taken. Identify digital photos with date, time, orientation, and project identifications.
- B. Take digital construction photographs of job progress and completed project as follows:
 - 1. Take site photographs from differing directions and interior photographs of structures indicating relative progress of the work on a daily and weekly basis.
 - 2. Engineer will request additional digital photographs if the submitted digital copies are not enough. Contractor is required to provide additional digital photographs if requested.
- C. Take digital post construction photographs.
- D. Each month, provide two CDs or portable hard drive with electronic versions of all prints taken in the past month (in .jpeg format).

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 01400
QUALITY CONTROL

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Quality assurance and control of installation.
- B. References and standards.
- C. Tolerances.
- D. Field samples.
- E. Inspection and testing services.
- F. Testing by Contractor.
- G. Manufacturers' field services and reports.

1.02. RELATED SECTIONS

- A. General Conditions
 - 1. Article 3
 - a. Paragraph 3.02: Reference Standards.
 - b. Paragraph 3.03: Reporting and Resolving Discrepancies.
 - 2. Article 6 - Paragraph 6.17: Shop Drawings and Samples.
 - 3. Article 13 - Paragraph 13.02: Access to Work. Paragraph 13.03: Tests and Inspections.
- B. Supplementary Conditions - Refer to the appropriate "SC" paragraphs that supplement or modify the above numbered paragraphs of the General Conditions.
- C. Section 01019 - CONTRACT CONSIDERATIONS
- D. Section 01300 - SUBMITTALS: Manufacturers' instructions and certificates.

1.03. QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.

- D. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- E. Comply with specified standards as a minimum quality for the work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- F. Perform work by persons qualified to produce workmanship of specified quality.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.04. REFERENCES AND STANDARDS

- A. Conform to reference standard by date of issue current on date for receiving bids, date of Owner-Contractor Agreement when there are no Bids, date specified in individual sections, except where a specific date is established by code.
- B. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- C. Should specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.

1.05. 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. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

1.06. FIELD SAMPLES

- A. Furnish field samples at the site as required by individual specification sections for review.
- B. Acceptable samples represent a quality level for the work.
- C. Where field sample is specified in individual sections to be removed, clear area after field sample has been accepted by Engineer.

1.07. INSPECTION AND TESTING BY LABORATORY SERVICES

- A. 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 those tests and inspections identified in paragraph 13.03.B of the General Conditions.
- B. Contractor shall employ and pay for the services of an independent testing laboratory, acceptable to Owner and Engineer, to perform tests and inspections required by the Contract Documents.

C. Independent testing laboratory shall:

1. Perform inspections, tests, and other services specified in the individual specification sections and as required by Engineer and Owner.
2. Perform inspecting, testing, and source quality control which may occur on or off project site, as required by Engineer or Owner.
3. Prepare and submit reports to the Engineer, in indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents. Engineer will forward copy of report(s) to Contractor.

D. Contractor shall:

1. Cooperate with independent firm; furnish samples of materials; furnish design mix, equipment, tools, storage and assistance as requested.
2. Notify Engineer and independent firm 24 hours prior to expected time for operations requiring services.
3. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's own use.

E. Retesting required because of non-conformance to specified requirements shall be performed, on instructions by the Engineer, by the same independent firm which performed the initial tests and inspections, whether employed by Owner or Contractor.

F. Payment for retesting will be the Contractor's expense with no change in the contract price.

1.08. TESTING BY CONTRACTOR

A. General Contractor shall furnish required labor, facilities, tools, equipment, compressed air, water and electric power for tests, and:

1. Conduct hydrostatic and/or pressure tests on installed utilities, process piping, valves, air piping, tanks, structures, in accordance with individual sections of the specifications.
2. Pay all costs associated with such tests.

1.09. MANUFACTURERS' FIELD SERVICES AND REPORTS

- 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, as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Engineer 30 days in advance of required observations. Observer subject to approval of Engineer and Owner.
- C. Report observations, site conditions, or instructions given to applicators or installers, that are supplemental or contrary to manufacturers' written instructions.
- D. Submit report in duplicate within 30 days of observation to Engineer for review.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 01500

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Temporary Utilities - Electricity, lighting, heating, cooling, ventilation, cellular phone, water, and sanitary facilities.
- B. Temporary Controls - Barriers, enclosures and fencing, protection of the work, water control and pollution controls.
- C. Construction Facilities - Security, access roads, parking, maintenance of traffic, and progress cleaning.

1.02. RELATED SECTIONS

- A. General Conditions
 - 1. Article 4 - Paragraph 4.01: Availability of Lands.
 - 2. Article 6
 - a. Paragraph 6.03.A: Services, Materials and Equipment.
 - b. Paragraph 6.11: Use of Site and Other Areas.
 - c. Paragraph 6.13: Safety and Protection.
- B. Supplementary Conditions - Refer to the appropriate "SC" paragraphs which supplement or modify the above numbered paragraphs of the General Conditions.
- C. Section 01700 CONTRACT CLOSEOUT: Final cleaning.

1.03. TEMPORARY ELECTRICITY

- A. General Contractor shall provide and pay for power service required from utility source, for his operations and those of other contractors, including equipment, job trailers, etc.
- B. Power consumption shall not disrupt Owner's need for continuous service.

1.04. TEMPORARY LIGHTING

- A. General Contractor shall provide and maintain lighting for his operations to achieve appropriate lighting and for security purposes.

1.05. TEMPORARY HEATING

- A. General Contractor shall provide and pay for heat devices and heat as required to maintain specified conditions for their construction operations including work areas.

1.06. TEMPORARY COOLING

- A. General Contractor shall provide and pay for cooling devices and cooling as needed to maintain specified conditions for their construction.

1.07. TEMPORARY VENTILATION

- A. General Contractor shall ventilate enclosed areas to achieve cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases for their operations.

1.08. CELLULAR PHONE

- A. Contractor shall provide, maintain, and pay for a smart phone with internet service to be exclusively used by Resident Project Representative for the duration of the contract. Contractor shall pay for all costs associated with the use of the cellular phone, including unlimited voice, voice mail, email, text, and data plans with uninterrupted service over the entire project area and surrounding locality.

1.09. TEMPORARY WATER SERVICE

- A. General Contractor shall provide, and maintain suitable quality water service required for their construction operations by connecting to Owner's existing water source.
- B. General Contractor shall provide separate metering and reimburse Owner for cost of water used.
- C. General Contractor shall extend branch piping with outlets located so water is available by hoses with threaded connections. Provide temporary pipe insulation to prevent freezing, if necessary.
- D. Each Contractor shall provide sufficient potable quality drinking water for [workers at project site.

1.10. TEMPORARY SANITARY FACILITIES

- A. General Contractor shall provide and maintain required sanitary facilities and enclosures for use by all persons employed at the site. Provide at time of mobilization. Existing facilities shall not be used.
- B. General Contractor shall remove facilities from site at end of construction.
- C. Facilities shall be maintained in conformance with applicable state regulations and local ordinances. Contents shall be removed and disposed of in satisfactory manner by General Contractor as occasion requires.
- D. Each Contractor shall enforce sanitary regulations amongst employees and take precautions against infectious diseases as deemed necessary. Isolate infected employee(s) and arrange for immediate removal of such person(s) from site.

1.11. BARRIERS

- A. General Contractor shall provide barriers to prevent unauthorized entry to construction areas to allow for Owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for Owner's access to existing buildings.
- C. Provide protection for plant life designated to remain. Replace damaged plant life. All plant life is designated to remain unless otherwise shown on the contract drawings or as ordered by the Owner.
- D. Protect non-owned vehicular traffic, stored materials, site and structures from damage.
- E. Supplement barriers with suitable signs, railings and night lights, as necessary, to conform with governing authorities and regulations.

1.12. FENCING

- A. General Contractor shall provide fence as necessary around construction areas to protect their work.
- B. Construction - Contractor's option.

1.13. WATER CONTROL

- A. General Contractor shall 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.

1.14. EXTERIOR ENCLOSURES

- A. General Contractor shall provide temporary weather tight closure of exterior openings to accommodate acceptable working conditions and protection for products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

1.15. PROTECTION OF INSTALLED WORK

- A. Each Contractor shall protect their installed work from damage and deterioration due to floods, driving rain, wind, snow storms or freezing temperatures; 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 minimize 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. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic over landscaped areas.

- G. Owner reserves right to order that additional protective measures be taken beyond those proposed by Contractor, to safeguard the work.

1.16. SECURITY

- A. General Contractor shall provide security and facilities to protect their work, and that of other Contractor's including existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate security measures taken with Owner's own security program.

1.17. ACCESS ROADS

- A. General Contractor shall provide and maintain temporary access roads to project site as follows:
 - 1. Extend and relocate roads as work progress requires. Provide detours as necessary for unimpeded traffic flow.
 - 2. Roads shall be free for use by all personnel involved in project, and be adequate for transportation of persons, materials, equipment and products to construction area.
 - 3. Maintain roads in serviceable condition, free of obstructions, potholes, ponded water, debris, accumulated snow and ice, until completion of project or until permanent access roads are installed.
 - 4. When no longer required, remove roads and rehabilitate disturbed areas to meet requirements of Contract Documents.
- B. Designated existing on-site roads may be used for construction traffic.

1.18. PARKING

- A. When site space is not adequate, General Contractor shall provide additional off-site parking.

1.19. MAINTENANCE OF TRAFFIC

- A. General Contractor shall maintain and regulate traffic within Contract Limits in accordance with applicable state, county, and local regulations.
- B. Conduct operations so as to maintain access for vehicular and pedestrian traffic to and from properties adjoining or adjacent to those streets and roads affected by construction activities, and to subject the public to a minimum of delay and inconvenience.
- C. Erect suitable signs and barricades including warning lights at night, to alert traveling public. Provide watchmen and flagmen as necessary to maintain and regulate traffic.
- D. Plan operations so that access to any dwelling, building or hospital is assured in case of fire or other emergency. Review with and obtain approval from local fire and police departments regarding anticipated detours and obstructions to traffic flow which could hinder passage of fire apparatus, ambulance or otherwise.

1.20. PROGRESS CLEANING

- A. General Contractor shall maintain areas free of waste materials, debris, and rubbish. Maintain site and structures in a clean and orderly condition, as follows:
 - 1. Remove debris and rubbish from pipe chases, plenums, attics, crawlspaces, and other closed or remote spaces, prior to enclosing the space.
 - 2. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
 - 3. Collect and remove waste materials, debris, and rubbish from site periodically and dispose offsite.
- B. Each Contractor shall store unused tools and equipment at their yard or base of operations.

1.21. POLLUTION CONTROLS

- A. Dust Control
 - 1. Each Contractor shall execute work by methods to minimize raising dust from construction operations.
 - 2. Provide positive means to prevent air-borne dust from dispersing into atmosphere.
- B. Erosion and Sediment Control
 - 1. General Contractor shall plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas.
 - 2. Minimize amount of bare soil exposed at one time.
 - 3. Provide temporary measures such as berms, dikes, and drains, to regulate water flow and prevent soil erosion.
 - 4. Periodically inspect earthwork in disturbed areas to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- C. Noise Control
 - 1. All construction equipment and tools exhibiting potential noise nuisance shall be provided with noise muffling devices.
 - 2. Confine use of such equipment and tools during regular working hours
- D. Pollutants Control - 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.

1.22. REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Respective Contractors responsible for temporary utilities, facilities, and controls shall remove temporary utilities, equipment, facilities, controls, materials, prior to Final Application for Payment.

- B. Remove temporary barriers, enclosures, etc. in concert with completion of those segments of work which no longer require such measures.
- C. Remove temporary underground installations.
- D. Clean and repair damage caused by installation or use of temporary work.
- E. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 01600
MATERIAL AND EQUIPMENT

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Products.
- B. Transportation and handling.
- C. Storage and protection.
- D. Substitutions.

1.02. RELATED SECTIONS

- A. General Conditions
 - 1. Article 6
 - a. Paragraph 6.03.B: Services, Materials and Equipment.
 - b. Paragraph 6.05: Substitutes and "Or Equals."
 - c. Paragraph 6.13.A: Storage of Material and Equipment.
- B. Supplementary Conditions - Refer to the appropriate "SC" paragraphs that supplement or modify the above numbered paragraphs of the General Conditions.
- C. Section 01400 - QUALITY CONTROL: Product quality monitoring.

1.03. PRODUCTS

- A. Products - Means new material, machinery, components, equipment, fixtures, and systems forming the work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the work. Products may also include existing materials or components required for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- C. Provide interchangeable components of the same manufacturer, for components being replaced.

1.04. TRANSPORTATION AND HANDLING

- A. Arrange deliveries of products in accordance with construction progress schedules. Allow time for inspection prior to installation.
- B. Coordinate deliveries to avoid conflict with work, conditions at site, work of other Contractors, work of Owner, and availability of personnel and handling equipment.

- C. Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging, dry, with identifying labels intact and legible.
- D. Provide equipment and personnel to handle products by methods to prevent soiling or damage. Protect sensitive equipment and finishes against impact, abrasion and other damage.
- E. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

1.05. STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.
- B. For exterior storage of fabricated products, place on sloped supports, above ground.
- C. Provide off-site storage and protection when site does not permit on site storage or protection.
- D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of Products.
- E. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained in acceptable condition.

1.06. SUBSTITUTIONS

- A. Engineer will consider requests for Substitutes or "Or Equal" items after the Effective Date of the Owner-Contractor Agreement, and then only within the time constraints stipulated in paragraph SC-6.05.A of the Supplementary Conditions.
- B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor. Furnish evidence that product is unavailable.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the Contractor:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same warranty for the substitution as for the 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 the costs incurred by Owner for review and any subsequent redesign services by Engineer, including Engineer's revisions to the Contract Documents, and Engineer's assistance in connection with review by authorities when re-approval is required, if Engineer determines that the item of material or equipment proposed by Contractor is a substitute item.
- 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 the Contract Documents.
- F. Substitution Submittal Procedure
1. Submit request for substitution for consideration. Limit each request to one proposed substitution.
 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence.
 3. The 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

SECTION 01640
EQUIPMENT-GENERAL

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Submittals.
- B. Performance affidavit.
- C. Shop drawings.
- D. Equipment design.
- E. Spare parts.
- F. Equipment identification.
- G. Standardization of grease fittings.
- H. Anchors and supports.
- I. Shop tests.
- J. Installation of equipment.
- K. Field tests.
- L. Services of manufacturer's representative.
- M. Operation and maintenance instructions.
- N. Lubrication schedule.
- O. Failure of equipment to perform.
- P. Guarantee.
- Q. Schedule of Equipment Testing and Manufacturer's Services.

1.02. RELATED SECTIONS

- A. Section 01300 - SUBMITTALS: Submittal procedures and submittal items.
- B. Section 01400 - QUALITY CONTROL: Installation, testing and field services.
- C. Section 01600 - MATERIAL AND EQUIPMENT
- D. Section 01650 - STARTING OF SYSTEMS: Field testing.
- E. Section 11300 - PUMPING EQUIPMENT-GENERAL
- F. Section 11310 - SUBMERSIBLE PUMPS

1.03. SUBMITTALS

- A. Submit shop drawings in accordance with Section 01300, Submittals.
- B. Submit performance affidavits with applicable shop drawings.
- C. Manufacturer's Installation Certificates.
- D. Certification of Equipment Compliance.
- E. Operations and maintenance manuals.
- F. Training Plans
 - 1. Submit no less than 30 days prior to proposed date for training in accordance with procedures identified in Section 01300, Submittals.
 - 2. Training plan must be approved by Engineer prior to scheduling actual date for training.
 - 3. Provide syllabus with sufficient detail to establish content of training, duration of each topic, and demonstrate adequate content to train Owner's staff on proper operation and maintenance of equipment.
- G. DVD recordings of training sessions (to be completed by and coordinated with the Contractor).
- H. Written training reports.
- I. Guarantees.

1.04. PERFORMANCE AFFIDAVITS

- A. Provide performance affidavits for products listed in the Schedule of Equipment Testing and Manufacturer's Services, included at the end of this section, and as required in the individual technical sections.
 - B. Submit performance affidavits in conformance with Section 01300, Submittals.
 - C. Performance affidavits shall be developed by each manufacturer and shall certify to Contractor and Owner, jointly, that manufacturer has examined the Contract Documents and that the equipment, apparatus, process, or system will meet the performance requirements set forth in the Contract Documents in every way. Equipment design, manufacturing, and assembly specifications are an integral part of the performance requirements.
 - D. Shop drawings will not be reviewed prior to receipt by the Engineer of an acceptable performance affidavit.
 - E. The performance affidavit must be signed by an officer (vice president or higher) of the basic corporation, partnership or company manufacturing the equipment, and witnessed by a notary public.
 - F. The performance affidavits shall be in the following format:
- G. Addressed to: (Contractor) and (Owner)
- H. Reference: Contract No. _____
 (Project)

- I. Text: "(manufacturer's name) has examined the Contract Documents and verified that the _____ (product) _____ meets in every way the performance requirements and design specifications set forth in Section(s) _____ of the Contract Documents."
- J. Signature: Corporate officers shall be vice president or higher (unless statement authorizing signature is attached).
- K. Notary: Signature(s) must be notarized.

1.05. SHOP DRAWINGS

- A. Provide shop drawing submittals as specified in Section 01300, Submittals
- B. Shop drawing submittals shall include all descriptive data, performance characteristics, material specifications, spare parts list, drawings, piping diagrams, wiring schematics, and shall be complete and accurate to indicate item-by-item compliance with the Contract Documents.
- C. All catalog cuts, manufacturer's specifications, drawings, and verbal descriptions shall be clearly marked to allow identification of the specific products used.
- D. If the submittal deviates from the requirements of the Specifications in any way, it shall be clearly marked in the submittal with the justifying reason stated for evaluation by the Engineer.
- E. Electrical and control submittals shall include a verbal description of the functions, metering equipment, alarm points, alarm sequences, and any other specific features provided.
- F. Electric motor submittals shall be in accordance with Section 01300, Submittals.

1.06. EQUIPMENT DESIGN

- A. Equipment and appurtenances shall be designed in conformity with ANSI, ASME, IEEE, NEMA and other generally accepted applicable standards.
- B. Equipment and appurtenances shall be of rugged construction and of sufficient strength to withstand all stresses which may occur during fabrication, testing, transportation, installation, all conditions of operation, or as required by specifications.
- C. All bearings and moving parts shall be adequately protected by bushings or other approved means against wear, and provision shall be made for adequate lubrication by readily accessible devices.
- D. Details shall be designed for appearance as well as utility. Protruding members, joints, corners, gear covers, etc., shall be finished in appearance. All exposed welds on machinery shall be ground smooth and the corners of structural shapes shall be rounded or chamfered.
- E. Machinery parts shall conform within allowable tolerances to the dimensions shown on the working drawings. The corresponding parts of identical machines shall be made interchangeable.
- F. All machinery and equipment shall be safeguarded in accordance with the safety codes of the ANSI and OSHA and the State Industrial Code. All rotating shafts, couplings or other moving pieces of equipment shall be provided with suitable protective guards of sheet metal or wire mesh neatly and rigidly supported. Guards shall be removable as necessary to provide access for repairs.
- G. Details promoting maintenance, ease of replacing parts, and lubrication shall be a prime consideration in design.

- H. Products shall be designed for corrosion resistance and shall not be constructed of materials which may prohibit ease of maintenance due to corrosion. All fasteners on areas requiring access for maintenance and lubrication shall be Type 316 stainless steel unless otherwise specified. Zinc or cadmium plated fasteners for these areas shall not be used.

1.07. SPARE PARTS

- A. Provide spare parts as required by individual specification sections.
- B. Provide spare parts that are identical and interchangeable with original parts.
- C. For each part (or group of small parts), provide a tag which shall carry the following information: Identity of the equipment the part is for; identity or name of the part itself; date and manufacturer's name and identification number of the part.

1.08. EQUIPMENT IDENTIFICATION

- A. Each piece of equipment shall be provided with a substantial brass or stainless steel nameplate, securely fastened in a conspicuous place and clearly inscribed with the manufacturer's name, year of manufacture, serial number and principal rating data.

1.09. STANDARDIZATION OF GREASE FITTINGS

- A. Provide grease fittings of the hydraulic type, Alemite #1600 Series or Lincoln.
- B. Coordinate grease fittings on all mechanical equipment to be compatible with a single type of grease gun.

1.10. ANCHORS AND SUPPORTS

- A. Obtain and install all necessary guides, bearing plates, anchor and attachment bolts, working drawings for installation, templates and all other appurtenances necessary for the installation of the equipment specified. Subcontractors furnishing equipment shall also furnish anchors and templates to the General Contractor.
- B. Anchor bolts shall be of size and strength suitable for purpose intended and shall be in accordance with the individual specification sections.
- C. Pipe sleeves or other means of adjusting anchor bolts shall be provided where indicated or needed. Equipment shall be leveled by first using sitting nuts on the anchor bolts and then filling the space between the equipment base and concrete pedestal with grout. Where equipment bases (i.e., pumps) are installed with grout holes, subsequent to field testing, those bases shall be totally filled with grout.

1.11. SHOP TESTS

- A. Arrange shop tests of the equipment indicated in the Schedule of Equipment Testing and Manufacturer's Services and individual equipment specification sections.
- B. Arrange for the Engineer to witness performance tests in the manufacturer's shop, if required by the individual specification section.
- C. Pump shop tests shall be conducted and reported in accordance with the Standards established by the Hydraulic Institute. Pump tolerances shall be within limits acceptable by these standards.

- D. Demonstrate by the tests that the equipment characteristics, including any specified pressure, duty, capacity, rating, efficiency, performance, function or other special requirements, comply fully with the requirements of the Contract Documents and that it will operate in the manner specified.
- E. Submit certified copies of the manufacturer's test data and interpreted results as required by Section 01300, Submittals.

1.12. INSTALLATION OF EQUIPMENT

- A. Install all equipment strictly in accordance with recommendations of the manufacturer.
- B. Submit all installation instructions as required by Section 01300, Submittals.
- C. Install pumps in accordance with Section 11300, Pumping Equipment-General.
- D. Install control panels in the same location of the existing control panels.

1.13. FIELD TESTS

- A. Perform field tests as specified in this section and in the individual specification sections.
- B. Functional testing - Perform final tests prior to startup. Provide services of the manufacturer's representative as required by the Schedule of Equipment Testing and Manufacturer's Services. Furnish labor, fuel, lubricants, energy, water and all other materials, equipment and instruments necessary for all acceptance tests. Schedule functional testing to consist of the following checks as a minimum:
 - 1. That the equipment is properly lubricated, adjusted and aligned.
 - 2. That the equipment meets the specified performance requirements in every detail and performs its intended function without any unusual vibration, noise or other signs of possible malfunction.
 - 3. Where equipment is capable of operation in more than one mode or equipment performs more than one function, each operational mode or function shall be checked for proper performance.
 - 4. All controls, both mechanical and electrical, shall be checked individually for proper connection and operation.

1.14. SERVICE OF MANUFACTURER'S REPRESENTATIVE

- A. Arrange for the equipment manufacturer to furnish the services of a qualified representative. The time period for the supervision and instructions is stated in the Schedule of Equipment Testing and Manufacturer's Services. Where no specific duration of visit is listed, the length of time shall be such to allow the equipment representative ample time to follow the requirements outlined in this section and the individual technical section covering the particular equipment item.
- B. The Contractor shall be responsible for any additional time required for the manufacturer's representative to resolve equipment installation and/or operation problems due to a lack of coordination between the supplied equipment and the Contract Documents such as, but not limited to, dimensions, electrical problems or performance.
- C. Arrange for the equipment representative to visit the site on occasions after initial start-up and during the first year of operation if requested by the Owner. The purpose of these visits shall be to review equipment operation, assist the operators in correcting operational problems and basic inspection of the equipment.

- D. Manufacturer's representative shall assist and supervise Contractor during installation, testing, and operation of equipment where specified in the Schedule of Equipment Testing and Manufacturer's Services and the individual specification sections.
- E. Manufacturer's representative shall provide all certificates specified in the Schedule of Manufacturer's Services and the individual specification sections.
 - 1. Installation Certificate - Submit one copy to both Owner and Engineer of manufacturer representative's Installation Certificate indicating that the manufacturer's representative has inspected the installation and that the equipment provided by their organization has been properly installed, aligned, lubricated, and is ready for operation.
 - 2. Certification of Equipment Compliance - Submit one copy to both Owner and Engineer of manufacturer representative's written Certification of Equipment Compliance indicating that the manufacturer's representative has witnessed the Functional Test for the equipment provided by their organization, final adjustments to the equipment have been made, the equipment has been tested to their satisfaction, and the equipment meets all performance and testing requirements included in the Contract Documents, excluding testing to be performed either during or after startup.
- F. Testing Reports
 - 1. Functional Test Reports - Submit one copy to both Owner and Engineer of manufacturer representative's written Functional Test reports including performance test results unless otherwise noted.
 - 2. Performance Testing During or After Startup - When the Contract Documents require performance testing to be conducted during or after startup, submit one copy of performance test results with an updated Certification of Equipment Compliance as previously specified.
- G. Training
 - 1. Manufacturer shall provide services of qualified, factory trained, operations and maintenance personnel to instruct Owner personnel in proper care, operation, and maintenance of equipment. At a minimum, training shall include:
 - a. Theory of operation.
 - b. Actual operation.
 - c. Mechanical maintenance.
 - d. Electrical maintenance.
 - e. Instrumentation and alarms.
 - f. Optimization of operation.
 - g. Safe operating and working practices and operation of safety devices.
 - h. Troubleshooting.
 - i. Demonstration of equipment startup procedures, operation, and shutdown procedures using equipment installed under this contract.

2. Training shall be scheduled with the Owner. Training times shall be dependent on the availability of required Owner staff.
 3. Trainer shall provide all materials and training manuals required for training in quantities required by Owner.
 4. Contractor shall hire a professional video production firm to digitally record and produce video from all training sessions. All videos shall be clear in picture and sound quality and free from shake or vibration. Videos should be edited to include dates of training, subject matter, trainer's name and affiliation, and length of video on the title credits and shall be edited to remove any gaps from the program. Unacceptable training videos should be re-recorded and re-produced.
 5. Provide one digital DVD recording of each training session to the Owner. DVDs and cases shall be labeled with project name, equipment description, date of training, trainer's name and affiliation.
 6. Trainer shall develop a written report for each training session. At a minimum, reports shall summarize training sessions, indicate any problems that may have been encountered during operation of equipment, and include a sign-in sheet identifying all attendees. Contractor shall submit one copy of each training report to both Owner and Engineer.
- H. Manufacturer or manufacturer's representative shall document equipment installation, checkout, startup, testing, and training on Form F-09, attached to this specification.

1.15. OPERATION AND MAINTENANCE INSTRUCTIONS

- A. Submit operation and maintenance instructions as required by the Schedule of Equipment Testing and Manufacturer's Services, including those instructions required by the applicable technical sections, in accordance with Section 01300, Submittals.
- B. Prior to equipment installation, submit electronic preliminary draft operation and maintenance manuals. All comments generated by Engineer during review of preliminary draft operation and maintenance manuals must be adequately addressed prior to submission of final draft operation and maintenance manuals
- C. Submit final draft electronic operation and maintenance manuals following training, testing, and startup. All comments generated by Engineer during review of final draft operation and maintenance manuals must be adequately addressed prior to submission of final operation and maintenance manuals
- D. Submit final electronic and (5) five hardcopy operation and maintenance manuals for record following approval of the final draft operation and maintenance manuals.
- E. Manual Preparation - Manuals shall include operation and maintenance information on all systems and items of equipment. The data shall consist of catalogs, brochures, bulletins, charts, schedules, approved shop drawings corrected to as-built conditions and assembly drawings and wiring diagrams describing location, operation, maintenance, lubrication, operating weight, lubrication charts and schedules showing manufacturer's recommended lubricants for each rotating or reciprocating unit, and other information necessary for Owner to establish effective operating and maintenance programs. The following shall also be included:
 1. Title page giving name and location of facility, drawing number where shown, and specification section where described.

2. Equipment cover sheet listing the supplied equipment manufacturer's name, brand name, model numbers, serial numbers, equipment installer (provide contact name, address, phone and fax numbers, and e-mail address), equipment supplier (provide contact name, address, phone and fax numbers, and e-mail address), and equipment manufacturer (provide contact name, address, phone and fax numbers, e-mail address, and website address),
3. Performance curves for all pumps and equipment.
4. Approved shop drawings of each piece of equipment.
5. Design criteria for the equipment, in table format. Information shall include standard size information such as length, width, or diameter, and capacity information such as flow and head that is not included in the nameplate table.
6. Troubleshooting in table format as follows:

Problem	Possible Causes	Corrective Action

7. Nameplate data for the equipment in table format. Nameplate information shall include data for the overall assembly and any major components such as motors, gear reducers, etc.
8. Manufacturer's cut sheets and dimensional drawings of each piece of equipment, and details of all replacement parts.
9. Manufacturer's erection, operation, and maintenance instructions for all equipment and apparatus, and complete listing of nameplate data.
10. Complete electrical and control schematics with labeled terminations for all individual pieces of equipment and systems including one line diagrams, schematic or elementary diagrams, and interconnection and terminal board identification diagrams.
11. A description of the controls provided with the equipment.
12. Complete piping and interconnecting drawings.
13. Complete parts list with parts assembly drawings (preferably by exploded view), names and addresses of spare parts suppliers, recommended list of spare parts to be kept "in stock" and sample order forms. Lead time requirements for ordering parts shall be estimated.
14. Instructions with easily understood schematics or diagrams for disassembling and assembling equipment for overhaul and repair.
15. Shop testing results where applicable.
16. Manufacturer's Installation Certificate.
17. Manufacturer's Certificate of Equipment Compliance.
18. Field testing/performance reports where applicable.

19. Manufacturer's equipment warranty.
20. Information not applicable to a specific piece of equipment installed on this project shall be removed from or crossed out on the submissions.
21. Illegible data due to any cause, including poor copy quality or reduction, will not be accepted. Manuals with illegible data will be rejected and returned for correction.

F. Organization - O&M manuals shall be organized as follows:

1. All information shall be bound into a series of 3- or 4-inch heavy-duty three-ring binders. Where necessary, more than one binder may be used to assemble the data. When two or more binders are used, each book or volume shall be titled to indicate its particular book or volume number and the total number of volumes per set (i.e., Volume 2 of 12). The Contractor shall plan manual content and shall "break" the data between volumes at reasonable locations so no loss in continuity of data presentation occurs.
2. Information shall be organized by specification section, each covering an individual equipment item.
3. Sections shall be listed in a Table of Contents at the front of each volume.
4. All shop drawings included in the binders and/or folders shall be those previously submitted for review and approval and shall bear Engineer's stamp of approval and comments as originally noted thereon.

G. Electronic Operations and Maintenance Data

1. Electronic operation and maintenance manuals shall be submitted in Adobe Acrobat Reader (.PDF) format.
2. Final operation and maintenance manuals shall be submitted on compact disks or on a portable harddrive.

1.16. LUBRICATION

- A. For equipment that requires lubrication, manufacturer shall prepare a lubrication schedule for all equipment utilizing lubricants from as few companies as possible (preferably single source).
- B. Include lubrication schedule in the operation and maintenance instructions.

1.17. FAILURE OF EQUIPMENT TO PERFORM

- A. Promptly correct by replacement or otherwise any defects in the equipment, or failure to meet the guarantees or performance requirements.
- B. If Contractor fails to make these correction, or if the improved equipment again fails to meet the guarantees or specified requirements, the Owner, notwithstanding his having made partial payment for work and materials which have entered into the manufacture of said equipment, may reject said equipment and order the Contractor to remove it from the premises at the Contractor's expense.

1.18. GUARANTEE

- A. Provide equipment guarantees in accordance with Article 13 of the General Conditions. Guarantee requirements may be added to or modified in the individual Specification Sections.

- B. By supplying a product under the contract, the manufacturer and Contractor jointly agree that all manufacturer's warranties, expressed or implied, pass through the Contractor to Owner. This warranty obligation starts on the date of the substantial completion and survives any inspection by, delivery to, acceptance by or payment by the Owner or Contractor for the goods furnished by the manufacturer. Further, this warrants that the equipment designed, manufactured and/or used meets all applicable federal, state and local laws, rules and regulations, including applicable OSHA standards. This requirement does not change or limit the requirements for performance affidavits described in Article 1.03.

1.19. EQUIPMENT SCHEDULE

- A. The attached schedule outlines the various items of equipment and lists the responsibilities of the equipment manufacturer for the Division 11 specifications. In the event of conflicts between the schedule and individual specifications, the more stringent requirements shall apply.
- B. The responsibilities of the equipment manufacturer for other specification sections are outlined in the individual specification sections.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

SCHEDULE OF EQUIPMENT TESTING AND MANUFACTURER'S SERVICES

Equipment Name	Spec Section ⁽¹⁾	X= Required ⁽¹⁾				Services of Manufacturer's Representative ^(1, 2, 3)						Operation and Maintenance Manual ⁽¹⁾	Video Recording of Training Required ⁽¹⁾
		Performance Affidavit	Shop Tests	Field Tests	Certification of Equipment Compliance	Installation	Preliminary Field Test	Functional Test	System Demonstration	Startup	Training		
Submersible Pumps	11310	X	X	X	X	--	--	1 ⁽⁴⁾	--	1 ⁽⁴⁾	1	X	X

(1) Refer to individual specification sections for additional details.

(2) All times are actual on-site times and represent minimum requirements.

(3) Final acceptance will not be given until the new or rehabilitated equipment has run for a two consecutive week demonstration period under normal operating conditions. If a fault occurs, or if excessive vibration is detected, the two-week demonstration period will restart upon correction of the problem.

(4) Two separate trips; one for each unit/system/location.

END OF SECTION

MANUFACTURER'S EQUIPMENT CHECK-OUT & CERTIFICATION

PROJECT:		REPORT NO.:	
COMPANY:		DATE:	
NAME OF EQUIPMENT:		PROJECT NO.:	
EQUIPMENT TAG:		CONTRACT NO.:	
SPEC SECTION:		MODEL NO.:	
SHOW DRAWING ITEM NO.:		SERIAL NO.:	

_____, as the authorized Manufacturer's Representative for the above-referenced equipment, hereby certifies that we have completely inspected, aligned, operated and adjusted said equipment on this date.

Equipment Evaluation Checklist	Completed and Acceptable	Deficient Explanation Below	N/A
Verify there is no visible corrosion or mechanical damage to the equipment.			
Verify the nameplates are correct.			
Verify that all mountings are secure, all piping is attached, all belts and drives are installed and tensioned correctly, and all safety features are in place.			
Verify that prerequisites and preliminary tests for low voltage motor control centers, adjustable frequency drives, and all other electrified equipment, have been completed. Verify all control and power circuits to the equipment are energized.			
Verify that factory test reports have been received and approved.			
For systems tests, verify that all applicable prerequisites and preliminary tests for subsystems and auxiliary equipment have been completed.			
Bump motors to verify correct rotation.			
Verify operation of seal water system.			
Verify operation of valves and verify proper open or shut positions.			
Check all feed and drain lines.			
Verify the equipment has been checked against the approved shop drawing and complies with all details, including comments by the Engineer.			
Verify that all equipment has been properly lubricated in accordance with manufacturer's requirements.			

Deficiencies:

MANUFACTURER'S EQUIPMENT CHECK-OUT & CERTIFICATION

Corrections:

Special Instructions:

Training (Check One):

	_____ hours of training on equipment operation and maintenance was given on _____ to the following personnel:
	No training was provided; it will be scheduled for a later date.
	No training is required.

Manufacturer's Certification Statement:

The equipment is complete, conforms to the requirements of the Contract and is ready for permanent operation. There is nothing in the installation that will render the Manufacturer's warranty null and void.

Authorized Signature _____

Title _____ Date _____

The equipment is ready for permanent operation and nothing in the installation will render the Manufacturer's warranty null and void. The deficiencies noted are minor and will not adversely affect the equipment operation. The deficiencies will be corrected at a later date.

Authorized Signature _____

Title _____ Date _____

The equipment certification cannot be completed at this time.

Authorized Signature _____

Title _____ Date _____

MANUFACTURER'S EQUIPMENT CHECK-OUT & CERTIFICATION

Witnessed by Contractor:

Authorized Signature _____
Title _____ Date _____

Witnessed by Engineer:

Authorized Signature _____
Title _____ Date _____

Attachments (list manufacturer's field report):

**Attach Manufacturer's Check-Out Report.*

SECTION 01650
STARTING OF SYSTEMS

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Starting systems.
- B. Demonstration and instructions.

1.02. RELATED SECTIONS

- A. Section 01019 - CONTRACT CONSIDERATIONS
- B. Section 01400 QUALITY CONTROL: Manufacturers' field reports.
- C. Section 01700 CONTRACT CLOSEOUT: System operation and maintenance data and extra materials.

1.03. STARTING SYSTEMS

- A. Coordinate schedule for start-up of various equipment and systems. Attend coordination meetings convened by Engineer.
- B. Notify Engineer seven days prior to startup of each item.
- C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, or other conditions which may cause damage.
- D. Verify that tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- E. Verify that wiring and support components for equipment are complete and tested.
- F. Execute start up under supervision of responsible manufacturer's representative in accordance with manufacturers' instructions.
- G. Submit a written report in accordance with Section 01400, Quality Control, that equipment or system has been properly installed and is functioning correctly.

1.04. 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. Demonstrate start-up, operation, control, adjustment, troubleshooting, servicing, maintenance, and shutdown of each item of equipment at scheduled times, on site.

- D. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 01700
CONTRACT CLOSEOUT

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Closeout procedures.
- B. Final cleaning.
- C. Adjusting.
- D. Project record documents.
- E. Warranties and bonds.
- F. Spare parts and maintenance materials.

1.02. RELATED SECTIONS

- A. General Conditions
 - 1. Article 6
 - a. Paragraph 6.11.C: Final Cleaning.
 - b. Paragraph 6.12: Record Documents.
 - c. Paragraph 6.19: Contractor's General Warranty and Guarantee.
 - 2. Article 13 - Paragraphs 13.06 through 13.09: Correction of Defective Work.
 - 3. Article 14
 - a. Paragraph 14.04: Substantial Completion.
 - b. Paragraph 14.05: Partial Utilization.
 - c. Paragraphs 14.06 through 14.08: Final Inspection and Final Payment.
- B. Supplementary Conditions - Refer to the appropriate "SC" paragraphs which supplement or modify the above numbered paragraphs of the General Conditions.
- C. Section 01010 - SUMMARY OF WORK
- D. Section 01500 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS: Removal of utilities, facilities, and controls.
- E. Section 01650 - STARTING OF SYSTEMS

1.03. 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 Owner's and Engineer's inspection.
- B. Correct or replace defective work in accordance with requirements of Article 13 of General Conditions.
- C. Provide submittals to Owner that are required by Contract Documents.

Before the Certificate of Substantial Completion is issued, submit to the Engineer the following:

- 1. Test results of project components.
 - 2. Performance affidavits for equipment.
 - 3. Certification of equipment or materials in compliance with Contract Documents.
- D. Conform to procedures established by Engineer, in concert with requirements of Article 14 of General conditions and Supplementary Conditions, for final payment application, certificate of substantial completion, final inspection, release of liens, and other related documentations or conditions required by Contract Documents.
- E. Owner will occupy all of the building as specified in Section 01010, Summary of Work.

1.04. FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- C. Clean debris from roofs, gutters, downspouts, and drainage systems.
- D. Clean site; sweep paved areas, rake clean landscaped, restored surfaces.
- E. Remove waste and surplus materials, rubbish, sheds, tools and construction facilities from the site.

1.05. ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

1.06. PROJECT RECORD DOCUMENTS

- A. Maintain on site, one set of the following record documents; record actual revisions to the work:
 - 1. Contract Drawings.
 - 2. Specifications.
 - 3. Addenda.

4. Change orders and other modifications to the contract.
 5. Approved shop drawings, product data.
- B. Store record documents separate from documents used for construction.
- C. Record information concurrent with construction progress; make available for periodic examination by Engineer.
- D. Ensure that entries are complete and accurate, enabling future reference by Owner.
- E. Contract Drawings and Shop Drawings - Legibly mark in red ink or pencil to show all changes in, or directly associated with, the work of this contract. Keep entire set of drawings current on day-to-day basis. Examples of types of changes which could occur and are to be recorded:
1. Change in location or elevation of structures.
 2. Change in dimensions of structures.
 3. Elimination of structures.
 4. Unforeseen modifications to existing structures made necessary by work requirements.
 5. Relocation of equipment.
 6. Additions to or expansion of structures.
 7. Changes in mechanical trades components; (electrical, heating, ventilating, plumbing).
 8. Measured location of internal utilities or mechanical trade items, which are to be concealed from view, referenced to visible and accessible features of the structure.
 9. Change in location or elevations of underground utilities installed under this Contract (sewer, water, industrial process piping).
 10. Change in materials, such as pipe materials.
 11. Relocation of existing underground utilities made necessary because of interference with work under this contract.
 12. Change in topographical contours of finished earth and paved surfaces.
 13. Change in elevations of finished surfaces along route of installed underground utilities (sewer, water).
- F. Affix Contractor's identification stamp, together with the label "Record Documents," as follows:
1. On each Contract Drawing, just above the Engineer's title block.
 2. On each shop drawing, just above the preparer's title block.

3. On the front cover or front page of all other documents.

- G. Final Record Drawings – Final record drawings shall be prepared in AutoCAD and submitted digitally as a .dwg file. The Contractor shall employ the services of a registered professional surveyor licensed in the State of New York to provide elevation information. Revisions in the work from the Contract Drawings shall be annotated in revision clouds with the revision. Submit record drawings to Engineer with final Application for Payment.

1.07. WARRANTIES AND BONDS

- A. Provide duplicate notarized copies of certifications for those items with extended transferable warranties beyond one year. Prepare separate submittal for each item.
- B. Execute and assemble documents from subcontractors, suppliers, and manufacturers.
- C. Provide Table of Contents and assemble in three D-side ring binder with durable plastic cover.
- D. Submit prior to final Application for Payment.
- E. For items of work delayed beyond date of Substantial Completion, provide updated submittal within 10 days after acceptance, listing date of acceptance as start of warranty period.

1.08. SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification sections.
- B. Deliver to and place in location as directed by Owner; obtain receipt prior to final payment.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 02030

DEMOLITION

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Demolition and removal of process equipment and piping.
- B. Demolition and removal of electrical construction.

1.02. RELATED SECTIONS

- A. Section 01010 - SUMMARY OF WORK: Work covered by Contract Documents, Owner's continued occupancy.
- B. Section 01039 - COORDINATION AND MEETINGS: Alteration project procedures, cutting and patching.
- C. Section 01300 - SUBMITTALS
- D. Section 01500 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS: dust control, barricades, security at Owner-occupied areas, and cleanup during demolition operations.
- E. Section 01700 - CONTRACT CLOSEOUT: Project record documents.

1.03. PROJECT RECORD DRAWINGS AND PHOTOGRAPHS

- A. Submit under provisions of Section 01700, Contract Closeout.
- B. Furnish digital photographs of existing conditions and of those items designated by Owner, prior to their scheduled demolition, removal, or relocation.
 - 1. Produce and submit photographs in accordance with requirements of Section 01300, Submittals.

1.04. REGULATORY REQUIREMENTS

- A. Conform to applicable codes for demolition of structures, protection of adjacent structures, dust control, runoff control, and disposal of materials.
- B. Obtain required permits from authorities.
- C. Notify affected utility companies before starting demolition operations and comply with their requirements.
- D. Do not close or obstruct roadways, sidewalks, hydrants, parking areas without required permits and/or approval from Owner.
- E. Conform to applicable regulatory procedures if a hazardous environmental condition is encountered at site or if hazardous material disposal is required.

1.05. HAZARDOUS ENVIRONMENTAL CONDITIONS

- A. If an unknown unforeseeable hazardous environmental condition is encountered at the site, or if Contractor or anyone for whom Contractor is responsible creates a hazardous environmental condition, immediately:
 - 1. Secure or otherwise isolate such condition;
 - 2. Stop all work in connection with such condition and in any area affected thereby; and
 - 3. Notify Owner and Engineer (and promptly thereafter confirm such notice in writing).
- B. Resume work in connection with such condition or in any affected area only after Owner has obtained any required permits related thereto and delivered to Contractor a written notice specifying under what special conditions work may be resumed safely.

1.06. SEQUENCING

- A. Sequence demolition work to conform with provisions of Section 01010, Summary of Work.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.01. PREPARATION

- A. Thirty days prior to performing any demolition, there shall be a coordination meeting between the Contractor, Owner, and Engineer to discuss the Contractor's Demolition Plan and related procedures. Items to be discussed shall be, but not limited to, dust control, sequence of work, removal of material, protection of existing equipment, access and egress of material, etc. Demolition procedures must be coordinated with the Owner's operating personnel and operations, and adjusted accordingly, if necessary.

Following the coordination meeting, begin demolition operations after obtaining written authorization to proceed from the Owner.
- B. Notify Owner and Engineer at least 48 hours in advance of intended start of demolition operations in each affected area.
- C. Provide, erect, and maintain temporary barriers, signs, and security devices at locations indicated on Drawings.
- D. Erect and maintain temporary partitions and weatherproof closures to prevent spread of dust, odors, and noise in areas of continued Owner occupancy identified in Section 01010, Summary of Work.
- E. Protect existing structures, equipment, appurtenances, architectural features, and materials which are not to be demolished. Prevent movement or settlement of adjacent structures.
- F. Protect existing site-related items such as pavements, walkways, parking areas, curbs, aprons, and landscaping features which are not to be demolished.

- G. Protect existing electrical; heating, ventilating, and air conditioning; and plumbing systems, including related components, which are not to be demolished.
- H. Mark location of underground utilities.

3.02. DEMOLITION REQUIREMENTS

- A. Confine demolition operations [to designated areas of the site as shown on the Contract Drawings.
- B. Conduct operations to minimize interference with adjacent and occupied building areas. Maintain protected egress and access at all times.
- C. Cease operations immediately if adjacent structures appear to be in danger. Notify Engineer. Do not resume operations until directed.
- D. All materials, except rubble and non-metallic scrap, shall become the property of the Owner and be disposed of in accordance with the schedule in Article 3.04.
- E. Dispose of rubble and non-metallic scrap at an on-site area designated by Owner.
- F. Dispose of designated hazardous materials in accordance with the nature of the material, required handling and disposal procedures, regulatory requirements, and applicable permits.

3.03. DEMOLITION

- A. Disconnect and remove designated process piping systems, including valves fittings, transition, pumps, guide rails, slides, base, mounting hardware and appurtenances; provide temporary capping of those segments of the system to be reused. Plug openings in walls and floors where utilities are removed.
- B. Detach, dismantle, and remove metal components of process equipment from designated pump stations, including miscellaneous metal work items associated with access to and operation of such equipment.
- C. Disconnect and remove existing control panel, enclosure, and floats.
- D. Remove steel access hatches for pump station and sand traps.
- E. Remove and dispose of demolished materials as work progresses. Do not burn materials; do not bury materials unless otherwise specified in Article 3.04.
- F. Patch and refinish existing visible surfaces which are to remain in accordance with Section 01039, Coordination and Meetings, and otherwise restore adjacent surfaces as specified in Article 3.04.
- G. Remove and dispose of residual materials such as sewage, grit, sludge, debris, trash, and other scrap.
- H. Upon completion of demolition operations, leave areas in a clean condition.

3.04. SCHEDULES

A. Pump Stations and Sand Traps

1. Process piping, fittings, valves, transitions, pumps, slides, base mounting hardware, guiderails, appurtenances, floats and mounting equipment.
2. Steel access hatches.

B. Electrical Construction

1. Control panel and enclosure.
2. Electrical conduit, supports, and wiring including connections made to control panel designated for removal.

END OF SECTION

SECTION 02131

REMOVAL OF DEBRIS

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Cleaning, removal, and disposal of sludge, leachate, grit, and debris from sand traps, wet wells, channels, sumps, and other structures.
- B. Procedures for measurement of quantities.

1.02. RELATED SECTIONS

- A. Division 1 specifications.
- B. Section 02762 – CLEANING OF UNDERGROUND PIPELINES

1.03. WORK

- A. Refer to the Contract Drawings for work locations.
- B. When taken out of service for improvements, all sand traps, wet wells, channels, sumps, shall be drained and thoroughly cleaned on all exterior and interior surfaces as well as any walkways or attached structures by use of a pressure washer or other approved cleaning technique. Contractor shall work with the Owner and Engineer to determine proper draining procedures and disposal locations for materials found within the structures during the cleaning process.
- C. All materials shall be removed from the site and disposed of at sites approved by the Owner.

1.04. UNIT PRICES

- A. Materials removed shall be paid for on a unit price basis. Measurement of debris removal is described in the Bid Items.

1.05. REGULATORY REQUIREMENTS

- A. Conform to applicable local, state and federal (OSHA) Health and Safety Codes for the storing, mixing and handling of chemical root control agents. Comply with manufacturer's recommendations for handling and use of such agents in enclosed areas.
- B. Contractor shall be aware that the sand traps and piping in the interior pump station collect liquids from ongoing equipment maintenance and may contain oils, grease, petroleum, etc. associated with that maintenance. Contractor is responsible for all associated disposal costs.
- C. Conform to applicable local and state codes for legal hauling and disposal of all removed materials.
- D. Provide necessary treatment of sludge and grit which may be required for legal hauling and disposal.

- E. The Contractor to obtain necessary permits and site approval for disposal of solids obtained from cleaning operation.
- F. Contractor is responsible for conducting tests on the material, if required by disposal facility, Owner, or the Engineer at no additional cost to the Owner.

1.06. SUBMITTALS

- A. Contractor shall submit sample test results in accordance with Section 01300, Submittals.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.01. REMOVAL AND DISPOSAL

- A. The Contractor is responsible for providing labor, materials, equipment, temporary power, and supplies necessary to remove sludge, grit, and debris from the structures. This shall include all pumps, piping supports, wiring, mechanical equipment, suction tanker, etc., required for complete operation.
- B. The Contractor is responsible for providing all dewatering and treatment which may be required to remove and dispose of the sludge and grit in accordance with state and local requirements.
- C. Sludge and grit which is removed for disposal must be stored in leakproof, covered containers; containers must be covered when loading is not occurring. Covers shall be integral to the container. Tarping systems are not acceptable.
- D. Grit and sludge must be removed from the structures within 24 hours of the beginning of the structure dewatering process.
- E. Removal of sludge and grit shall be accomplished in a manner that does not allow spillage onto the plant site.

END OF SECTION

SECTION 02205

PROTECTION OF EXISTING FACILITIES

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Notification of owners and authorities.
- B. Coordination and preparation.
- C. Protection of facilities.
- D. Relocation of facilities.
- E. Protection of sewers and storm drains.
- F. Restoration of property markers.

1.02. RELATED SECTIONS

- A. General Conditions: Article 4, Paragraphs 4.02, 4.03 and 4.04; Article 6, Paragraph 6.20.
- B. Section 01039 - COORDINATION AND MEETINGS: Preconstruction meeting.
- C. Section 01300 - SUBMITTALS: Construction photographs.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.01. NOTIFICATIONS OF OWNERS AND AUTHORITIES

- A. Prior to construction, notify owners of existing facilities, including local Police and Fire Departments, of general scope, nature and planned progress schedule of the work.
- B. When existing utilities, such as sewer, water, gas, telephone or electric power are damaged or disturbed during construction, immediately notify affected owner and Project Owner.
- C. Notify Police and Fire Departments, including affected owners, immediately if hazardous conditions are created or have the potential for occurring, as a result of damage to an existing facility or as a result of other activities at project site. Hazardous conditions could be created from: fire, explosion, escape of gas, escape of fuel oil, gasoline or industrial fluids, downed electrical wires, and disrupted underground electrical cables.

3.02. COORDINATION AND PREPARATION

- A. Discuss anticipated work schedule with local authorities and owners of utilities at preconstruction meeting, including procedures to be followed if one or more utilities are damaged or disrupted. Develop contingency plans to address Contractor's role in repair of damaged utilities.
- B. Make preparations beforehand to repair and restore damaged utilities, including arrangements for standby materials and equipment to be promptly assembled at site and utilized immediately.
- C. Adjust work schedules and personnel assignments as necessary to conform with requirements of utility owner whose utility is to be temporarily interrupted during construction. Cooperate with utility owner in this regard to minimize the time of interruption.

3.03. PROTECTION OF FACILITIES

- A. Plan and conduct construction operations so that operation of existing facilities near or adjacent to the work, including electric, telephone, sewer, water, gas or drainage utilities, are sustained insofar as the requirements of the project will permit.
- B. Protect existing facilities from damage or movement through installation of adequate support systems and use of proper equipment in sensitive areas.
- C. Existing utilities and other facilities which are damaged by the Contractor's construction operations shall be promptly repaired by Contractor to the satisfaction of the affected owner or, if he so elects, that owner will perform the repairs with his own forces. Under either arrangement, such repair work shall be done at Contractor's expense.
- D. When aboveground visible facilities such as poles, wires, cables, fences, signs or structures constitute an unavoidable interference, notify Engineer and consult with affected owner regarding temporary removal and later restoration of the interfering item. Arrange with that owner to remove and later restore the interfering item to the satisfaction of the owner, subject to approval of the project Owner; or, allow affected owner to perform such work with his own forces. Under either arrangement, such work shall be done at Contractor's expense.
- E. Take all necessary precautions to prevent fires at or adjacent to the work, buildings, and other facilities. No burning of trash or debris is permitted. If permanent fire extinguishers are used, they shall be recharged and in "new" condition when turned over to Owner.

3.04. RELOCATION OF FACILITIES

- A. If the location or position of an existing gas or water pipe, public or private sewer or drain, conduit or structure be such as, in the opinion of Engineer, to require its removal, realignment or change, such alteration shall be without cost to the Contractor for the work of removal, realignment or change only.
- B. Uncovering, supporting and sustaining such facility before its removal or before and after its realignment or change, shall be the Contractor's responsibility as part of the work of his contract.

3.05. PROTECTION OF SEWERS AND STORM DRAINS

- A. Where existing sanitary sewers or storm drain systems are being replaced or interrupted, provide temporary bypass pumping or piping to maintain flow around that segment of the work such that no back-ups occur in existing systems.
- B. Existing sanitary sewer laterals damaged in the work or temporarily disconnected shall be restored to operation by the end of each work day. Existing sanitary sewer laterals crossing over new pipelines to be restored in accordance with details shown on the Drawings.
- C. Maintain existing manholes, catch basins, and other utility structures in their pre-work condition. Any material or debris entering same due to the Contractor's operation shall be promptly removed.

3.06. RESTORATION OF PROPERTY MARKERS

- A. Property corner markers, boundary monuments, etc., disturbed or moved by the Contractor's operation shall be restored, in conformance with the property deed description, by a licensed land surveyor. Restoration of the property corner markers or boundary monuments shall be certified by said surveyor on a map prepared by him which shows the work accomplished. One copy of the map shall be given to the property owner and one copy given to the project Owner.

END OF SECTION

SECTION 02741

PRESSURE TESTS OF FORCE MAINS

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Pressure testing of force mains and pressure sewer systems.
- B. Test requirements.
- C. Required replacement or repair if test fails.
- D. Project records.

1.02. RELATED SECTIONS

- A. Section 01026 - LUMP SUM ITEMS: Requirements applicable to lump sum prices for the work of this section.
- B. Section 01700 - CONTRACT CLOSEOUT

1.03. REFERENCES

- A. AWWA C600 - Installation of Ductile Iron Water Mains and Their Appurtenances

1.04. TEST REQUIREMENTS

- A. All force mains and pressure sewer systems shall be tested in accordance with AWWA Standard C600. The following procedure shall be used:
 - 1. All newly installed pipe or any valves section thereof, shall be subjected to a hydrostatic pressure 50 percent in excess of the working pressure at any point in the section being tested, but in no case less than 150 lbs. per square inch for a period of two hours.
 - 2. The Contractor shall accomplish the required tests by individually testing each section of the installed main. The maximum length of section permitted to be tested at any one time will be approximately 1 mile, and normally will be less.
- B. Test Pressure Restrictions - Test pressure shall:
 - 1. Not exceed pipe or thrust restraint design pressures.
 - 2. Be of at least two-hour consecutive duration.
 - 3. Not vary by more than ± 5 psi.
 - 4. Not exceed twice the rated pressure of the valves when the pressure boundary of the test section includes closed valves.

C. Leakage Test

1. All leakage tests shall be conducted concurrently with the pressure test.

No water may be supplied into the newly installed pipe, or any valved sections thereof, to maintain pressure during the test phase of the pressure system.
2. If the section of pipes tested does not meet the test pressure requirement (no more than 5 percent loss of the test phase pressure), the test shall be considered a failure.

1.05. SUBMITTALS

- A. For each test, submit a completed "Flushing and Testing of Force Mains Tabulation Sheet" (sample found at the end of this section).

1.06. PROJECT RECORD DOCUMENTS

- A. Submit documents under provisions of Sections 01300, Submittals, and 01700, Contract Closeout.
- B. Contractor to complete and submit for each test the form for recording data for flushing and testing pressure pipe (see form at end of this section). Engineer shall fill out form and both Contractor and Engineer shall sign upon completion.

1.07. REGULATORY REQUIREMENTS

- A. Submit proof of testing as required by local, county or state agencies and this section of the specifications.

1.08. FIELD MEASUREMENTS

- A. Measure length of test section.
- B. Measure quantity of water used to maintain test pressure during test period.
- C. Measurements required to complete the attached form.

1.09. COORDINATION

- A. Contractor is responsible for obtaining water for flushing and pressure test.
- B. Provide 48-hour notice to Owner when water for flushing and testing is required.
- C. Owner or Owner's designated operator of existing water system to operate all valves and hydrants unless Contractor has been authorized by Owner to operate water systems valves and hydrants.

PART 2 PRODUCTS

2.01. WATER SUPPLY

- A. Contractor shall supply water for flushing from clean, clear potable sources acceptable to the Engineer

- B. All water for flushing shall be furnished and disposed of in accordance with all federal, state, and local requirements by the Contractor at his expense.

PART 3 EXECUTION

3.01. PREPARATION

- A. The Contractor shall supply all plugs, pumps, weirs, gauges, etc., necessary to conduct the tests, including means to accurately measure the quantity of water used to maintain test pressure during the test period.
- B. Flush all piping systems with water prior to testing. Flushing shall be sufficient to remove all dirt/debris from force main.

3.02. TESTING

- A. Pressure and leakage tests shall be conducted on all force main and pressure pipe.
- B. The Engineer shall witness all tests. Provide a minimum of three business days' notice to Engineer of date and time of test.
- C. All test results shall be recorded on the form attached at the end of this section.
- D. Contractor is responsible for temporary connections to facilitate filling of force main, release of air from force main, and pressure testing. Connection devices shall be reviewed by Owner before starting testing. All temporary connections shall be plugged after a successful test.
- E. When filling force mains with water for flushing or testing, a direct connection from potable water source to force main is strictly prohibited.
- F. Pressurization - Each valved section of pipe shall be slowly filled with water. The specified test pressure, based on the elevation of the lowest point of the pipe or section under test and corrected to the elevation of the test gauge, shall be applied by means of a pump connected to the pipe.
- G. Air Removal - Before applying the specified test pressure, air shall be expelled completely from the pipe and valves.
- H. Examination - Any exposed pipe, fittings, valves, and joints shall be examined carefully during the test. Any damaged or defective pipe, fittings, or valves that are discovered following the pressure test shall be repaired or replaced with sound material and the test shall be repeated.
- I. All visible leaks, regardless of the amount, shall be repaired.
- J. If the section being tested fails to pass the pressure or leakage test, the Contractor shall determine, at his own expense, the source or sources of leakage, and he shall permanently repair or replace all defective materials and/or workmanship. The extent and type of repair as well as results, shall be subject to the approval of the Owner. The completed pipe installation shall then be retested and required to meet the pressure and leakage requirements of this test.
- K. Testing and retesting shall be completed prior to final paving.
- L. The use of sealants, applied from outside or inside of pipe, is not acceptable.

Table 4.A Hydrostatic testing allowance per 1,000 ft of pipeline*—*gpb*†

Avg. Test Pressure <i>psi</i>	Nominal Pipe Diameter— <i>in.</i>																	
	3	4	6	8	10	12	14	16	18	20	24	30	36	42	48	54	60	64
450	0.43	0.57	0.86	1.15	1.43	1.72	2.01	2.29	2.58	2.87	3.44	4.30	5.16	6.02	6.88	7.74	8.60	9.17
400	0.41	0.54	0.81	1.08	1.35	1.62	1.89	2.16	2.43	2.70	3.24	4.05	4.86	5.68	6.49	7.30	8.11	8.65
350	0.38	0.51	0.76	1.01	1.26	1.52	1.77	2.02	2.28	2.53	3.03	3.79	4.55	5.31	6.07	6.83	7.58	8.09
300	0.35	0.47	0.70	0.94	1.17	1.40	1.64	1.87	2.11	2.34	2.81	3.51	4.21	4.92	5.62	6.32	7.02	7.49
275	0.34	0.45	0.67	0.90	1.12	1.34	1.57	1.79	2.02	2.24	2.69	3.36	4.03	4.71	5.38	6.05	6.72	7.17
250	0.32	0.43	0.64	0.85	1.07	1.28	1.50	1.71	1.92	2.14	2.56	3.21	3.85	4.49	5.13	5.77	6.41	6.84
225	0.30	0.41	0.61	0.81	1.01	1.22	1.42	1.62	1.82	2.03	2.43	3.04	3.65	4.26	4.86	5.47	6.08	6.49
200	0.29	0.38	0.57	0.76	0.96	1.15	1.34	1.53	1.72	1.91	2.29	2.87	3.44	4.01	4.59	5.16	5.73	6.12
175	0.27	0.36	0.54	0.72	0.89	1.07	1.25	1.43	1.61	1.79	2.15	2.68	3.22	3.75	4.29	4.83	5.36	5.72
150	0.25	0.33	0.50	0.66	0.83	0.99	1.16	1.32	1.49	1.66	1.99	2.48	2.98	3.48	3.97	4.47	4.97	5.30
125	0.23	0.30	0.45	0.60	0.76	0.91	1.06	1.21	1.36	1.51	1.81	2.27	2.72	3.17	3.63	4.08	4.53	4.83
100	0.20	0.27	0.41	0.54	0.68	0.81	0.95	1.08	1.22	1.35	1.62	2.03	2.43	2.84	3.24	3.65	4.05	4.32

*If the pipeline under test contains sections of various diameters, the testing allowance will be the sum of the testing allowance for each size.

†Calculated on the basis of Eq 1.

FLUSHING AND TESTING OF FORCE MAINS TABULATION SHEET

Job No. _____ Location _____
Contract No. _____ Contractor _____
Project _____
Contractor's Representative _____

FLUSHING

Date _____ Weather _____ Temperature _____
Section Flushed _____ ft. of _____-inch diameter pipe
Line Flushed _____ hrs. _____ min. @ _____ gal/min
Line Flushed Through _____ Manhole No. _____

PRESSURE AND LEAKAGE TESTING

Date _____ Weather _____ Temperature _____
Section Tested _____ ft. of _____-inch diameter pipe
_____ ft. of _____-inch diameter pipe in _____-ft. laying lengths
Time Started _____ Time Finished _____ Elapsed Time _____
Test Pressure: Start _____ psi Finish _____ psi
Water to Make up Initial Pressure _____ gallons
Allowable leakage, as calculated _____ gallons Pass _____ Fail

Ductile Iron Pipe/HDPE

PVC Pipe

$$L = \frac{SD \sqrt{P}}{133,200} *$$

$$L = \frac{ND \sqrt{P}}{7,400}$$

L = Allowable leakage in gallons/hour
S = Length of pipe tested (linear feet)
D = Nominal diameter of pipe (inches)
P = Average pressure during test, psi
N = Number of joints

*Refer to C600 for additional allowance leakage against closed metal-seated valves.

WITNESS: OWNER/ENGINEER _____ Name _____ Title _____ Signature _____	WITNESS: CONTRACTOR _____ Name _____ Title _____ Signature _____
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END OF SECTION

SECTION 02762

CLEANING OF UNDERGROUND PIPELINES

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Cleaning.
- B. Disposal of solids removed from pipes.
- C. Root control.
- D. Maintenance of existing wastewater or process flows.
- E. Maintenance of traffic.

1.02. RELATED SECTIONS

- A. Section 01025 - UNIT PRICE ITEMS: Requirements applicable to unit prices for the work of this section.
- B. Section 01039 - COORDINATION AND MEETINGS
- C. Section 01300 - SUBMITTALS: Progress schedule.
- D. Section 01500 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS
- E. Section 01700 - CONTRACT CLOSEOUT
- F. Section 02131 - REMOVAL OF DEBRIS
- G. Section 02741 - PRESSURE TEST OF FORCE MAINS

1.03. SUBMITTALS

- A. Provide product data describing the active ingredients, manufacturer and installation procedures.
- B. The Contractor shall provide to the Engineer on a weekly basis draft copies of the field log sheets.
- C. Progress schedule.
- D. All logs, submitted to the Engineer shall be carefully identified as to its location.
- E. Method for removing debris.

1.04. PROJECT RECORD DOCUMENTS

- A. Reports - The Contractor shall submit to the Engineer one draft copy of the report, including all log sheets, records, within 30 days after completing the field work.

1.05. REGULATORY REQUIREMENTS

- A. The Contractor shall obtain all necessary permits from regulatory agencies prior to application of chemical root control agents to piping.
- B. Contractor shall be aware that the sand traps and piping in the interior pump station collect liquids from ongoing equipment maintenance and may contain oils, grease, petroleum, etc. associated with that maintenance. Contractor is responsible for all associated disposal costs.
- C. Conform to applicable local, state and federal (OSHA) Health and Safety Codes for the storing, mixing and handling of chemical root control agents. Comply with manufacturer's recommendations for handling and use of such agents in enclosed areas.
- D. The Contractor to obtain necessary permits and site approval for disposal of solids obtained from cleaning operation.
- E. Contractor is responsible for conducting tests on the material, if required by disposal facility, Owner, or the Engineer at no additional cost to the Owner.

1.06. COORDINATION AND TRAFFIC CONTROL

- A. Throughout the duration of the field work, the Contractor shall maintain and protect traffic.

PART 2 PRODUCTS

2.01. CHEMICAL ROOT CONTROL

- A. Chemical root control agent by foaming method.
 - 1. The active ingredients used in the foam application shall be formulated as a solution containing no less than 24 percent by weight of Anhydrous AVapam® (sodium methyldithiocarbamate) and no less than 1.7 percent by weight of Dichlobenil (2,6-Dichlorobenzonitrile).
 - 2. Manufacturer - Stauffer Chemical Company or equal.

2.02. CLEANING REQUIREMENTS

- A. The Contractor shall provide all equipment, tools, labor and materials necessary to satisfactorily pressure clean and remove all visible obstructions, dirt, sand, sludge, roots, gravel, stones, etc., from the designated pipes and cleanouts.
- B. Manholes, benchwall, and channels shall be properly cleaned of debris including loose mortar, bricks, etc., prior to the cleaning of the designated pipes.
- C. After removal of all debris, the manhole walls and benches shall be hosed off.
- D. Contractor shall pressure clean all existing drainage pipes from the grates in the floor drains to the sand trap, including all vertical and horizontal piping and fittings.
- E. Remove all wastewater, dirt sand, grit, sludge, gravel and all other debris from designated sandtraps, pump stations, and manholes. Remove debris using a suction tanker or approved method in accordance with Federal, State, and local requirements. Refer to Section 02131.

- F. Records in printed form shall be kept of all cleaning performed and shall include in the name of the Owner, date, line section cleaned, manhole section location, line size, length of section, type of cleaning performed, any special remarks concerning the condition of the line, and amount of and nature of material removed.

PART 3 EXECUTION

3.01. PREPARATION

- A. All work associated with access to the project and traffic control, including snow and ice removal, locating and uncovering pavement from manhole cover and cleanout grates, opening of manhole and cleanouts, and furnishing of cleaning water shall be performed by the Contractor.
- B. The Contractor shall have on site or immediately available bypass pumping equipment with adequate capacity to maintain sewage flow, the cost of pumping being included in the applicable bid items. No separate payment shall be made for this work.

3.02. APPLICATION

- A. Cleaning
 - 1. Pipe cleaning shall be performed in a systematic fashion (refer to Articles 2.02 and 3.01). This shall be accomplished by cleaning the upper reaches of the pipe and progressing in the direction of flow.
 - 2. The Contractor shall perform the cleaning of the pipes in a fashion which prohibits grease, sludge, grit, etc., from accumulating in a section of sewer previously cleaned.
 - 3. Throughout all work, the Contractor shall maintain flows in the existing system and in particular flows on the upstream side of the section being cleaned. Contractor shall have to install bypass pumping prior to cleaning.
 - 4. Remove all wastewater and sludge/grit from each sand trap and pump station after pipes have been cleaned.

3.03. DISPOSAL OF SOLIDS

- A. All solids removed from the pipes shall be removed from the site and disposed of at sites approved by the Owner.
- B. Under no circumstances shall sewage or solids removed from the sewer be dumped onto the streets or into ditches, catch basins, storm drains or streams.

END OF SECTION

SECTION 02769
BYPASS PUMPING

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Mobilization and demobilization.
- B. Nature and capacity of system to be bypassed.
- C. Flow bypass plan requirements.
- D. Backup and standby equipment requirements.
- E. Installation, operation, and removal of facilities.
- F. Sound attenuation.

1.02. RELATED SECTIONS

- A. Section 01026 - BID ITEM DESCRIPTIONS (LUMP SUM ITEMS)
- B. Section 01039 - COORDINATION
- C. Section 01500 - TEMPORARY FACILITIES
- D. Section 01700 - CONTRACT CLOSEOUT
- E. Section 02205 - PROTECTION OF EXISTING FACILITIES
- F. Section 15060 - INSIDE PROCESS PIPING

1.03. DEFINITIONS

- A. Bypass Pumping System - The bypass pumping system shall consist of all equipment, piping, valves, plugs, power supplies, and other appurtenances required to divert sewer flows from the influent gravity sewers at bypass set-ups indicated in paragraph 1.04.A to the respective discharge force mains. The bypass pumping system shall be comprised of primary (pumping) setups and secondary (pumping) setups in addition to all bypass piping necessary to complete the work. The work shall be scheduled in such a manner that allows the completion of the work in a time frame that minimizes the duration of bypass pumping.
- B. Bypass Piping - The bypass piping shall consist of the piping, valves, supports, and other appurtenances including, but not limited to, air relief valves and dewatering connections. The bypass piping includes both the suction and discharge piping for each primary and backup bypass setup. Separate suction pipes shall be provided for each bypass pump.

1.04. BYPASS PUMPING SYSTEM DESCRIPTION

A. The following table identifies the bypass pumping set-ups.

Primary Setup No.	Set-up	Pump Capacity (gpm)	Minimum Discharge Head (Feet)	Minimum Number of Pumps ⁽¹⁾	Comments
1	Sand trap bypass	83	16	2	Discharge Sanitary Sewer manhole located outside of Building No. 1
2	Holding tank bypass	Not available	Not available	2	Discharge Location: City sanitary sewer (Brighton Avenue)

(1) Represents the total number of pumps necessary to operate at the design conditions. The total includes the lead and lag pumps.

B. The Contractor shall investigate these and/or other locations that may provide sufficient space or flexibility in order to perform this work. Each set-up shall include, at a minimum, the following equipment:

1. Suction lift primary pump(s). The primary pump(s) shall be capable of pumping the combined peak flow of the pumps at the pump station and be connected to the bypass piping, be isolated with valves, and be complete with power supplies. Primary pump(s) shall be electrically or diesel driven, as required by the Owner.
2. One suction lift standby pump with equal capacity of the primary pumps. Standby pump shall be stored at the site or at a site mutually agreed to by Contractor and Owner. If standby pump is placed in operation, an additional standby pump shall be provided within four hours. Standby pump shall be diesel driven.
3. Required pump control panels and float switches for pump operations and alarm indication.

C. Provide a standby pump on site and ready for operation of the same capacity as the largest temporary bypass pump. In addition, one of the following two conditions must be met:

1. The temporary pumping system must be manned continuously (24 hours per day, 7 days per week) during operation by a representative of the Contractor trained and certified by the pump supplier. In the event of a pump failure, the Owner shall be notified within 15 minutes and the temporary backup pump shall be placed into service within 1 hour of the pump failure.
2. As an alternative to 24/7 manned operation, install, test, and maintain remote telemetry to monitor operation of the temporary pump(s) and the wet well level(s). Notify Owner within 15 minutes of a pump and/or system failure. Report to site within 30 minutes of a pump and/or system failure, and place the temporary backup pump in service within 1 hour of a pump and/or system failure. The telemetry system shall notify up to six individuals in a specific order; the contact phone numbers shall be coordinated with and provided to the Owner.
3. For temporary pumping system with automatic backup pump operation, report to site within 30 minutes of a pump failure to ensure the automatic backup system is operating properly.

- D. Temporary pumping systems shall be equipped with noise reduction features. Sound levels shall not exceed 40 dBA at 30 feet when diesel generator and pumps are operating. Electric pumps, when operating, shall generate sound levels of less than 50 dBA at 30 feet.
- E. Location of bypass pumping systems shall be coordinated with the Owner and Engineer.
- F. The bypass pumps shall be diesel-driven. Provide fuel supply for 48 hours of operation on site and stored in accordance with laws and regulations for diesel-powered systems. Assume responsibility for all spills and regulatory fines due to failure of the temporary pumping system.
- G. See Section 01010, Summary of Work, for facility outage requirements and constraints.
- H. Provide concrete Jersey barriers in all locations where temporary pumps, piping, and other accessories are located in roadways, driveways, and other vehicle-accessed areas.
- I. Provide security fencing for all temporary pumps where not located within a secured area.
- J. Provide all software development and device configuration required for the system, including but not limited to, the PLC and graphics, alarming, and autodialer.
- K. The Contractor shall incorporate provisions to remove water from the primary bypass pumping system to protect against freezing and damage. During cold weather operations, diesel generators shall utilize block heaters and critical priming piping shall be protected with heat tracing. Contractor shall provide cold weather mix diesel fuel during cold weather operations.

1.05. SUBMITTALS

- A. Provide product data describing conformance to ASTM and ANSI codes of the bypass pipe material.
- B. The Contractor will retain the services of a licensed New York State engineer to design, review the installation, and approve the bypass pumping system. Calculations and review comments will be kept on file throughout the duration of the contract.
 - 1. A letter of approval shall be submitted to the contract administrator stating that the design meets the requirements of the Contract Documents.
- C. Flow Bypass Plan
 - 1. The Contractor shall submit to the Engineer plans and descriptions pertaining to the bypass pumping provisions to be taken by the Contractor regarding the handling of peak flows. No construction shall begin until all submittals have been reviewed by the Engineer and are determined to be complete.
 - 2. The plan shall include, but not be limited to, details of the following:
 - a. Sewer plugging plan, including type, location, and manufacturer of plugs and emergency release procedures.
 - b. Material and location of suction piping installation.
 - c. Material and location of discharge piping installation and associated valves and pipe supports.

- d. Locations and number of each bypass pump and power requirements.
 - e. Compliance with permits required by the New York State Department of Environmental Conservation or the Owner.
 - f. Plan for noise control for each pump and/or generator.
 - g. Cold weather operational plan to protect equipment and pipes from freezing, including provisions to remove water that is trapped in sections at road crossings or other low spots in the discharge line.
 - h. Standard and emergency shutdown plan indicating emergency (24-hour) contacts, drain points, drain down time, disinfection and disassembly.
 - i. Schedule for installation of and maintenance of bypass pumping lines.
 - j. Details for standard road/sidewalk crossings.
 - k. Plan to prevent odors from being generated, including seals at discharge manholes and primary and secondary setup manholes.
 - l. Alarm system(s) that will allow prompt determination of loss of bypass piping integrity during operation.
 - m. Schedule for routine inspection of bypass pumping lines.
3. The Engineer's and Owner's receipt of flow bypass plan does not relieve Contractor of responsibility for means, methods, and sequences of construction, requirement to pump peak flows, and for safety.

1.06. PROJECT RECORDS

- A. The Contractor shall maintain records which indicate the following:
- 1. Dates of installation and operation of primary and secondary setups.
 - 2. Maintenance schedules for each pump.
 - 3. Dates and times of any flow loss from the bypass pumping system.
 - 4. Dates and times of any backups of flow into maintenance garage, and contractor action with corrective actions taken.
 - 5. Date of any public complaints with corrective actions taken.

1.07. REGULATORY REQUIREMENTS

- A. Conform to regulatory agencies having jurisdiction over the work.
- B. Contractor is responsible for fines levied on Owner by state, federal, and/or other agencies due to spills caused by failure of temporary pumping and piping systems.

1.08. FIELD MEASUREMENTS

- A. Prior to start of construction, verify by field measurements that existing conditions are as shown on Drawings. Notify Engineer of differences.

1.09. COORDINATION

- A. Coordinate field work under provisions of Section 01039, Coordination and Meetings, including maintenance of traffic, access to maintenance garage, sidewalks and emergency 911 service.
- B. Coordinate work with local utility companies (private and municipal) for location of existing utilities and protection thereof.
- C. Coordinate work which may disrupt school bus routes and dropoff/pickup locations with the local school system.
- D. Coordinate flow bypassing with Owner. If necessary, the Contractor shall coordinate snow removal operations with the governing municipality. The Contractor will be responsible for the removal or moving of snow surrounding the bypass system and piping.

1.10. TEMPORARY PUMPING COORDINATION MEETING

- A. The Contractor shall be responsible for the installation, operation, and removal of all flow bypass facilities and surface restoration in accordance with the approved project schedule.
- B. After Owner and Engineer review and approval of temporary pumping system submittal(s), and at least 14 days prior to intended use, schedule a coordination meeting with the Owner, Engineer, Contractor, and subcontractor or temporary pump supplier, if applicable.
- C. No temporary pumping shall take place until after satisfactory completion of the coordination meeting.
- D. Work shall be scheduled to minimize the duration of bypass pumping.

PART 2 PRODUCTS

2.01. MATERIALS - BYPASS PIPING

- A. Rigid Piping - Hot dipped, galvanized steel piping. Each pipe joint shall have a ball and socket-type connection, rubber O-ring, and lever closure for positive sealing.
- B. Flexible Piping - Synthetic rubber core, reinforced with synthetic fabric with wire helix, covered with synthetic rubber wrapping. Joint fittings to match rigid piping fittings.

2.02. PUMPS

- A. The pumps and drives shall be rated for continuous duty and shall be capable of pumping the required flow ranges without surging, cavitation, or vibration. Where required pumping rates are not specified, coordinate with Engineer to determine required pumping range prior to submitting associated shop drawings. Pumps shall not overload drivers at any point on the pump operating curve.

- B. Pumps shall be suitable for use with raw unscreened wastewater and leachate being pumped. Pumps shall be self-contained units designed for temporary use.
- C. Sewer plugs shall be pneumatic and shall be capable of accommodating the maximum allowable surcharge heads that may be experienced during the construction of this project. The plugs shall also be readily removed from the system during emergency shutdown of the system.
- D. Contractor shall provide necessary protection for bypass pumping equipment from freezing during cold weather operation.
- E. Contractor shall provide necessary containment for raw sewage from pump priming operations or routine maintenance.
- F. Provide the necessary start/stop and level controls for each pump.

2.03. CONCRETE BARRIERS

- A. Contractor to provide concrete barriers to surround bypass pumping area along any boundary with a road.

PART 3 EXECUTION

3.01. DESIGN REQUIREMENTS

- A. Maintenance of Flow - Bypass pumping systems shall have sufficient capacity for peak flow as noted in Article 1.04.
- B. Noise Suppression
 - 1. Contractor shall equip all pump motors and engines to minimize the generation of noise.
 - 2. Contractor shall utilize sound enclosures around all primary setups or utilize "hospital muffles" on those pumps.
 - 3. Contractor shall utilize sound enclosures around all secondary setups.
 - 4. Contractor shall be responsible to implement additional sound reduction measures as directed by the Owner, including those specified to protect the interests of surrounding private property owners.
- C. Siting of Facilities - Contractor shall maintain traffic flow at each site. Contractor shall have one day to install any road crossings he proposes that require the closure of local roadways. In all instances traffic flow must be maintained around and past the stations.
- D. Contractor will not be allowed to begin bypass pumping until verification is forwarded to the Engineer that all equipment scheduled to be installed has been received by the Contractor(s).

3.02. PERFORMANCE REQUIREMENTS

- A. It is essential to the operation of the existing sewerage system that there be no interruption in the flow of sewage throughout the duration of the project. The Contractor shall provide, maintain, and operate all temporary facilities such as dams, plugs, pumping equipment, conduits, all necessary power, and all other labor and equipment necessary to intercept the sewage flow before it reaches the point where it would interfere with work; carry it past this work; and return it to the existing sewer system downstream of the work.
- B. The bypass system shall meet the requirements of all codes and regulatory agencies having jurisdiction.
- C. The Contractor shall maintain sewer flow around the work area in a manner that will not cause surcharge or damage to tributary sewers and that will protect public and private property from damage.
- D. The Contractor shall incorporate provisions to remove water from the primary bypass pumping system to protect against freezing and damage. During cold weather operations, diesel generators shall utilize block heaters and critical priming piping shall be protected with heat tracing. Contractor shall provide cold weather mix diesel fuel during cold weather operations.

3.03. FIELD QUALITY CONTROL AND MAINTENANCE

- A. Testing on Installation - The Contractor shall perform leakage and pressure tests of the bypass piping, using clean water, prior to actual operation if directed by the Engineer. The test pressures shall be 1.5 times the expected operating pressures. The Engineer will be given 24 hours' notice prior to testing.
- B. Testing Prior to Disassembly - Upon completion of the work within a particular flow bypass setup the Contractor shall flush the pipes with clean water and disinfect the system with chlorine prior to disassembly. A residual chlorine concentration of 20 mg/L must be maintained for one hour prior to final dewatering and disassembly.
- C. Routine Inspection and Maintenance
 - 1. The Contractor shall inspect all operating bypass pumping systems each weekday or more frequently as necessary to ensure the proper operation of the system. Suction and discharge piping shall be cleaned to maintain the required performance of the bypass pumping system. A qualified representative of the General Contractor familiar with the operation and maintenance of the bypass system shall be on call and shall respond to an alarm condition and/or request by the Owner's operations staff within one hour of receipt of alarm notification (or Owner request).
 - 2. The Contractor shall ensure that the bypass pumping system is properly maintained.
- D. Extra Materials
 - 1. Spare parts for pumps and piping shall be kept on site as required.
 - 2. Adequate hoisting equipment for each pump and accessories shall be maintained on the site.

3.04. PREPARATION

A. Precautions

1. The Contractor is responsible for locating any existing utilities in the area selected for installation of the bypass pipelines. The Contractor shall minimize the disturbance to existing utilities and shall obtain approval from the Owner and Engineer for any relocation of the bypass pipeline. All costs associated with the relocation of utilities and obtaining of approvals shall be paid by the Contractor.
2. During all bypass pumping operations, the Contractor shall protect the bypass pumping facilities and existing collection system from damage inflicted by equipment. The Contractor shall be responsible for all intentional or accidental physical damage to the bypass pumping system caused by human or mechanical failure or interference.
3. During installation of the bypass pumping lines the Contractor shall make every effort to minimize the disruption of work at the pumping stations. The Contractor shall protect all mature vegetation and structures or other obstacles in the path of the pipeline from damage through the use of shields and buffering devices. All Owner property that must be relocated to construct the work must be stored at a location acceptable to the Owner. In instances where fences must be disturbed for the construction of the pipeline the Owner shall be consulted to see if the installation of temporary fencing shall be required. Preconstruction videotapes will be produced by the Contractor to document the pre-construction condition of the pipeline route.

3.05. INSTALLATION AND REMOVAL

- A. The Contractor shall remove manhole sections or make connections to the existing sewer and construct temporary bypass pumping structures only as the access locations indicated on the Contract Drawings and as may be required to provide adequate suction conduit.
- B. Plugging or blocking of sewage flows shall incorporate a primary and secondary plugging device. When plugging or blocking is no longer needed for performance and acceptance of work, it is to be removed in a manner that permits the sewage flow to slowly return to normal without surge, to prevent surcharging or causing other major disturbances downstream.
- C. The pipeline must be located off facility roads and sidewalks. When shown on the Contract Drawings, the Contractor must place the pipelines in trenches and cover. Upon completion of the bypass pumping operations, and after receipt of written permission from the Engineer, the Contractor shall remove all the piping, restore all property to pre-construction condition or better, and shall restore all pavement and sidewalks. The Contractor is responsible for obtaining any approvals for placement of the temporary pipeline within public ways from the Owner.
- D. Bypass pumping setups must be flushed with clean water and disinfected prior to dewatering and disassembly as indicated in paragraph 3.03.B. All rinse water shall be returned to the sewer system.

END OF SECTION

SECTION 11300
PUMPING EQUIPMENT-GENERAL

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Nameplate requirements.
- B. Shop and field tests.
- C. Services of manufacturer's representative.

1.02. RELATED SECTIONS

- A. Section 01300 - SUBMITTALS
- B. Section 01640 - EQUIPMENT-GENERAL
- C. Section 01650 - STARTING OF SYSTEMS
- D. Section 11310 – SUBMERSIBLE PUMPS

1.03. SUBMITTALS

- A. Provide in accordance with Section 01300, Submittals; Section 01640, Equipment-General; and as supplemented herein. Submittals shall include, but not be limited to, the following:
 - 1. Shop drawings.
 - 2. Pump nameplate designations, in table format.
 - 3. Performance affidavits.
 - 4. Shop test procedures, complete with list of instruments, description and sketch of process, and sample calculation form.
 - 5. Shop test results.
 - 6. Installation Certificate.
 - 7. Training Plans.
 - 8. Recordings of training.
 - 9. Training Reports.
 - 10. Functional Test Reports.
 - 11. Performance Testing Reports.
- B. Provide operation and maintenance manuals and data in accordance with Section 01640, Equipment-General.

PART 2 PRODUCTS

2.01. NAMEPLATES

- A. A brass or stainless steel nameplate shall be furnished for each pump with stamped characters readable under ordinary lighting conditions.
 - 1. Pump nameplate shall give the rating in gallons per minute, rated head, speed and efficiency.
 - 2. Additional data may be in accordance with the manufacturer's regular practice.
 - 3. Nameplates shall be securely attached and NOT PAINTED OVER.

2.02. FABRICATION REQUIREMENTS

- A. Shop coat per manufacturer's standard finish system and color.
- B. All bolts, nuts, washers, and other fasteners shall be Type 316 stainless steel unless otherwise noted.
- C. Welds shall be continuous unless noted otherwise.
- D. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.

2.03. SHOP TESTS

- A. Tests shall be performed on the pumps in accordance with Section 01640, Equipment-General and Section 11310, Submersible Pumps.
 - 1. Each pump unit shall be shop tested to determine compliance with the specifications, and the manufacturers shall submit to the Engineer and receive approval of test data before shipment of the pumps is made.
 - 2. The Engineer reserves the right to witness the shop test on each pump before the pumps are assembled for shipment to the job site.
 - 3. The pump manufacturer shall give the Engineer ample notice of these tests so that the Engineer can arrange to witness the tests.
 - 4. Final acceptance, however, will be dependent upon the satisfactory operation and performance after installation.

PART 3 EXECUTION

3.01. EQUIPMENT INSTALLATION

- A. Install in accordance with the Contract Documents and the manufacturer's written instructions.
- B. No modifications to equipment shall be made without the written consent of the manufacturer and approval of Engineer.

- C. Field verify all dimensions and elevations. Notify Engineer of specific differences.
- D. Furnish all necessary materials (including lubricants, chemicals, etc.) and equipment (including measuring devices, etc.) for testing and startup.
- E. All bolts, nuts, washers, and other fasteners shall be Type 316 stainless steel unless otherwise noted.
- F. Anchor rods (bolts) shall be Type 316 SS HILTI-style adhesive anchors.
- G. Backpaint aluminum in contact with painted or galvanized steel or concrete with 5 mils of Tnemec Series 66-Gray, Hi-Build Epoxoline or DuPont 25P Epoxy.
- H. Isolate dissimilar metals by backpainting or with dielectric using stainless steel fasteners.

3.02. FIELD TESTS

- A. Field tests shall be made in conformance with Section 01640, Equipment-General and Section 01650, Starting of Systems.
- B. Functional testing shall demonstrate the following:
 - 1. That the units have been properly installed and are in proper alignment.
 - 2. That the units operate without overheating or overloading of any parts and without objectionable vibration.
 - 3. That there are no mechanical defects in any of the parts.
 - 4. That the pumps can deliver the specified pressure and quantity at the rated speed. All field tests shall be conducted with clean water from the private water company water supply system. The Contractor shall provide all temporary flow measurement devices as necessary to achieve accurate measurement of the pumped flow during the field tests.
 - 5. That the pumps can pass the size of solids specified and the type of liquid for which the pumps are to be used.

3.03. SERVICES OF MANUFACTURER'S REPRESENTATIVE

- A. Provide services of the equipment manufacturer or their approval representative in accordance with Section 01640, Equipment-General, and as specified in the specification sections for each pump type.

END OF SECTION

SECTION 11310
SUBMERSIBLE PUMPS

PART 1 GENERAL

1.01. DESCRIPTION OF WORK

- A. Furnish, install, and test submersible pumps in the Building No. 1 Pump Station and in the Holding Tank Pump Station complete with motors, pump discharge flanges, guide rails, brackets, control panels, wiring, accessories, spare parts, manufacturer's services, and all other required appurtenances in accordance with the Contract Documents.

1.02. RELATED SECTIONS

- A. Division 1 Specifications
- B. Division 2 Specifications
- C. Section 11300 – PUMPING EQUIPMENT-GENERAL
- D. Division 15 Specifications.

1.03. REFERENCES

- A. American National Standards Institute (ANSI).
- B. Hydraulic Institute Standards, latest edition.

1.04. PERFORMANCE REQUIREMENTS

- A. Submersible pumps shall be capable of pumping liquid with 0 to 3 percent solids without clogging.
- B. All equipment and appurtenances installed in the wet well shall be rated for use in NEC Class I, Division 1, Groups C and D hazardous locations.
- C. Submersible pumps shall be capable of continuous stable operation under the following conditions:

Pump Parameters	Building No. 01 Pump Station	Holding Tank Pump Station
Quantity	2	2
Impeller size	6.75 inches	6.75 inches
Drive type	Submersible	Submersible
Pumped liquid	Raw wastewater, leachate	Raw wastewater, leachate
Primary design point (each unit) Rated flow Total dynamic head	83 gpm 16 feet	Replace in-kind Replace in-kind
Minimum shutoff head	19.4 feet	Replace in-kind
Minimum sphere passing size	3.0 inches	2.0 inches

1.05. SUBMITTALS

- A. Provide in accordance with Sections 01300, Submittals, and 01640, Equipment-General, and as supplemented herein. Submittals shall include, but not be limited to, the following:
1. Shop Drawings
 - a. Operating characteristics and nameplate data.
 - b. Manufacturer's catalog information, descriptive literature, specifications, etc. for pumps, motors, and accessories.
 - c. Manufacturer's certified installation drawings containing all critical dimensions, piping connection sizes, weights, etc. required for installation of the equipment.
 - d. Certified pump curves.
 - e. Electrical schematics.
 - f. List of recommended spare parts other than those specified.
 - g. Motor information.
 - h. Control panel information.
 - i. Shop and field painting information.
 - j. Shop and field testing procedures, pump and piping set-up, equipment to be used and ANSI/HI testing tolerances to be followed.
 - k. Warranty.
 2. Performance affidavits.
 3. Shop test results.
 4. Manufacturer's installation certificate.
 5. Certification of equipment compliance.
 6. Functional Test Reports.
 7. Training Plans.
 8. Recordings of training sessions (to be completed by and coordinated with the Contractor).
 9. Written training reports.
- B. Provide operation and maintenance manuals and data where scheduled in Section 01640, Equipment-General.

1.06. SPARE PARTS

- A. Furnish the following spare parts for each pump in accordance with the Section 01640, Equipment-General, in clearly identified dust-proof containers:
 - 1. One set of bearings.
 - 2. One set of mechanical seals.
 - 3. One impeller bolt and wear rings.
 - 4. One seal fail relay and relay socket.
 - 5. One set of all attachment hardware complete with all gaskets and O-rings.

1.07. EQUIPMENT WARRANTIES AND SPECIAL GUARANTEES

- A. The supplier shall provide the following warranties and special guarantees in accordance with Section 01640, Equipment-General.
 - 1. The equipment manufacturer shall guarantee for a period of three years starting at the time of equipment delivery to the job site or one year starting at the time of Substantial Completion (whichever is shorter), that the equipment supplied is free from defects in materials or workmanship and will meet the specified performance requirements when operated in accordance with the manufacturer's recommendations. The manufacturer shall correct any breach in this warranty at their expense.

PART 2 PRODUCTS

2.01. MANUFACTURERS

- A. Building No. 01 Pump Station.
 - 1. Hydromatic/Pentair S4-NVX200.
 - 2. Or Engineer-approved equal.
- B. Holding Tank Pump Station (Replacement in-kind).
 - 1. Hydromatic/Pentair NPGH500JD

2.02. OR EQUAL AND SUBSTITUTIONS

- A. In the case of an "or-equal" or a substitution, demonstrate in writing, to the satisfaction of Owner that the manufacturer has produced the specified type and size of equipment for sanitary wastewater service that has been in successful operation for a minimum period of five years prior to the Bid date.
- B. Submit information for an "or-equal" or substitution as outlined in the General Conditions and Supplementary Conditions.

2.03. EQUIPMENT DESIGN – BUILDING NO. 1 PUMP STATION

A. General

1. Pumps shall be wet pit mounted, submersible, non-clogging with vertical mounted, direct-connected motors and bottom inlet.
2. All major components of the pumping unit (including impeller, volute casing and stator housing) shall be manufactured from ASTM A48 Class 30 or 40 gray cast iron with smooth surfaces devoid of blow holes or other irregularities.
3. All exposed nuts and bolts shall be AISI Type 316 stainless steel.
4. All metal surfaces coming into contact with the pumped liquid, except for stainless steel and brass materials, shall be protected by a factory applied spray coating of acrylic dispersion zinc phosphate primer with a polyester resin paint finish.
5. Sealing design shall incorporate metal-to-metal contact between machined surfaces. Critical mating surfaces where watertight sealing is required shall be machined and fitted with Nitrile or Viton rubber O-rings. Fittings will be the result of controlled compression of rubber O-rings in two planes and O ring contact on four sides without a specific torque limit requirement.

B. Pump Volute Casing

1. Casing shall be constructed of close-grained cast iron and shall be designed to withstand hydrostatic heads equal to 1.5 times the maximum shutoff head without leakage or undue distortion or deflection.
2. The discharge connection shall match the discharge hose or base elbow for the pump assembly.

C. Impeller

1. Impeller shall be grey cast iron, multi-vane, recessed solids handling design and have pump-out vanes on the backside of the impeller to prevent grit and other materials collecting in the seal area. Impellers shall be dynamically balanced and capable of handling solids, scum, fibrous materials, heavy sludge, and other matter normally found in wastewater.

D. Pump Shaft

1. The shaft shall be machined from a solid 416 stainless steel forging.
2. The pump shaft shall be an extension of the motor shaft. Shafts using mechanical couplings will not be acceptable.

E. Mechanical Seals

1. The pump shall have two mechanical seals, mounted in tandem, with an oil chamber between the seals.
2. The lower seal shall be replaced without disassembly of the seal chamber and without the use of special tools.

3. Pump-out vanes shall be present on the backside of the impeller to keep contaminants out of the seal area.

F. Bearings

1. An upper radial bearing and a lower thrust bearing shall be required. The bearings shall be heavy-duty single row ball bearings that are permanently lubricated by the dielectric oil that fills the motor housing.
2. Bearings shall be sized to carry the loads imposed under continuous service without undue heating.
3. Motor bearings shall be sealed and permanently lubricated.
4. Minimum B-10 life for bearings shall be 50,000 hours at maximum operating conditions.

2.04. ACCESSORIES

A. Power Cable

1. Power cable, moisture detection sensor cable, and motor thermal overload sensor cable shall be attached together and protected by a common heavy-duty flexible protective hose. If separate instrumentation cables are required, they shall be shielded. The protective hose shall safeguard the power cable from abrasion and/or piercing objects in the liquid.
2. Each pump shall be provided with a sufficient length of cable with the number and size of conductors required for the motor power leads and thermal switches to reach the junction box or manufacturer's control panel as shown on the Contract Drawings. Contractor shall field verify the required cable length prior to shop drawing submittal.
3. Cable entry shall be watertight, with strain relief at the junction chamber. Strain relief and water sealing shall function separately.

B. Moisture Detection

1. Each pump shall be supplied with a leakage sensor for the detection of water in the oil casing or bottom of motor housing. Detection shall generate an alarm but shall not result in an immediate shut down of the pump.
2. Pump manufacturer shall provide a sensor interface relay and compatible relay socket for each device.

C. Discharge Assembly

1. Pump manufacturer shall provide a discharge assembly. Discharge assemblies shall consist of a discharge connection claw and a discharge connection elbow.
2. For pumps with a fixed base elbow discharge assembly, the pump shall be provided with a flat-faced discharge flange which shall connect to a permanently mounted discharge elbow by a simple downward motion, without rotation, guided by guide rails.

- a. The pump and discharge assembly shall be constructed so that when the pump is lowered to the discharge base/elbow, the knifing action of the vertical metal-to-metal seal provides a self-cleaning, non-sparking, explosion-proof assembly. An elastomeric profile gasket is also acceptable to prevent leakage.
- b. The discharge base/elbow shall be secured to the bottom of the wet well and support the guide rails for the pump. The base shall be sufficiently rigid to firmly support the guide rails, discharge piping, and pumping unit under all operating conditions. The diameter and drilling of the elbow outlet flange shall conform to ANSI B16.1, Class 125. The discharge base shall be coated with an epoxy coating to prevent corrosion.

D. Pump Mounting

1. Pump mounting accessories shall be made of Type 316 stainless steel and shall include a safety hook assembly.
2. Pumps shall be easily removable from the space in which they operate without requiring personnel to remove bolts, nuts or other fastenings. Pumps shall be able to be lifted from the space without personnel entering or dewatering the space.
3. Pump manufacturer shall provide stainless steel lifting chain of adequate length that can be securely attached to guardrail when pumps are not hooked to davit cranes.
4. Manufacturer shall provide guide rails and guide rail supports to guide the pump when being raised or lowered into the tank.
 - a. The guide rails shall be Type 304 or 316 stainless steel.
 - b. The guide rails shall mount on the discharge base/elbow for the pump and shall align the pump with the discharge elbow as it is lowered into place.
 - c. A Type 316 stainless steel upper rail guide bracket shall be furnished to support and align the guide rails at the top of the sump. For rail lengths greater than 20 feet, a stainless steel intermediate rail guide bracket shall be included at the recommendation of the pump manufacturer.

E. Provide liquid level floats and controls for the following conditions at each pump station. Floats shall be provided with sufficient cable length for the application. Float elevations to be field coordinated with the manufacturer during startup.

1. Low Water Alarm
2. All Pumps Off
3. Lead Pumps On
4. Lag Pump On
5. High Water Alarm

2.05. MOTORS AND DRIVES

- A. Motors and drives shall be furnished by the equipment supplier and shall be designed specifically for use with the equipment provided.

- B. Motors shall be oil filled and be capable of proper operation at the design conditions with an operating level of at least 12-inches of wastewater in the wet well.

C. Motor Parameters

Item No.	Motor Parameters	Building No. 01 Pump Station	Holding Tank Pump Station
1	Maximum allowable motor horsepower	5 HP	7.5 HP
2	Motor Selection Type Special applications	Submersible None	Submersible None
3	Motor speed (nominal)	1,165 RPM	3,450 RPM
4	Minimum allowable motor efficiency at full speed	80 percent	80 percent
5	NEMA design	B squirrel cage	B squirrel cage
6	Duty	Continuous	Continuous
7	Insulation	Class F	Class F
8	Voltage, phase, and Hertz	460V, 3 phase, 60 Hertz	460V, 3 phase, 60 Hertz
9	Service factor	1.20	1.20
10	Motor enclosure	Submersible	Submersible
11	Protection	Motor winding thermal, motor overload protection	Motor winding thermal, motor overload protection

- D. Motors shall be provided with motor winding thermal protection.

- E. Motors shall be provided with motor overload protection.

2.06. CONTROLS

- A. Controls shall be provided as specified on the electrical drawings and as described herein.

- B. Manufacturer shall provide a complete and integrated control system for each duplex pump station supplied under this section that meets the requirements specified herein.

C. Control Panel

- The control panel enclosure, at minimum, shall include all electrical and control devices necessary to provide a complete and functional system. This includes the following, at minimum:

Parameter	Description
Power Distribution	
Main power supply	480VAC, 3 phase, 60 Hertz.
Main circuit breaker	Three-pole with external flange-mounted lockable disconnect handle sized to protect equipment and loads.
Control power transformer	480VAC -120VAC and for any other voltage conversions necessary to power system components.
Enclosure	
Rating	Dead-front NEMA 4X stainless steel

Parameter	Description
Mounting	Panel mounted
Doors	Single swing-out door with three-point latch handle and key lock
Door-Mounted Controls and Monitoring Equipment	
	As described herein
Control Panel Protective Devices	
	Surge suppression
Enclosure Accessories	
	Print pocket
	Panel heater (for exterior Holding Tank Pump Station control panel only)

2. Panel Heater - The exterior Holding Tank Pump Station control panel shall be equipped with a 120V panel heater to minimize the effects of humidity and condensation. The heater shall include a thermostat.
3. Provide the following door-mounted pilot lights, pushbuttons, and accessories (for each pump station control panel):
 - a. Individual pump Hand/Off/Auto selector switch.
 - b. Individual pump Running pilot light.
 - c. Individual pump Seal Leak pilot light.
 - d. Individual pump Motor Over-temperature pilot light.
 - e. Individual pump Overload pilot light.
 - f. Individual pump Fault Reset pushbuttons.
 - g. High Water pilot light.
 - h. Low Water pilot light.
 - i. Float push to test pilot light.

D. Sequence of Operation

1. In Hand, the pump shall operate continuously. The pump shall cease operation if a fault occurs.
2. In Off, the pump shall not operate.
3. In Auto, the pump shall operate based on the float setting.
4. At High Water, a light shall illuminate at the control panel.
5. At Low Water, a light shall illuminate at the control panel.
6. At Lead Pump On float setting, the lead pump shall start operation.

7. At Lag Pump On float setting, the lag pump shall start operation.
8. At All Pumps Off float setting, the pumps shall cease operation.

2.07. FABRICATION REQUIREMENTS

- A. Manufacturer shall provide surface preparation and prime coating suitable for continuous long-term submergence in raw wastewater and leachate.
- B. All bolts, nuts, washers, and other fasteners shall be Type 316 stainless steel unless otherwise noted.
- C. Welds shall be continuous unless noted otherwise.
- D. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.
- E. Furnish nameplates for each equipment.
 1. Equipment nameplates of stainless steel shall be engraved or stamped and fastened to the equipment in an accessible location with No. 4 or larger oval head stainless steel screws or drive pins.
 2. Nameplates shall contain the manufacturer's name, model, serial number, size, characteristics, and appropriate data describing the equipment performance ratings.
- F. The equipment shall be tested in the manufacturer's shop in accordance with the requirements of Section 01640, Equipment-General, and as specified herein.
 1. Provide shop testing for each pump as detailed in Section 11300, Pumping Equipment-General, and specified herein.
 2. Provide certified performance tests as specified herein for all pumps and spare rotating assemblies except those specified to be witness tested.
 3. Certified Performance Testing
 - a. Run pump at full speed rating point prior to start of any testing.
 - b. Full Speed Tests
 - 1) Test pumps at the conditions specified and indicated and take not less than five operating points between shutoff and runout. Test points must be at the conditions specified and indicated.
 - 2) Take readings to determine flow, differential pressure, rpm, horsepower, and efficiency.
 - 3) Operate each pump for not less than one hour and take readings to determine that the pump will operate as specified and indicated without cavitation.
- G. Engineer and Owner reserve the right to witness the shop test on each pump at their own expense before the pumps are assembled for shipment to the project site. The pump manufacturer shall give Engineer ample notice of these tests so that Engineer can arrange to witness the tests.

- H. The manufacturers shall submit certified copies of the test data to Engineer and receive approval of the test data before shipment of the pumps to the site. Include results of factory testing in the O&M Manual.
- I. Final acceptance of the equipment will be dependent upon the satisfactory operation and performance after installation.

PART 3 EXECUTION

3.01. EQUIPMENT INSTALLATION

- A. Install in accordance with the Contract Documents and the manufacturer's written instructions.
- B. No modifications to equipment shall be made without the written consent of the manufacturer and approval of Engineer.
- C. Contractor shall provide all fittings and appurtenances necessary to connect to equipment and as necessary for a complete installation. Contractor shall field verify dimensions with manufacturer prior to submittal review. Contractor shall field verify all dimensions and elevations. Contractor is responsible to resolve all discrepancies with the manufacturer at no cost to the Owner.
- D. Furnish all necessary materials (including lubricants, chemicals, etc.) and equipment (including measuring devices, etc.) for testing and startup.
- E. Provide surface preparation and field painting.
- F. All bolts, nuts, washers, and other fasteners shall be Type 316 stainless steel unless otherwise noted.
- G. Anchor rods (bolts) shall be Type 316 SS HILTI-style adhesive anchors.
- H. Backpaint aluminum in contact with painted or galvanized steel or concrete with 5 mils of Tnemec Series 66-Gray, Hi-Build Epoxoline or DuPont 25P Epoxy.
- I. Isolate dissimilar metals by backpainting or with dielectric using stainless steel fasteners.

3.02. TESTING AND STARTUP

- A. Testing and startup shall be performed in accordance with Section 01650, Starting of Systems, and as specified herein unless otherwise noted.
 - 1. Functional testing.
 - 2. Startup
- B. All testing shall be done in the presence of the Engineer and the equipment manufacturer or their approved representative.
- C. Functional testing shall demonstrate the following:
 - 1. That the units have been properly installed and are in proper alignment.

2. That the units operate without overheating or overloading of any parts and without objectionable vibration.
 3. That there are no mechanical defects in any of the parts.
 4. That the pumps can deliver the specified flow rate and quantity at the rated speed. All Functional Tests shall be conducted with clean water unless otherwise noted. Contractor shall provide all temporary flow measurement devices as necessary to achieve accurate measurement of the pumped flow during the field tests.
 5. That the pumps can pass the size of solids specified and the type of liquid for which the pumps are to be used.
- D. During Functional Testing, readings of all essential data shall be recorded at a minimum of four operating points. Data taken shall include suction and discharge pressure, flow, pump speed, and motor amperage. All field testing information shall be summarized in a report and submitted to Engineer for approval. Deviation of actual data from specified performance criteria shall not exceed ± 3 percent.

3.03. SERVICES OF MANUFACTURER'S REPRESENTATIVE

- A. Provide services of the equipment manufacturer or their approval representative in accordance with Section 01640, Equipment-General, and as specified herein.
- B. A qualified representative of the equipment manufacturer shall be on site for the following activities:
 1. Functional testing.
 2. Startup
 3. Training.
 4. As necessary to provide submittals in accordance with Article 1.05.

END OF SECTION

SECTION 15060
INSIDE PROCESS PIPING

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Inside process pressure piping, fittings and specials located inside pump stations and equipment.
- B. Miscellaneous appurtenances.
- C. Shop tests.
- D. Installation.
- E. Testing.
- F. Pipe schedule.

1.02. RELATED SECTIONS

- A. Section 01039 - COORDINATION AND MEETINGS
- B. Section 01300 - SUBMITTALS
- C. Section 01700 - CONTRACT CLOSEOUT
- D. Section 02741 - PRESSURE TEST OF FORCE MAINS
- E. Section 15100 - INSIDE PROCESS VALVES

1.03. REFERENCES

American National Standards Institute (ANSI).

American Water Works Association (AWWA).

American Society for Testing Materials (ASTM).

- A. Stainless Steel
 - 1. ASTM A240 - Heat Resisting Chromium and Chromium Nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels
 - 2. ASTM A774 - Specifications for as Welded Wrought Austenitic Stainless Steel Fittings for General Corrosive Service at Low and Moderate Temperatures
 - 3. ASME/ANSI B36.19 - Stainless Steel Pipe
 - 4. ASME/ANSI B16.11 - Forged Steel Fittings, Socket-Welding and Threaded

5. ASTM A312 - Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes
6. ASTM A403 - Standard Specification for Wrought Austenitic Stainless Steel Piping Fittings

1.04. SUBMITTALS

- A. Submit under provisions of Section 01300, Submittals.
- B. Product Data - Provide data, indicating conformance to ASTM/AWWA codes, pipe material, sizes, class, dimension, joint type and accessories.
- C. Layout Drawings - Show complete piping layout, including materials, sizes, classes, locations, and dimensions.
- D. Results of shop tests, if required.
- E. Manufacturer's Certification - Certify that products meet or exceed specified requirements.

1.05. PROJECT RECORD DOCUMENTS

- A. Submit documents under provisions of Section 01700, Contract Closeout.

1.06. FIELD MEASUREMENTS

- A. Prior to start of construction, verify the field measurements and elevations that existing conditions, piping, and equipment are as shown on Drawings. Notify Engineer of specific differences.
- B. Prior to the start of construction, verify by exploratory excavations that existing underground utility locations and elevations are as shown on Contract Drawings prior to installation of crossing pipes and confirm location and elevation of uncharted utilities in the vicinity of proposed work. Notify Engineer of location and elevation and allow Engineer sufficient time to determine any changes required as a result of such exploratory excavation, prior to start of construction.

1.07. TEST REQUIREMENTS

- A. Requirements for pressure testing of process piping are described in Sections 02741, Pressure Tests of Force Mains.

1.08. COORDINATION

- A. Coordinate work under provisions of Section 01039, Coordination and Meetings.

PART 2 PRODUCTS

2.01. GENERAL

- A. All products included in this section shall conform to the requirements of the standard specifications referenced herein.

- B. Pipe material, pipe class and pipe sizes shall be furnished and installed as listed in the pipe schedule
- C. All pipes and fittings shall be as listed in pipe schedule.
- D. The inside process piping system shall be installed as shown on the Drawings.
- E. All piping, couplings, and appurtenances shall be suitable for the environment in which the equipment is proposed to be installed.

2.02. MATERIALS - STAINLESS STEEL

- A. Stainless Steel Pipe and Fittings - Type 304L with 2-D finish conforming to ANSI 304L and ASTM A240-UNS Alloy S30403, ASTM312, and ASTM A774.
- B. Joints – Welded. No fabricated fittings, tees, or wyes will be accepted.
 - 1. Welder qualification certificates shall meet the minimum coded requirement for duration of qualification, clearly stating the type of weld and position for which the welder is qualified, and shall bear the signature of an AWS-authorized weld inspector.
 - 2. All fittings shall be by the same manufacturer.
 - 3. All flanges and flange systems shall be stainless steel.
 - 4. Flanges shall be provided, as a minimum, on stainless steel piping: at all connections to valves and equipment; and as otherwise shown on the Drawings.
 - 5. Gaskets shall be Viton.
 - 6. Piping system shall be inspected after fabrication and checked for irregularities. Flanges, if they are warped, shall be corrected in the proper manner acceptable to the Engineer.
- C. Schedule - Minimum thickness schedule for stainless steel piping and fittings shall be Schedule 40S.
- D. Stainless steel process piping and fittings shall be designed for minimum rated pressure of 150 psi internal pressure, including any live loads.

2.03. JOINTS IN PIPING

- A. Flanged Joints
 - 1. Shall be brought to exact alignment and all gaskets and bolts or studs inserted in their proper places.
 - 2. Bolts or studs shall be uniformly tightened around the joints.
 - 3. Where stud bolts are used, the bolts shall be uniformly centered in the connections and equal pressure applied to each nut on the stud.
 - 4. Pipes in all lines subject to temperature changes shall be cut short and cold sprung into place to compensate for expansion when hot.

5. Gaskets shall be ring type, minimum 1/16-inch thick, cloth inserted rubber gaskets.
 6. Flanges shall conform to AWWA Standard C115 (ANSI A21.15) with bolts provided in the size and number called for and in accordance with the American Standard with hexagonal nuts.
 7. For bolt sizes and lengths, the "Handbook of Cast Iron Pipe" should be consulted.
 8. Each flanged joint shall have a bead of silicone caulk applied to the full perimeter of the joint after finish painting is completed.
- B. Welded Joints
1. Shall be made by competent operators in a first-class workmanlike manner, in complete accordance with ANSI Standard B31.1. Welding electrodes shall conform to ANSI Standard W3.1, and welding rod shall conform to ANSI Standard W3.2.
 2. Only skilled welders capable of meeting the qualification tests for the type of welding which they are performing, shall be employed.
 3. Tests, if ordered by Engineer or otherwise required, shall be made at the expense of the Contractor.
- C. No-Hub Joints - Fittings and all parts of the clamp assembly used in joining "hubless cast iron sanitary systems" for soil, waste, vent and house or building sewer lines shall bear the registered insignia "C" or "C No-Hub" indicating that these items used in the sanitary system comply with the Cast Iron Soil Piping Institute Standard 301-69T and ASTM Standard C564.

2.04. HANGERS AND SUPPORTS

- A. All piping shall be adequately supported and braced by means of adequate hangers, concrete piers, pipe supports, brackets, or otherwise as may be required by the location. Refer Contract Drawings.

2.05. PIPE ACCESSORIES

- A. Fittings - Same materials, class, coatings and linings as pipe unless under Article 2.02 it was specifically described otherwise. Fittings molded or formed to suit pipe size and end design and in required tee, bends, elbow, couplings, adapters and other configurations.

2.06. IDENTIFICATION

- A. Each pipe length and fitting shall be clearly marked with:
1. Manufacturer's name and trademark.
 2. Nominal pipe size and class.
 3. Material designation.

PART 3 EXECUTION

3.01. EXAMINATION

- A. Verify that structures are complete enough to receive pipe.
- B. All pipe or fittings which have been damaged in transit or which are obviously deformed or refinished in any way shall be rejected, marked and removed from the site of the work.
 - 1. Any pipe or fitting which the Engineer suspects is improper for the job shall be temporarily rejected, marked and set aside for subsequent investigation to determine its conformity with the specifications.
 - 2. All pipe fittings and specials shall be carefully inspected in the field before installation. Cracked, broken, warped, out-of-round, damaged pipe joints including damaged pipe lining or coatings or specials, as determined by the Engineer, shall be culled out and not installed.
 - a. Such rejected pipe shall be clearly tagged in such manner as not to deface or damage it, and the pipe shall then be removed from the job site by the Contractor at his own expense.

3.02. INSTALLATION

- A. All piping shall be installed by skilled workmen in accordance with the best standard practice for piping installation, and in accordance with the manufacturer's installation instructions where applicable.
 - 1. Proper tools and appliances for the safe and convenient handling and installing of the pipe and fittings shall be used.
 - 2. Great care shall be taken to prevent any pipe coating from being damaged on the inside of the pipe and fittings. All pieces shall be carefully examined for defects and no piece shall be installed which is known to be defective.
 - 3. If any defective pieces should be discovered after having been installed, it shall be removed and replaced with a sound one in a satisfactory manner by the Contractor and at his own expense.
 - 4. Pipe and fittings shall be thoroughly cleaned before they are installed and shall be kept clean until they are accepted in the complete work.
 - 5. All piping connections to equipment or tanks shall be provided with unions or coupling flanges located so that piping may be readily dismantled from the equipment or tank.
 - 6. At certain applications, Dresser or victaulic couplings may also be used, subject to the Engineer's approval.
 - 7. All piping shall be installed in such a manner that it will be free to expand and contract without injury to itself or surrounding structures or equipment.
 - 8. All piping shall be erected to accurate lines and grades and shall be supported and braced against movement temporary or permanent.

- B. Where process piping assemblies connect to equipment, valves or tanks, such piping shall be rendered compatible with the approved equipment, valve or tank installed and any necessary modifications to the original piping shall be shown in scaled layout on appropriate shop drawings submitted to the Engineer.
- C. Piping assemblies under 4-inch size shall be essentially supported on walls and ceilings, unless otherwise shown on the Drawings, being kept clear of openings and positioned above "headroom" space; where practical, such piping shall be run in neat clusters, plumb and level along walls, and parallel to overhead beams.

3.03. TESTING

- A. All piping shall be tested in accordance with the procedures outlined in Section 02741, Pressure Tests of Force Mains.
 - 1. When no test method for inside process pressure piping is specified in the pipe schedule, the following procedure shall be used.
 - 2. A leakage test shall be conducted concurrently with the pressure test. The section tested shall be driptight with no signs of leakage.
 - 3. Any leaks or defective pipe disclosed by any leakage and pressure tests shall be repaired or replaced and aforementioned tests repeated as often as necessary until conformance with the requirements.
 - 4. All water for tests shall be furnished and disposed of by the Contractor at his expense.
 - 5. The source and quality of water which the Contractor proposes to use in testing the lines shall be acceptable to the Engineer.
 - 6. All test water must be removed from the interior of all stainless steel pipe by draining, blowing, mopping, etc. Water must not be allowed to stand for long periods of time within stainless steel pipe.

3.04. COUPLINGS AND ADAPTERS

- A. General
 - 1. Adapters shall be restrained to process piping by the use of stainless steel tie rods.
 - 2. Couplings and/or adapters shall be provided by the Contractor for the alignment of similar types of pipe or connecting dissimilar pipe materials as required.
 - 3. All new to existing connections shall be restrained.
 - 4. Unions shall be provided adjacent to all valves and other pieces of equipment where soldered, cement welded, or screwed joints are utilized.
 - 5. Type 316 stainless steel bolts shall be used on all pipe adapters.
 - 6. Where couplings and adapters are to be used they shall be installed in complete accordance with the manufacturer's recommendations.

7. All piping, couplings, and appurtenances shall be suitable for the environment in which the equipment is proposed to be installed.
8. Couplings shall be manufactured by Smith Blair or equal.

3.05. PIPING SCHEDULE

- A. Piping requirements for this project are outlined in the following schedule.
- B. Contractor shall field verify existing pipe sizes and match existing sizes. Provide all necessary fittings for the connections to the pumps and as necessary to perform the work.

Pipe No.	Identity	Predominant Size	Type of Pipe	Schedule or Class	Joints
1	Pump Station No. 1 Pipes	4" – Field Verify	304L SS	40S	Welded
2	Holding tank pump station pipe	Field Verify	304L SS	40S	Welded

END OF SECTION

SECTION 15100
INSIDE PROCESS VALVES

PART 1 GENERAL

1.01. SECTION INCLUDES

- A. Furnishing of check valves.
- B. Installation.
- C. Testing.

1.02. RELATED SECTIONS

- A. Section 01026 - LUMP SUM ITEMS: Requirements applicable to lump sum prices for the work of this Section.
- B. Section 01039 - COORDINATION AND MEETINGS
- C. Section 01300 - SUBMITTALS
- D. Section 02741 - PRESSURE TESTING OF FORCE MAINS
- E. Section 15060 - INSIDE PROCESS PIPING

1.03. REFERENCES

ANSI/AWWA C508	Swing Check Valves for Waterworks Service 2 inches through 24 inches NPS
ANSI/AWWA C509	Resilient-Seated Gate Valves for Water and Sewerage Systems
ASTM A126	Gray Iron Castings
ASTM A48	Gray Iron Castings for Valves, Flanges and Pipe Fittings
ANSI B16.1	Gray Iron Pipe Flanges and Flanged Fittings
ANSI B16.5	Pipe Flanges and Flanged Fittings

1.04. DESIGN REQUIREMENTS

- A. The design working pressure shall be 250 psig for valves 12 inches NPS in diameter and smaller.
- B. Valves shall be required for wastewater use.
- C. Check valves shall be designed to prevent to backflow of fluid by closing preventing flow reversal.
- D. Resilient seated gate valves shall be designed to be leak-tight with full pressure on either face with no pressure on the opposite face.
- E. All valves shall be compatible with all the materials the valves shall be exposed to.

1.05. SUBMITTALS

- A. Submit under provisions of Section 01300, Submittals.
- B. Submit shop drawings of types of valves and appurtenances proposed for the project including conformance to ANSI/AWWA codes and related details for field assembly, operations and maintenance.
- C. Manufacturer's Installation Instructions - Indicate special procedures required to install products specified.
- D. Results of shop tests, if required.
- E. Manufacturer's Certificate - Certify that products meet or exceed specified requirements.

1.06. COORDINATION

- A. Coordinate work under provisions of Section 01039, Coordination and Meetings.
- B. Contractor shall field verify the diameter of the existing discharge force main to remain prior to ordering valves. Check valve sizes shall match the diameter of existing discharge force mains.

PART 2 PRODUCTS

2.01. MATERIALS

- A. Valve size, type of valve, joint type, class, lining, coatings shall be installed as listed herein or as shown on Drawings.
- B. Valves shall be of standard manufacturer and of highest quality, both as to material and workmanship, conforming to the latest edition of AWWA standards specified.
- C. All valves shall have the manufacturer's name monogrammed or initialed by the manufacturer thereon and shall be identified by catalog numbers.
- D. All valves shall be provided with flange ends as described herein or shown on the Drawings.
- E. Valves shall be iron bodied.
- F. All surface forming joints or bearing surfaces shall be machined to a perfect fit.
- G. All disc and seat rings shall be carefully and thoroughly secured in place with the iron castings machined where the rings are bare and the backs of the rings machined all over.
- H. After the rings have been fastened securely in place, the front shall be machined all over to a perfectly true and smooth bearing surface.
- I. Valves shall open counterclockwise (left) unless otherwise specified.

2.02. CHECK VALVES

- A. All check valves, except those installed on sump pump discharge lines, shall be of the horizontal single disc swing type designed to operate with a minimum loss of pressure.
- B. Check valves shall be so designed that when there is no flow through the line, the disc shall hang lightly against the seat and shall afford ample waterway with but a small angle of opening.
- C. All check valves shall be provided with screwed or bolted covers for access to the disc.
- D. Unless shown otherwise, all check valves shall be located in horizontal piping runs and shall be provided with extended hinge pin and outside lever and weight fully installed to assist the valve in closing.
- E. 4-inch or larger valves shall be capable of passing a 3-inch solid.
- F. Check valves are proposed to be installed in Class 1, Divisions 1 and 2 areas with continuous exposure to sewage gas. Valves shall be corrosion resistant and compatible with the environmental.
- G. All check valves, shall be manufactured by DeZurik, ITT Kennedy Valve Manufacturing Company, Inc. or equal.

PART 3 EXECUTION

3.01. EXAMINATION

- A. Verify that structures are complete and ready to receive work.
- B. All valves and appurtenances shall be carefully inspected in the field before installation. Cracked, broken, warped, out-of-round, damaged joints, including damaged linings or coatings, or otherwise defective valves, as determined by the Engineer, shall be culled out and not installed. Such rejected material shall be clearly tagged in such manner as not to deface or damage it, and the material shall then be removed from the job site by the Contractor at his own expense.
- C. The Contractor shall have on the job site all the proper tools, gauges, pipe cutters, lubricants, etc., to properly install valves, etc.
- D. The Contractor shall verify all valve positions and locations before installation.

3.02. TOLERANCES

- A. Valves, and appurtenances shall be installed at the elevations and locations shown on the Drawings.

3.03. INSTALLATION

- A. The Contractor shall furnish slings, straps, and/or approved devices to provide satisfactory support of the valves when lifted. Transportation from storage areas to the work area shall be restricted to operations which can cause no damage to the coating or lining or castings.

- B. The valves shall not be dropped from trucks onto the ground.
- C. All valves shall be installed in accordance with the specifications for the pipe to which they are to be connected and as previously described for individual types of valves.
- D. Joints of valves shall be made up in accordance with the Drawings and/or as described under the appropriate pipe joint descriptions found in other sections of these specifications.
- E. The valves shall be so located that they are accessible for operating purposes and shall bear no stresses due to loads from the adjacent pipe.
- F. All valves shall be inspected before installation, and they shall be cleaned and well lubricated before being installed in the line.

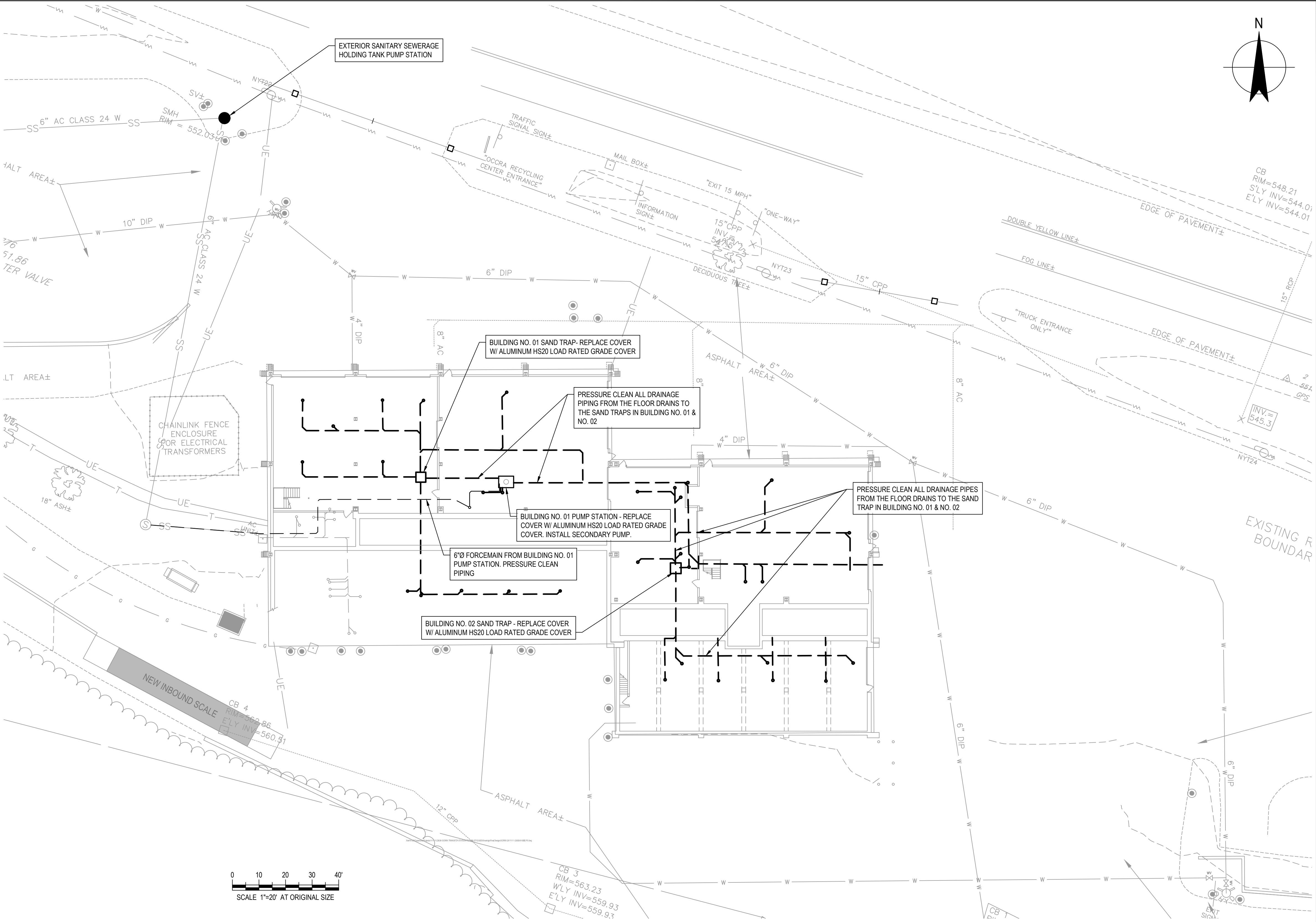
3.04. PRESSURE AND LEAKAGE TEST

- A. All installed valves and appurtenances shall be subjected to the pressure and leakage test as described under Section 02741, Pressure Tests of Force Mains.

END OF SECTION


SUMMARY OF WORK:

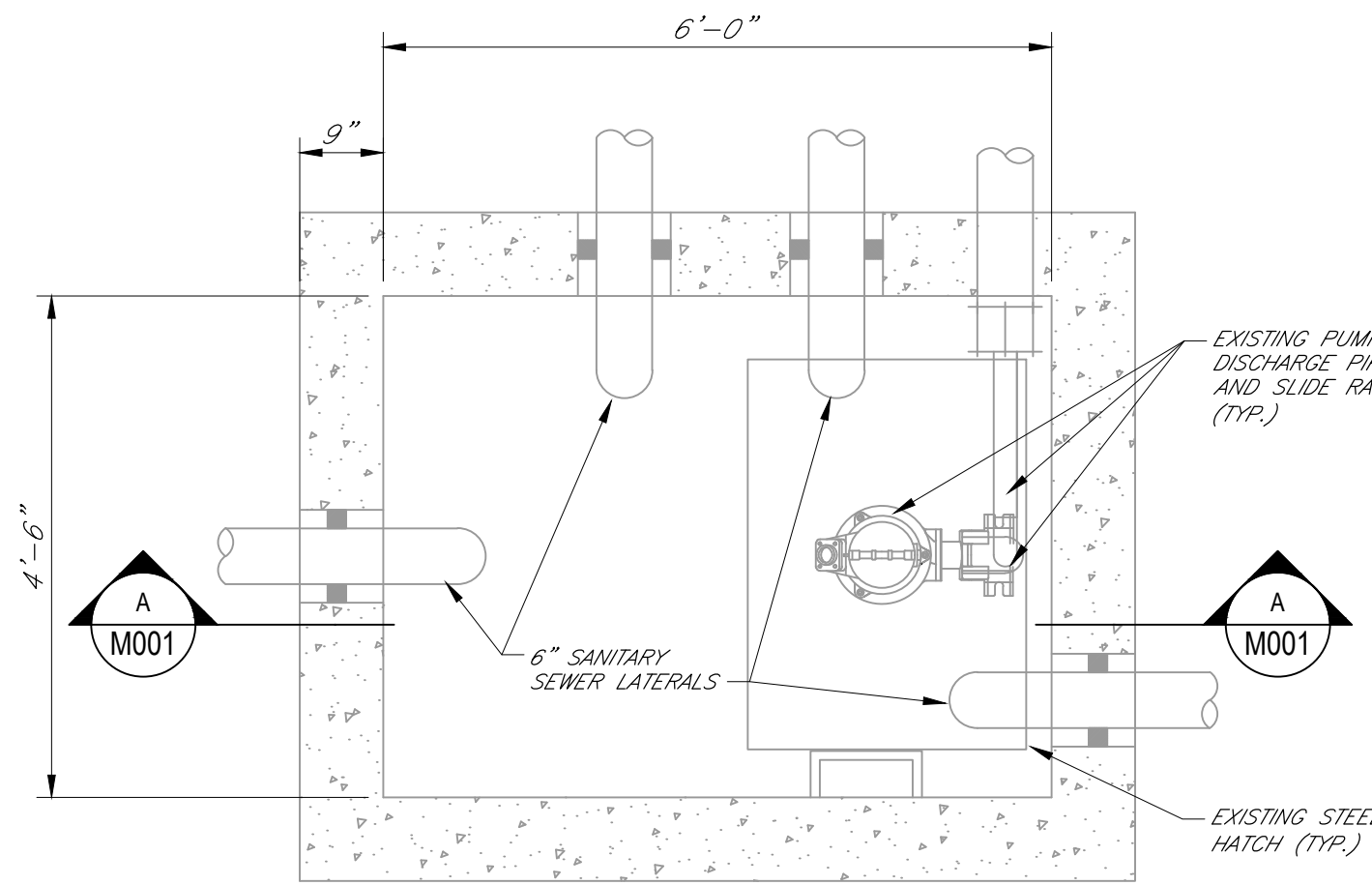
- PRESSURE CLEAN ALL EXISTING DRAINAGE LINES FROM THE GRATES IN THE FLOOR DRAINS TO THE SAND TRAP. PRESSURE CLEAN THE DRAINAGE LINES FROM THE SAND TRAPS TO THE PUMP STATION. PRESSURE CLEAN THE FORCE MAIN FROM THE PUMP STATION TO THE SANITARY MANHOLE ON THE SOUTHWEST CORNER OF BUILDING NO. 01.
- CONTRACTOR SHALL REMOVE ALL WASTEWATER AND SLUDGE/GRIT FROM EACH PUMP STATION AND SAND TRAP. CONTRACTOR SHALL PRESSURE WASH EACH PUMP STATION AND SAND TRAP AND DISPOSE OF THE LIQUID AND CONTENTS IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. SAND TRAPS COLLECT LIQUIDS FROM ONGOING EQUIPMENT MAINTENANCE AND MAY CONTAIN OILS, GREASE, PETROLEUM, ETC. REFER TO SECTION 02131.
- REPLACE THE COVERS TO BUILDING NO. 01 PUMP STATION WITH AN ALUMINUM COVER OF EQUAL SIZE AND DIMENSION WITH A HS20 LOAD RATING OR GREATER BY BILCO, HALLIDAY OR ENGINEER APPROVED EQUAL. ALUMINUM COVER SHALL BE PROVIDED WITH COMPATIBLE FALL PROTECTION GRATING MEETING ALL OSHA REQUIREMENTS FOR FALL PROTECTION. SUBMIT SHOP DRAWINGS IN ACCORDANCE 01300 FOR APPROVAL BY ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MODIFICATIONS NECESSARY TO EXISTING FLOORS ADJACENT TO COVERS. COVERS SHALL BE INSTALLED WATERTIGHT AND FLUSH WITH FLOOR UNLESS OTHERWISE NOTED.
- REPLACE THE COVERS TO BUILDING NO. 01 & BUILDING NO. 02 SAND TRAPS WITH AN ALUMINUM COVER OF EQUAL SIZE AND DIMENSION WITH A HS20 LOAD RATING OR GREATER BY BILCO, HALLIDAY OR ENGINEER APPROVED EQUAL. ALUMINUM COVER SHALL BE PROVIDED WITH COMPATIBLE FALL PROTECTION GRATING MEETING ALL OSHA REQUIREMENTS FOR FALL PROTECTION. SUBMIT SHOP DRAWING IN ACCORDANCE 01300 FOR APPROVAL BY ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MODIFICATIONS NECESSARY TO EXISTING FLOORS ADJACENT TO COVERS. COVERS SHALL BE INSTALLED WATERTIGHT AND FLUSH WITH FLOOR UNLESS OTHERWISE NOTED.
- REPLACE ALL OF THE INTERNAL COMPONENTS OF BUILDING NO. 01 PUMP STATION INCLUDING BUT NOT LIMITED TO SLIDE RAILS, PUMPS, BASES, MOUNTING HARDWARE, ANCHORS, CHAINS, FLOATS, CONTROL PANEL, WIRING AND ANY OTHER APPURTENANCES TO MAKE A COMPLETE SYSTEM.
- REPLACE ALL OF THE INTERNAL COMPONENTS OF THE EXTERIOR HOLDING TANK PUMP STATION INCLUDING BUT NOT LIMITED TO SLIDE RAILS, PUMPS, BASES, MOUNTING HARDWARE, ANCHORS, CHAINS, FLOATS, CONTROL PANEL, WIRING AND ANY OTHER APPURTENANCES TO MAKE A COMPLETE SYSTEM.
- CONTRACTOR SHALL PROVIDE BYPASSING PUMPING TO PERFORM THE WORK.
- CONTRACTOR IS REQUIRED TO PROVIDE COORDINATION WITH UTILITIES AS NECESSARY TO PERFORM THE WORK.
- CONTRACTOR SHALL REVIEW AND FIELD VERIFY ALL DIMENSIONS AND AND ELEVATIONS.
- CONTRACTOR SHALL PROVIDE EROSION AND SEDIMENT CONTROL FOR THE WORK IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL AS OUTLINED BY NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, AS APPLICABLE.
- CONTRACTOR SHALL PROVIDE SITE RESTORATION FOR THE WORK. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION EQUAL OR BETTER THAN THAT WHICH EXISTED PRIOR TO CONSTRUCTION UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL SEQUENCE ALL WORK ACTIVITIES TO MINIMIZE DISRUPTION TO OCCRRA OPERATIONS AND ONGOING CONSTRUCTION ACTIVITIES. ALL WORK IS PLANNED IN AREAS THAT HAVE ACTIVE OPERATIONS AND/OR ONGOING CONSTRUCTION ACTIVITIES AND REQUIRES COORDINATION WITH OCCRRA AND ON-SITE CONTRACTORS. REFER TO SECTION 01039.



EXISTING CONDITIONS
PLAN VIEW
SCALE 1" = 20'

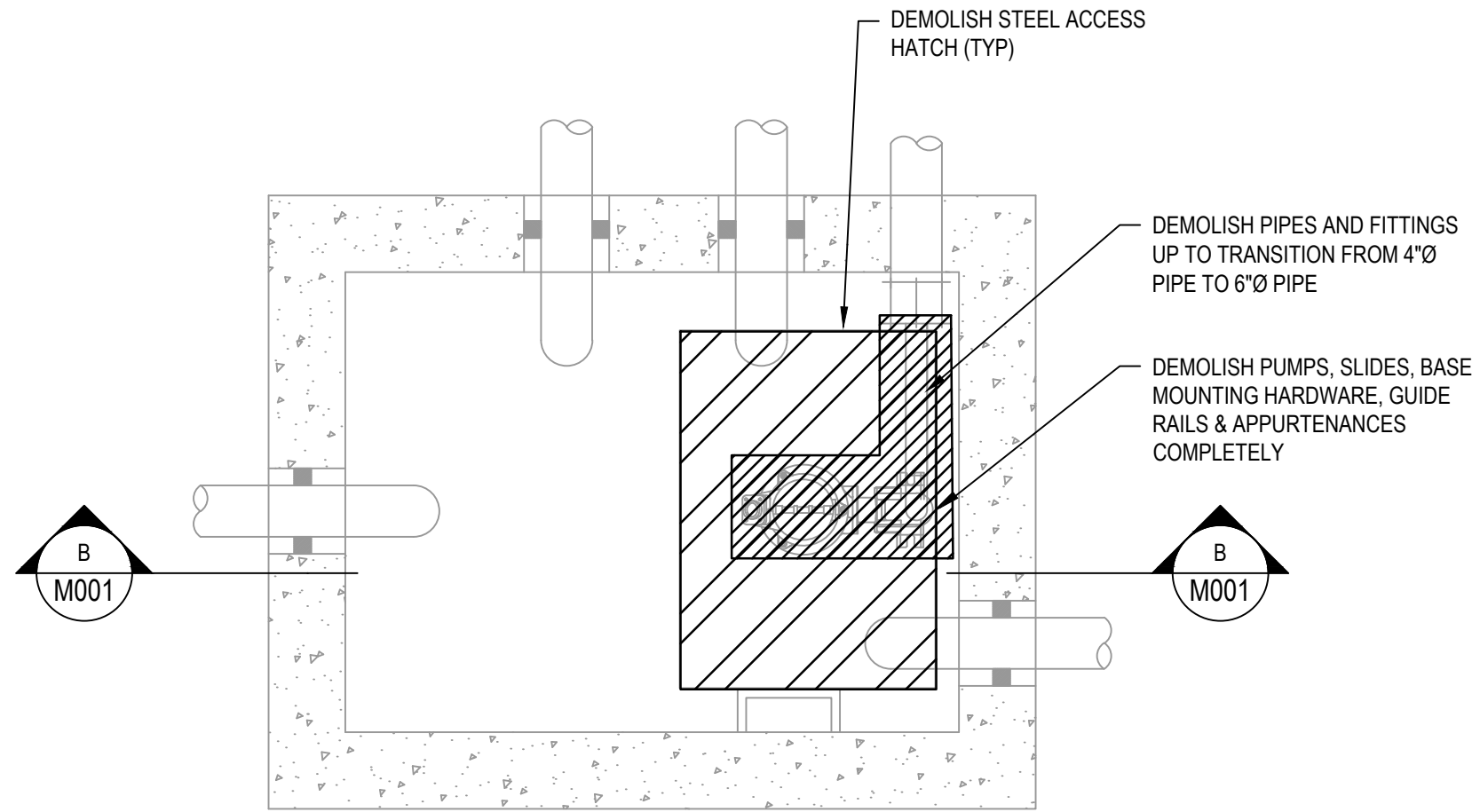


					Notes	<div>Bar is one inch on original size sheet</div> <div>01"</div>		<div>GHD Consulting Services Inc.</div> <div>One Remington Park Drive</div> <div>Cazenovia NY 13035 USA</div> <div>T 1 315 679 5800 F 1 315 679 5801 W www.ghd.com</div>	Drawn I.GOMEZ	Designer J.WAY	Client ONONDAGA COUNTY RESOURCE RECOVERY AGENCY	
					Reuse of Documents				Drafting Check J.CASE	Design Check B.SMITH		Project ROCK CUT ROAD TRANSFER STATION
					It is violation of New York State education law for any person, unless acting under the direction of a licensed professional engineer, to alter an item on this drawing in anyway. If an item is altered, the altering engineer shall affix to the item his/her seal and the notation "altered by" followed by his/her signature and date of such alteration and a specific description of the alteration.				Project Director J. HEATH	Date 08/2019		
0	FOR BIDDING	IDG	BLS	08/2019							Project No. 111-23638	Contract No. 5
No.	Issue	Drawn	Approved	Date							Original Size ANSI D	



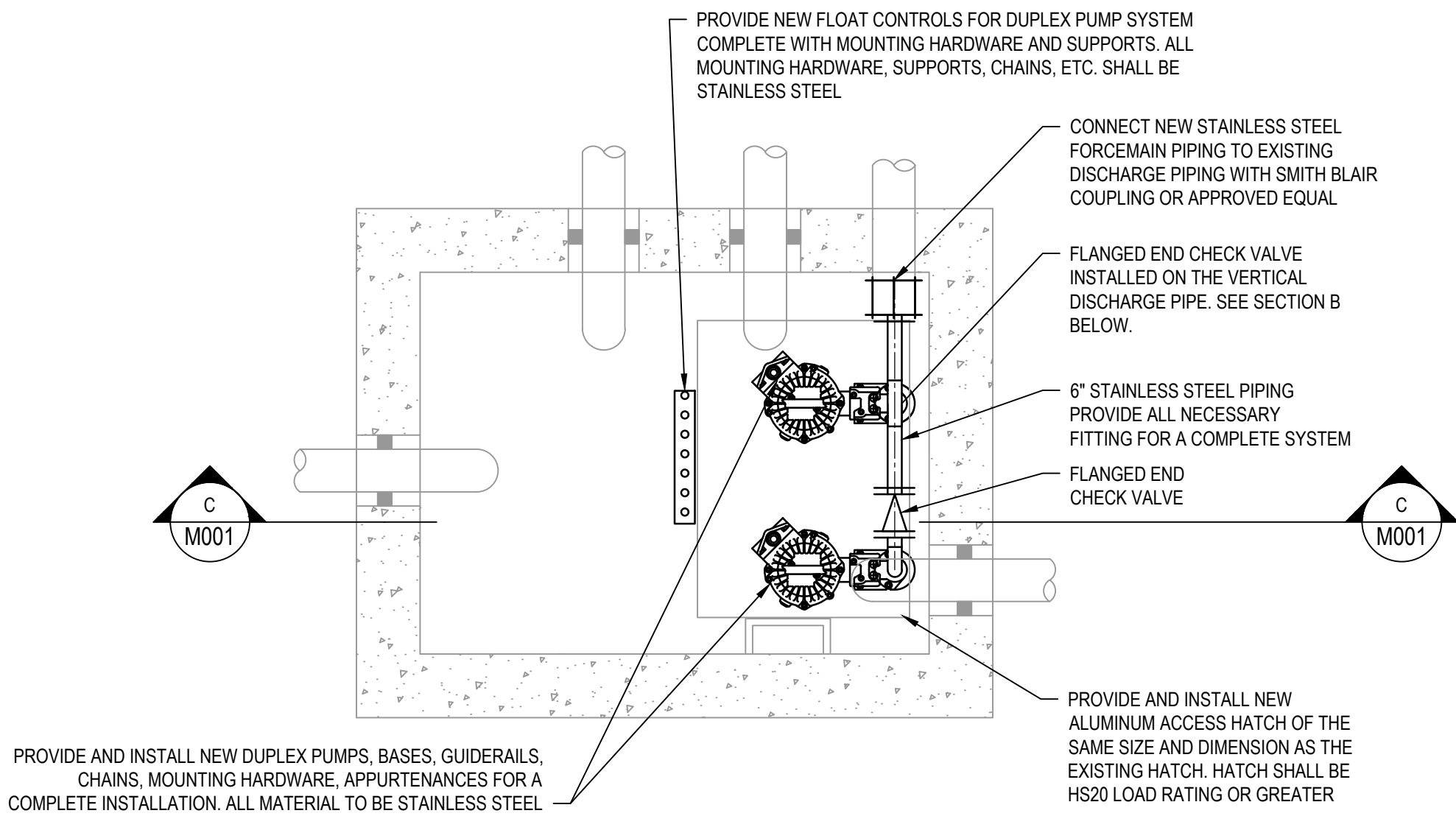
EXISTING CONDITIONS PLAN

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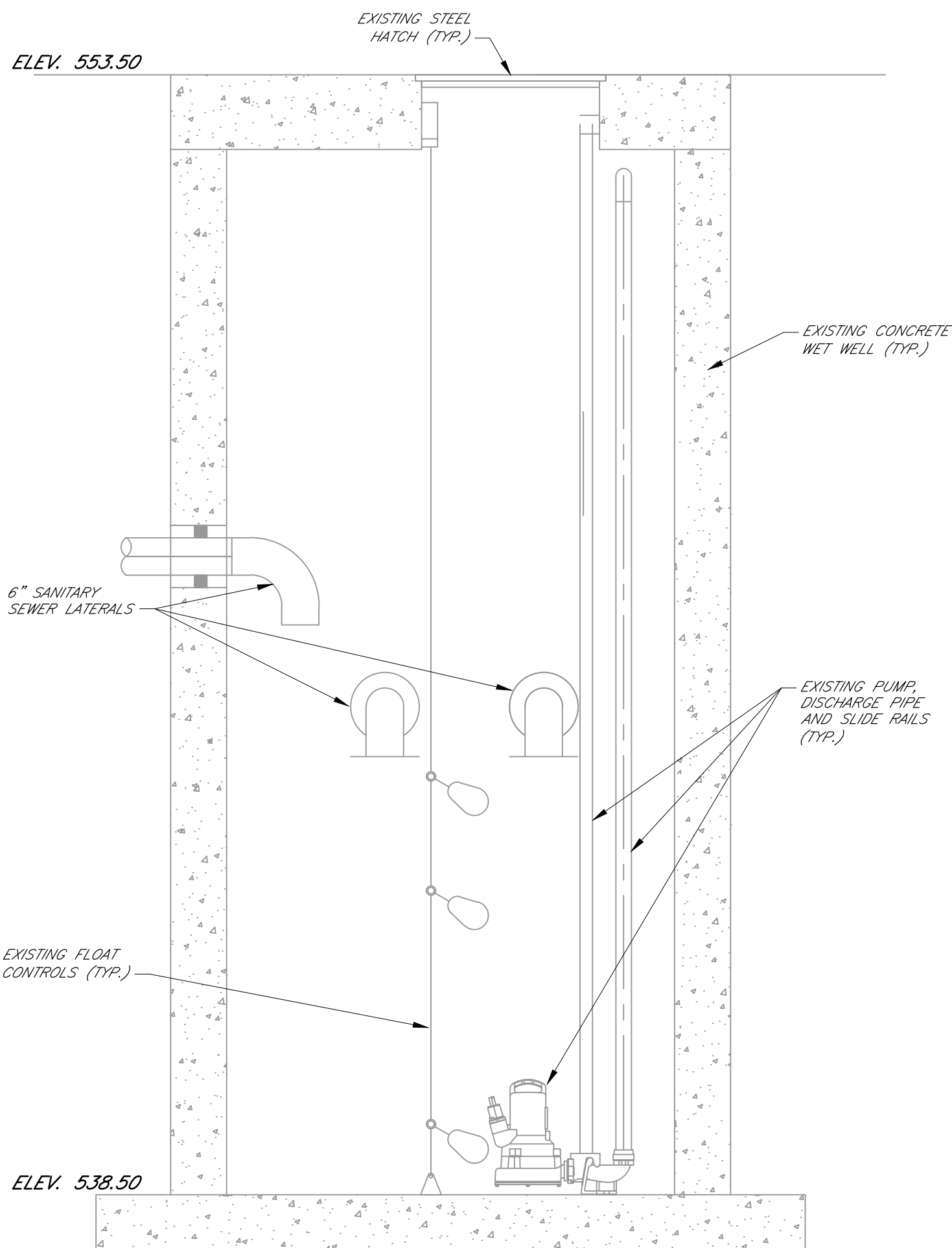
DEMOLITION PLAN

SCALE: NTS

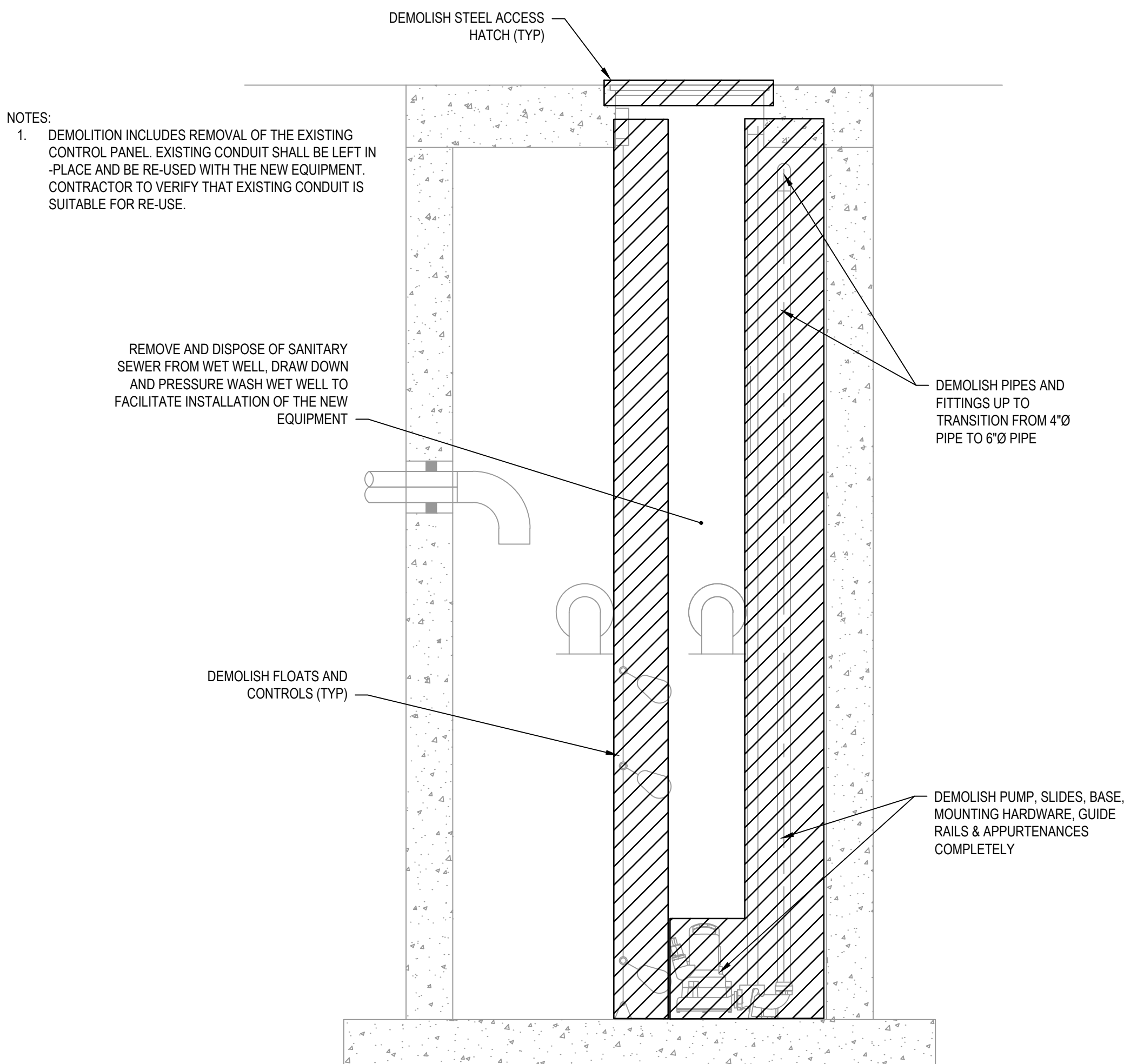


PROPOSED REPLACEMENT PLAN

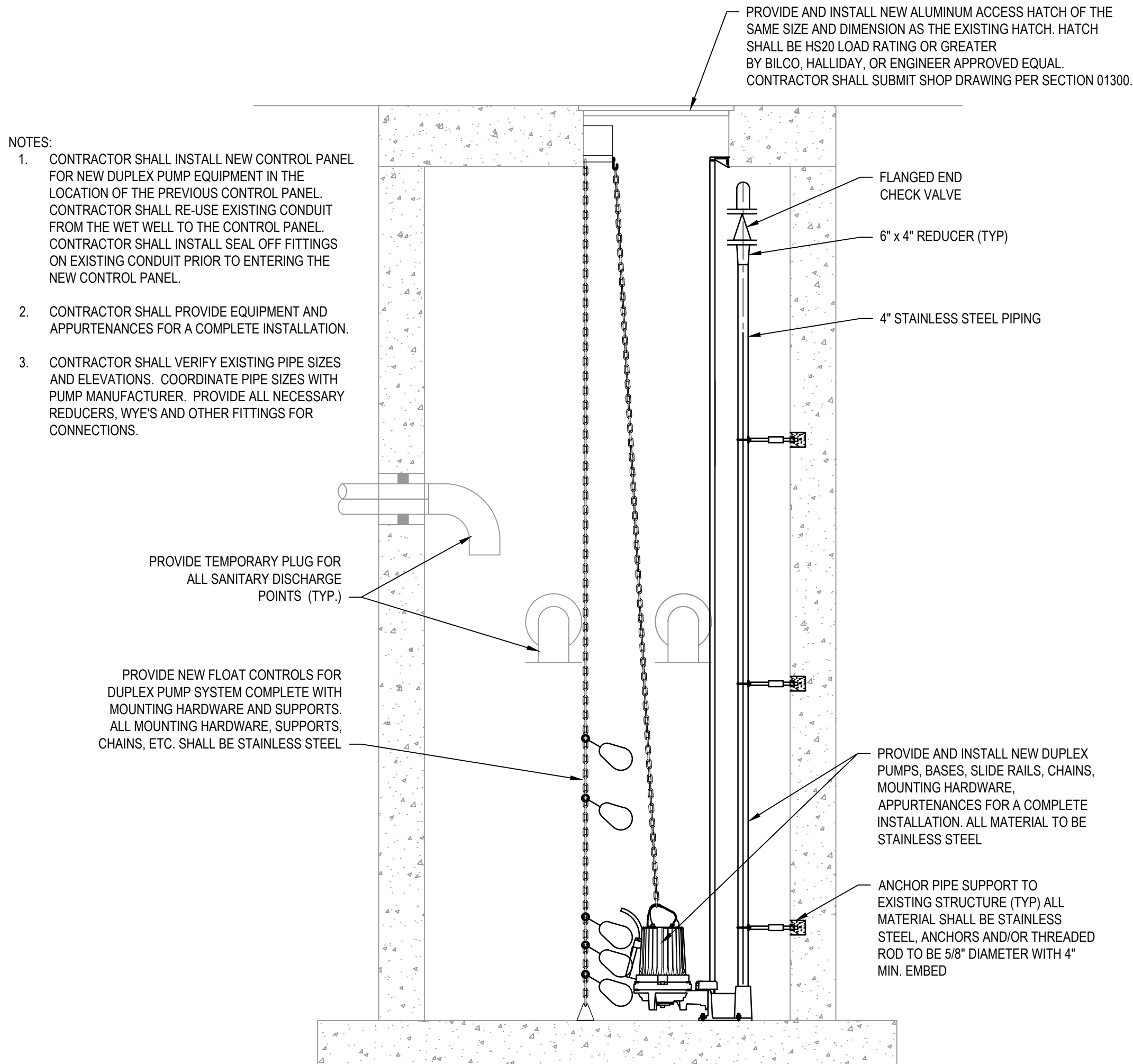
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A SECTION
M001 SCALE: NTS



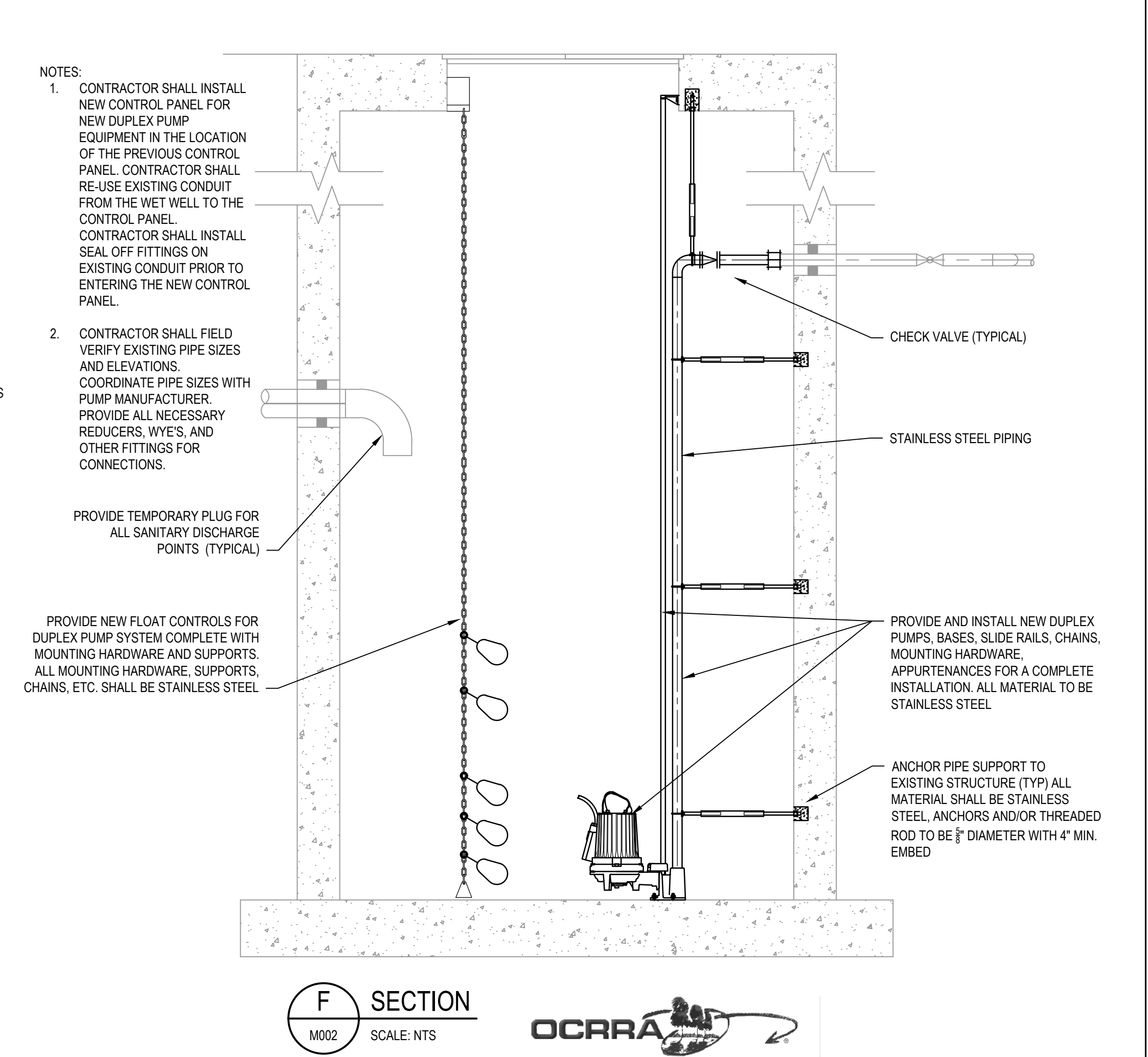
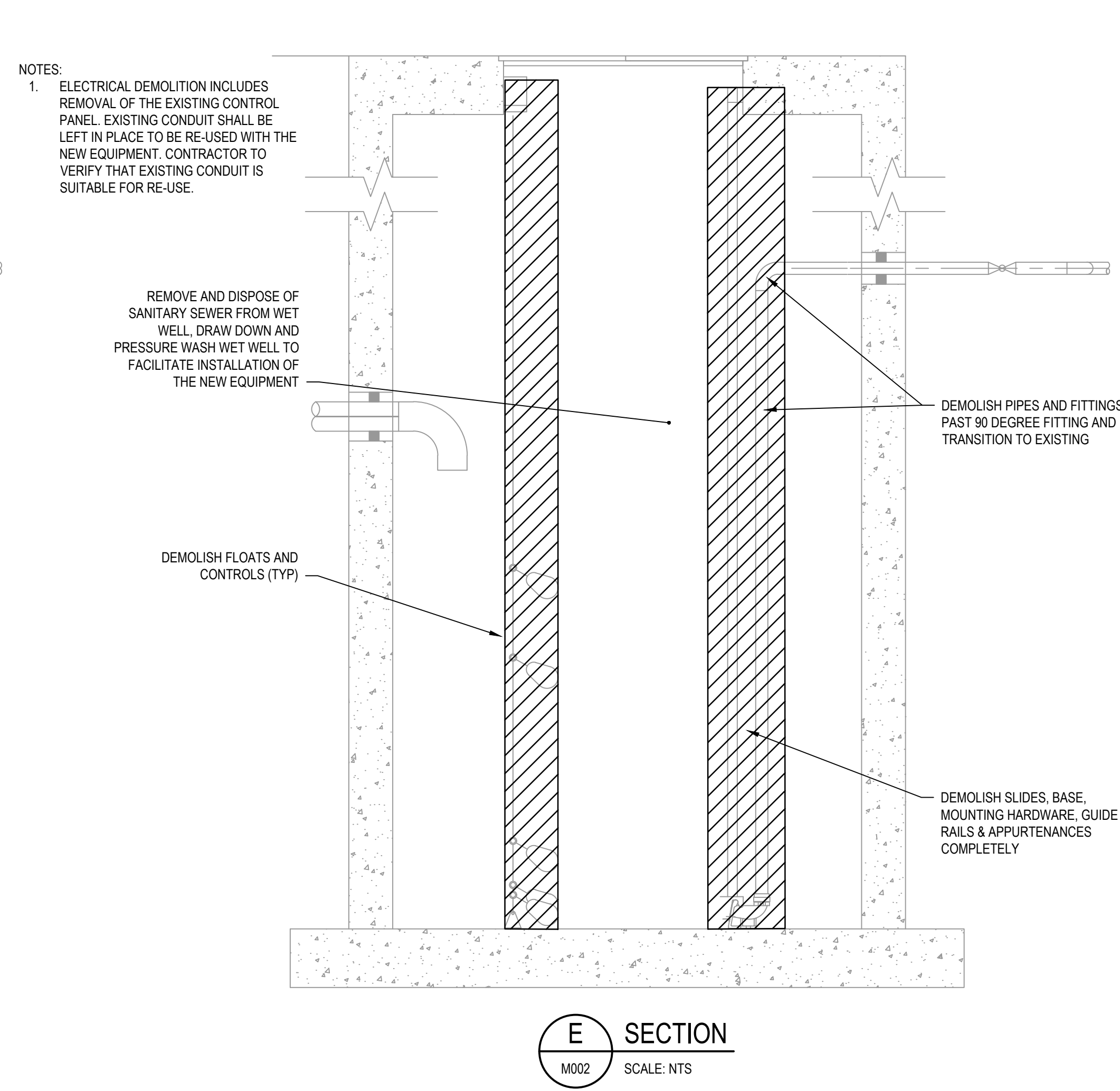
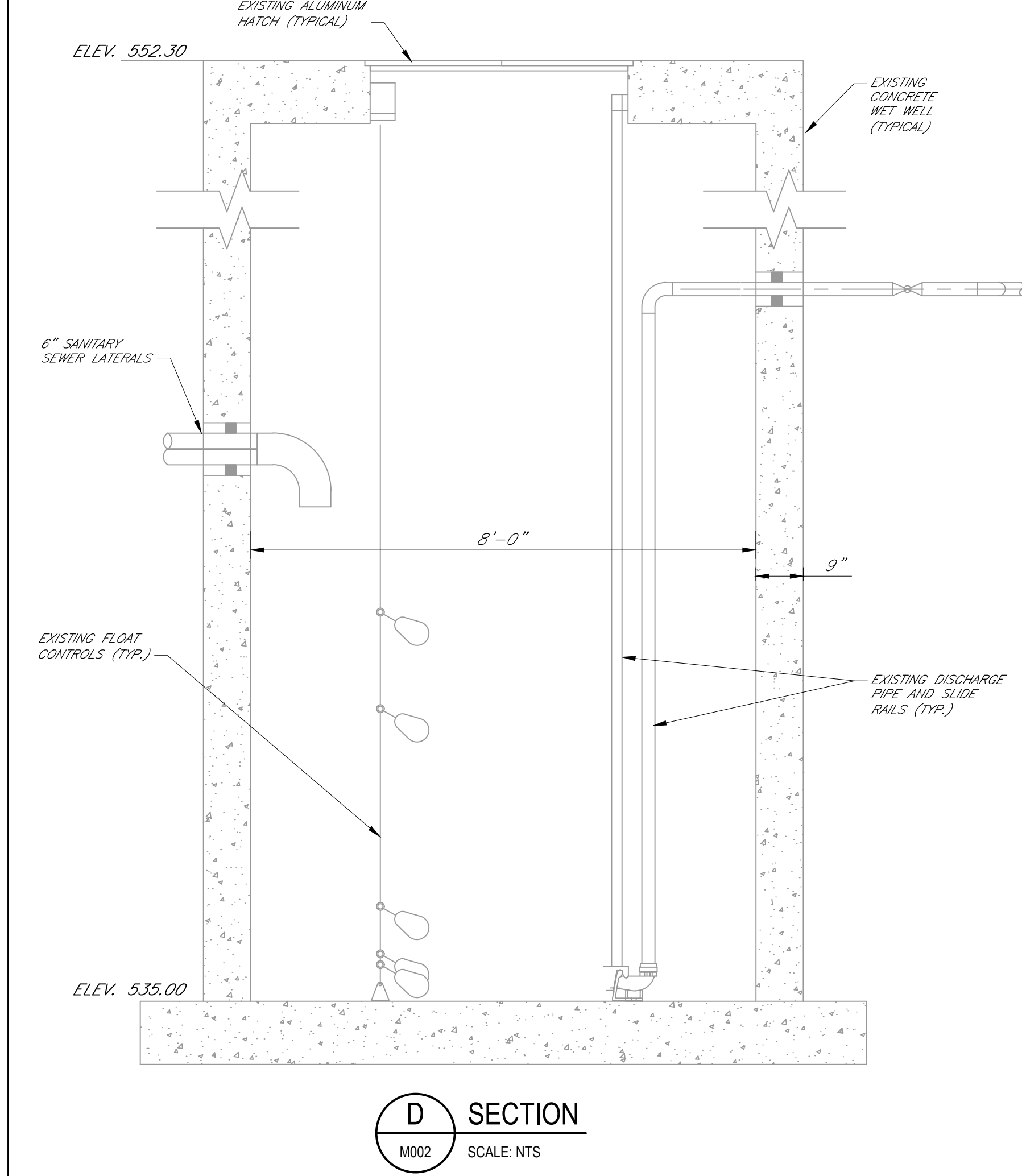
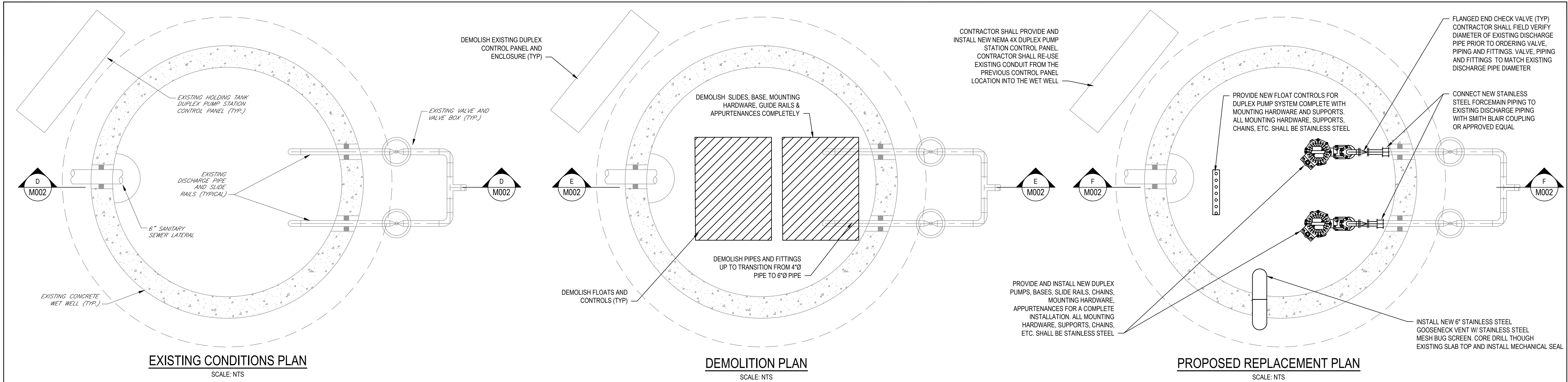
B SECTION
M001 SCALE: NTS



C SECTION
M001 SCALE: NTS



					Notes	Bar is one inch on original size sheet 0 1"			GHD Consulting Services Inc. One Remington Park Drive Cazenovia NY 13035 USA T 1 315 679 5800 F 1 315 679 5801 W www.ghd.com	Drawn I. GOMEZ	Designer J.WAY	Client ONONDAGA COUNTY RESOURCE RECOVERY AGENCY Project ROCK CUT ROAD TRANSFER STATION Title SANITARY / LEACHATE SYSTEM REHABILITATION BUILDING No. 01 PUMP STATION Project No. 111-23638 Original Size ANSI D Sheet No. M001	Contract No. 5
										Drafting Check J. CASE	Design Check B. SMITH		
										Project Director J. HEATH	Date 08/2019		
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					Underground facilities, structures, and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.	0 1"				Drafting Check J. CASE	Design Check B. SMITH		Project ROCK CUT ROAD TRANSFER STATION
					It is violation of New York State education law for any person, unless acting under the direction of a licensed professional engineer, to alter an item on this drawing in anyway. If an item is altered, the altering engineer shall affix to the item his/her seal and the notation "altered by" followed by his/her signature and date of such alteration and a specific description of the alteration.	Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2019 GHD			Project Director J. HEATH	Date 08/2019	Title SANITARY / LEACHATE SYSTEM REHABILITATION HOLDING TANK PUMP STATION		
0	FOR BIDDING		IDG	BLS	08/2019					Project No. 111-23638		Contract No. 5	
No.	Issue		Drawn	Approved	Date					This document shall not be used for construction unless signed and sealed for construction.	Scale AS SHOWN	Original Size ANSI D	Sheet No. M002

ABBREVIATIONS

A or AMP	AMPERE, AMPS	SEL or	SELECTOR SWITCH
AC	ALTERNATING CURRENT	SEL SW	SERVICE ENTRANCE RATED
AF	AMPERE FRAME SIZE	SER	SHIELDED
AFF	ABOVE FINISHED FLOOR	SHLD	STOP/LOCKOUT SWITCH
AFG	ABOVE FINISHED GRADE	S/L	SOLID NEUTRAL
AIC	AMPS INTERRUPTING CURRENT	SN	STAINLESS STEEL
ALT	ALTERNATOR	SS	SOLID STATE REDUCED VOLTAGE
ANN	ANNUNCIATOR	SSRV	STARTER
ASV	AIR SOLENOID VALVE	SSW	SAFETY SWITCH
AT	AMPERE TRIP RATING	S/S	STOP/START PUSH BUTTON
ATS	AUTOMATIC TRANSFER SWITCH	STR	STRANDED
AUX	AUXILIARY	SV	SOLENOID VALVE
AWG	AMERICAN WIRE GAUGE	SW	SWITCH
BKR	BREAKER	SWD	SWITCHING DUTY
C or COND	CONDUIT	TC	TERMINAL CABINET OR TIMED CLOSED
C&W	CONDUIT & WIRE	TDR	TIME DELAY RELAY
CA	CABLE	TERM	TERMINAL
CB	CIRCUIT BREAKER	TR	TIMER
CDRS	CONDUCTORS	TR.SW.	TRANSFER SWITCH
CIRC	CIRCUIT	TR24	24-HOUR TIMER
CLF	CURRENT LIMITING FUSE	TS	TORQUE SWITCH
COMP	COMPARTMENT	TSP	TWISTED SHIELDED PAIR
COR	CORROSION RESISTANT	TST	TWISTED SHIELDED TRIAD
CP	CONTROL PANEL	TYP	TYPICAL
CPT	CONTROL POWER TRANSFORMER	UG/E	UNDERGROUND ELECTRIC
CR	CONTROL RELAY	UG/T	UNDERGROUND TELEPHONE
CT	CURRENT TRANSFORMER	UNK	UNKNOWN
DC	DIRECT CURRENT	UPS	UNINTERRUPTIBLE POWER SUPPLY
DM	DAMPER MOTOR	VA	VOLT-AMPERES
DS	DISCONNECT SWITCH	VFD	VARIABLE FREQUENCY DRIVE
EA	EACH	VM	VOLTMETER
EMH	ELECTRICAL MANHOLE	VS	VOLTMETER SWITCH
ES	EMERGENCY SWITCH	VSC	VARIABLE SPEED CONTROL
ESTOP	EMERGENCY STOP	W/	WITH
ETM	ELAPSED TIME METER	WP	WEATHER PROOF, WATER PROOF
FA	FIRE ALARM	XP	EXPLOSION PROOF
FLEX	FLEXIBLE	XFMR	TRANSFORMER
FLOA	FLOAT SWITCH		
FS	FLOW SWITCH		
FSW	FUSED SWITCH		
FVNR	FULL VOLTAGE NON REVERSING		
FVR	FULL VOLTAGE REVERSING		
GC	GENERAL CONTRACTOR		
GEN	GENERATOR		
GENSET	EMERGENCY POWER GENERATOR		
GFCI	GROUND FAULT CIRCUIT INTERRUPTER		
GFI	GROUND FAULT INTERRUPTER		
GRD	GROUND		
HOA	HAND-OFF-AUTO SELECTOR SWITCH		
HP	HORSE POWER		
IL	INDICATING LIGHT		
I/O	INPUT/OUTPUT		
ISR	INTRINSICALLY SAFE RELAY		
JB	JUNCTION BOX		
JIC	JOINT INDUSTRIAL COUNCIL		
KCMIL	THOUSAND CIRCULAR MILS		
KSU	KEY SERVICE UNIT		
KVA	KILOVOLT AMPERES		
KW	KILOWATT		
LO	LOCKOUT		
LS	LIMIT SWITCH		
mA	MILLIAMPS		
MAG	MAGNETIC		
MAX	MAXIMUM		
MCB	MAIN CIRCUIT BREAKER		
MCC	MOTOR CONTROL CENTER		
MCP	MOTOR CIRCUIT PROTECTOR		
MCS/	MOLDED CASE SWITCH		
T	THERMAL ONLY		
M	MAGNETIC ONLY		
AUTO	AUTOMATIC ONLY		
MDP	MAIN DISTRIBUTION PANEL		
MFR	MANUFACTURER		
MIN	MINIMUM		
MLO	MAIN LUGS ONLY		
MMC	MOTOR MANAGEMENT CONTROLLER		
MMS	MANUAL MOTOR STARTER		
MSS	MOTOR STARTING SWITCH		
MTR	MOTOR TIMING RELAY		
MWTP	MOTOR WINDING THERMAL PROTECTION		
Mx	MOTOR CONTACTOR AUXILIARY CONTACT		
NC	NORMALLY CLOSED		
NEC	NATIONAL ELECTRIC CODE		
NO	NORMALLY OPEN		
NP	NAMEPLATE		
OH/E	OVERHEAD ELECTRIC		
OH/L	OVERHEAD TELEPHONE		
OL	OVERLOAD RELAY		
Ø	PHASE		
P	POLE		
PB	PUSHBUTTON		
PBx	PULL BOX		
PF	PULLING FITTING		
PLC	PROGRAMMABLE LOGIC CONTROLLER		
PNL	PANEL		
PR	PAIR		
PS	PRESSURE SWITCH		
PT	POTENTIAL TRANSFORMER		
R&R	REMOVE & REPLACE		
RECP	RECEPTACLE		
RGS	RIGID GALVANIZED STEEL CONDUIT		
ROS	REMOTE OPERATING STATION		
SA	SURGE ARRESTOR		
SCR	SILICON CONTROLLED RECTIFIER		
SEC	SECOND		

GROUNDING NOTES

- THE GROUNDING SYSTEM IS SHOWN DIAGRAMMATICALLY. EXACT LOCATION OF CABLE GROUND RODS AND CONNECTIONS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
- ALL BURIED GROUNDING CABLE CONNECTIONS SHALL BE CADWELDED OR THERMOWELDED. THE WELDED CONNECTIONS SHALL BE LEFT EXPOSED FOR INSPECTION BY ENGINEER PRIOR TO BACKFILLING.
- WHERE EXPOSED TO MECHANICAL INJURY, THE GROUNDING CONDUCTOR SHALL BE SUITABLY PROTECTED BY PIPE OR OTHER MECHANICAL PROTECTION. EACH END OF PROTECTING CONDUIT (IF METALLIC) SHOULD BE GROUNDED TO THE BARE CABLE.
- ALL EXPOSED CABLE LUGS AND CONNECTORS SHALL BE OF THE COMPRESSION TYPE UNLESS OTHERWISE NOTED.
- STEEL MUST BE CLEANED THOROUGHLY AND CABLE MUST BE SETTING COMPLETELY DRY BEFORE MAKING WELD CONNECTIONS.
- THE GROUNDING SYSTEM SHALL BE CONNECTED TO A METALLIC WATERLINE WITH A MINIMUM OF 10 FEET LENGTH UNDERGROUND AND TO THE GROUNDING ELECTRODES.
- REMOVE PAINT FROM UNDER ALL GROUND LUGS AND BARS, INCLUDING SHOP FABRICATED PANELS.

NEW / EXISTING TEXT IDENTIFIER

- NEW WORK, EQUIPMENT AND STRUCTURES ARE SHOWN IN THIS TEXT FORMAT
- EXISTING EQUIPMENT, CONDITIONS AND STRUCTURES ARE SHOWN IN THIS TEXT FORMAT.

GENERAL NOTES

- POWER AND LIGHTING CIRCUITS ARE SHOWN DIAGRAMMATICALLY; EXACT LOCATION OF CONDUIT RUNS SHALL BE DETERMINED BY THE ELECTRICAL INSTALLER IN THE FIELD, UNLESS SPECIFICALLY DIMENSIONED ON THE PLANS. CONDUIT AND WIRE INFORMATION CAN BE FOUND ON THE PLANS, EQUIPMENT SCHEDULES AND SCHEMATICS.
- EXACT EQUIPMENT CONDUIT CONNECTIONS ARE TO BE DETERMINED BY THE ELECTRICAL INSTALLER BASED UPON THE ACTUAL FIELD LOCATION OF EQUIPMENT. INSTALL CONDUIT IN ACCORDANCE WITH SPEC. SEC. 16110.
- ALL PENETRATIONS THROUGH EXISTING SOLID CONCRETE STRUCTURES WHERE SLEEVES HAVE NOT BEEN PROVIDED SHALL BE CORE DRILLED AND SIZED TO ACCEPT MECHANICAL LINK SEALS. THROUGH NON-FIRE RATED WALLS, CORE HOLE AND SEAL AROUND CONDUIT WITH NON-SHRINK GROUT. THROUGH EXTERIOR WALL SEAL WATER TIGHT WITH SILICONE MASONRY SEALANT.
- EVERY EFFORT HAS BEEN MADE TO IDENTIFY REMOTE ITEMS TO BE CONNECTED BY THE ELECTRICAL CONTRACT, EITHER IN THE ELEMENTARIES OR IN THE SCHEDULES. HOWEVER, NOT ALL OF THE REMOTE DEVICES MAY HAVE BEEN SHOWN ON THE ELECTRICAL PLAN DRAWINGS. SEE THE DRAWINGS OF RESPECTIVE CONTRACTS TO LOCATE OR CONFIRM THEIR LOCATION.
- IN GENERAL, ALL WORK SHOWN ON THESE ELECTRICAL SHEETS IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACT UNLESS SPECIFICALLY STATED OTHERWISE. WORK OF THIS CONTRACT IS GENERALLY SHOWN USING HEAVY LINE WEIGHTS, WITH EXISTING FACILITIES AND THE WORK OF OTHER CONTRACTS SHOWN WITH LIGHTER LINE WEIGHTS AND/OR CALLED OUT ON THE PLANS.
- SEE DRAWINGS OF OTHER CONTRACTS FOR ADDITIONAL CONTRACT LIMITS.
- ELECTRICAL TRADE SHALL COORDINATE INSTALLATION OF EQUIPMENT SUCH THAT INSTALLATION OF HIS EQUIPMENT IS NOT STARTED UNTIL AFTER PAINTING & FINISHES, IN ACCORDANCE WITH THE ROOM FINISH SCHEDULE, HAVE BEEN COMPLETED IN EACH OF THE AREAS OR THE GENERAL CONTRACTOR AGREES THAT EQUIPMENT THAT IS INSTALLED WILL NOT PREVENT AREAS FROM BEING PAINTED OR FINISHES APPLIED IN THEIR ENTIRETY.

SYMBOLS

INDICATING LIGHT * = COLOR
R - RED W - WHITE
G - GREEN A - AMBER

PUSH-TO-TEST INDICATING LIGHT

CONTACT NORMALLY OPEN

CONTACT NORMALLY CLOSED

TERMINAL STRIP CONNECTION

CURRENT LIMITING FUSE

SWITCH WITH CURRENT LIMITING FUSE

MOLDED CASE CIRCUIT BREAKER

CONTINUOUS RATING
MOTOR CIRCUIT PROTECTOR-TRIP RANGE
SETTING BASED ON ACTUAL MOTOR FULL
LOAD AMPS

CONTRACTOR TYPE AND NEMA SIZE AS
REQUIRED FOR MOTOR FULL LOAD AND
CHARACTERISTICS

OVERLOAD HEATERS OR RELAY

MUSHROOM HEAD PUSHBUTTON
(MAINTAINED)

MOMENTARY OPEN PUSHBUTTON (NORMALLY
OPEN)

MOMENTARY CLOSED PUSHBUTTON
(NORMALLY CLOSED)

MAINTAINED CONTACT PUSHBUTTON
WITH MECHANICAL INTERLOCK

THREE POSITION MAINTAINED
SELECTOR SWITCH

TIME DELAY SWITCH NORMALLY OPEN
TIMED OPEN

TIME DELAY SWITCH NORMALLY OPEN
TIMED CLOSE

TIME DELAY SWITCH NORMALLY CLOSE
TIMED OPEN

TIME DELAY SWITCH NORMALLY CLOSE
TIMED CLOSE

TEMPERATURE SWITCH

LIMIT SWITCH

FLOAT SWITCH

PRESSURE SWITCH

FLOW SWITCH

MOTORIZED VALVE ACTUATOR

SOLENOID VALVE COIL

CONTROL RELAY

TIMER

TIME DELAY RELAY

MOTOR STARTER CONTACTOR COIL

ELAPSED TIME METER

NAME PLATE

JUNCTION BOX

PULL BOX

CONTROL STATION

DISCONNECT SWITCH

MOTOR OPERATED DAMPER

MOTOR

FLEXIBLE CONDUIT

DRAW OUT

TRANSFORMER

DELTA

WYE

MOUNTING STAND

WIRES CONNECTED

WIRES NOT CONNECTED

GROUND GRID

GROUND ROD

SINGLE POLE SWITCH (P) PILOT LIGHT

THREE WAY SWITCH

FOUR WAY SWITCH

OCCUPANCY SENSOR SWITCH

MANUAL MOTOR STARTER WITH
OVERLOAD PROTECTION

MOTOR STARTING SWITCH

SINGLE RECEPTACLE

DUPLEX RECEPTACLE
CR = CORROSION RESISTANT
WP = WEATHER PROOF

SEAL OFF

DATA JACK

VENTILATION FAILURE ALARM

ITEM TO BE DEMOLISHED

CCTV CAMERA

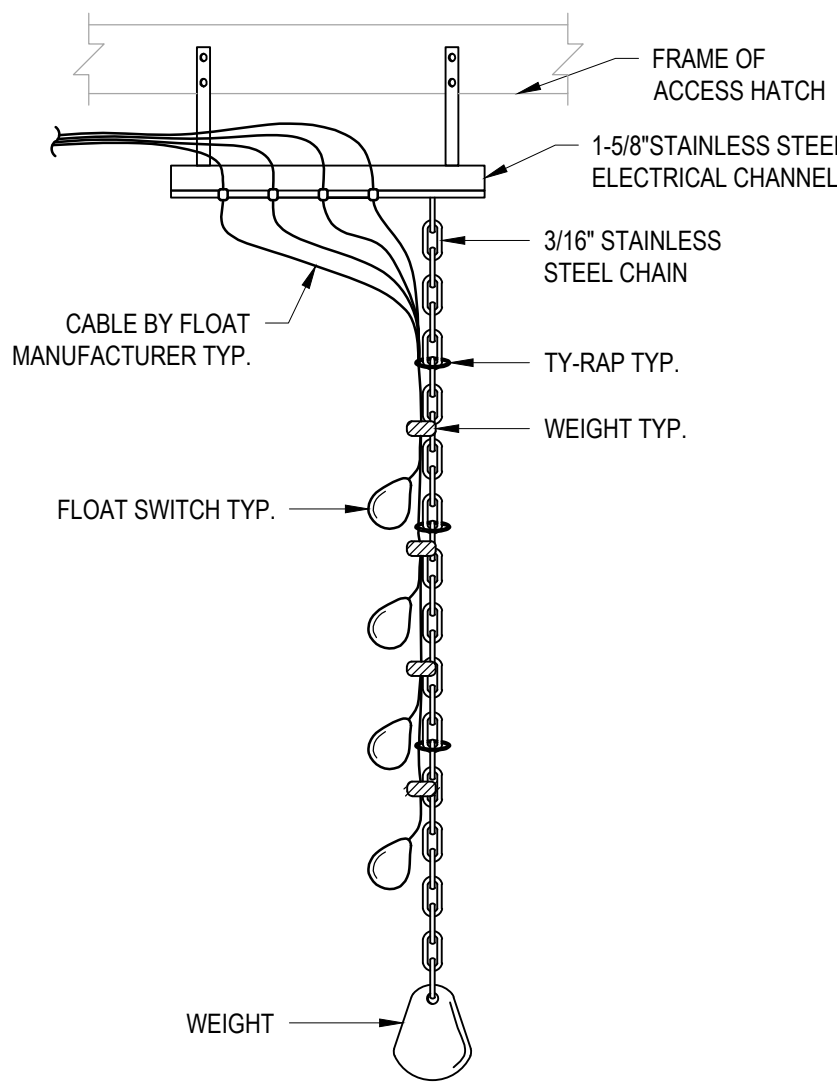
THE ABBREVIATIONS AND SYMBOLS LISTED HEREIN ARE STANDARDS OF THIS OFFICE AND APPLY TO A VARIETY OF PROJECTS. ONLY A PORTION OF THEM WILL NECESSARILY APPLY TO ANY GIVEN PROJECT.

SEE THE LISTINGS IN OTHER SECTIONS OF THIS DOCUMENT FOR ADDITIONAL SYMBOLS AND ABBREVIATIONS.

ALL CONTRACTORS ARE ISSUED A COMPLETE SET OF CONTRACT DRAWINGS. WHILE EVERY EFFORT HAS BEEN MADE TO CONCENTRATE THE WORK OF TRADES ON SPECIFIC SHEETS AND LABELED ACCORDINGLY, THERE ARE NECESSARY INSTANCES WHERE WORK IS SHOWN ON, OR CROSS-REFERENCED TO, OTHER DRAWINGS. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO REVIEW ALL DRAWINGS AND COORDINATE HIS WORK WITH OTHERS.

LIGHTING SYMBOLS

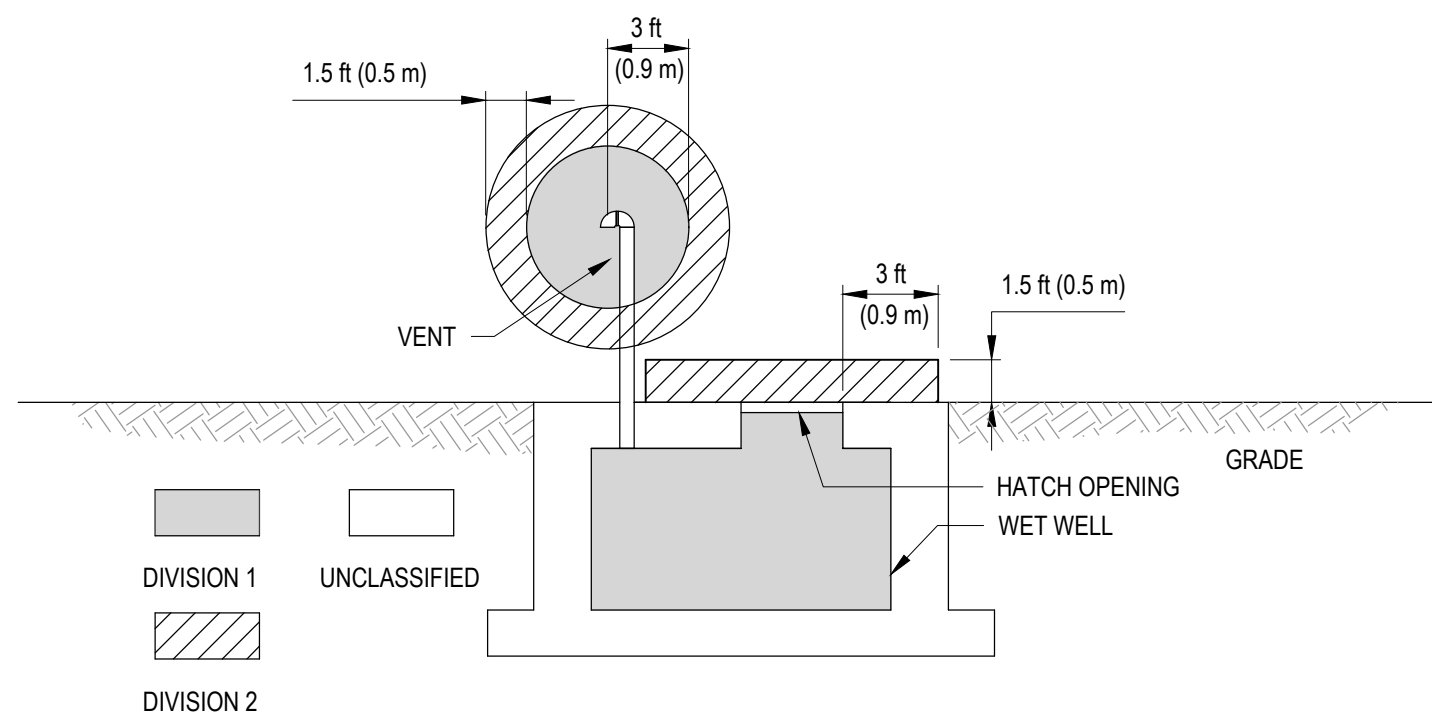
					Notes	Bar is one inch on original size sheet 0 1"			GHD Consulting Services Inc. One Remington Park Drive Cazenovia NY 13035 USA T 1 315 679 5800 F 1 315 679 5801 W www.ghd.com	Drawn E. PARTRIDGE	Designer E. PARTRIDGE	Client ONONDAGA COUNTY RESOURCE RECOVERY AGENCY
										Drafting T. DEVINE	Design Check T. DEVINE	Project ROCK CUT ROAD TRANSFER STATION
										Project Director J. HEATH	Date 07/2019	Title SANITARY/LEACHATE SYSTEM REHABILITATION - ELECTRICAL ABBREV., LEGENDS, SYMBOLS AND NOTES
0	FOR BIDDING	EPP	BLS	08/2019	It is violation of New York State education law for any person, unless acting under the direction of a licensed professional engineer, to alter an item on this drawing in anyway. If an item is altered, the altering engineer shall affix to the item his/her seal and the notation "altered by" followed by his/her signature and date of such alteration and a specific description of the alteration.	Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2019 GHD			Project No. 111-23638	Original Size Contract No. 2		
No.	Issue	Drawn	Approved	Date						Scale NOT TO SCALE	ANSI D	Sheet No. E001



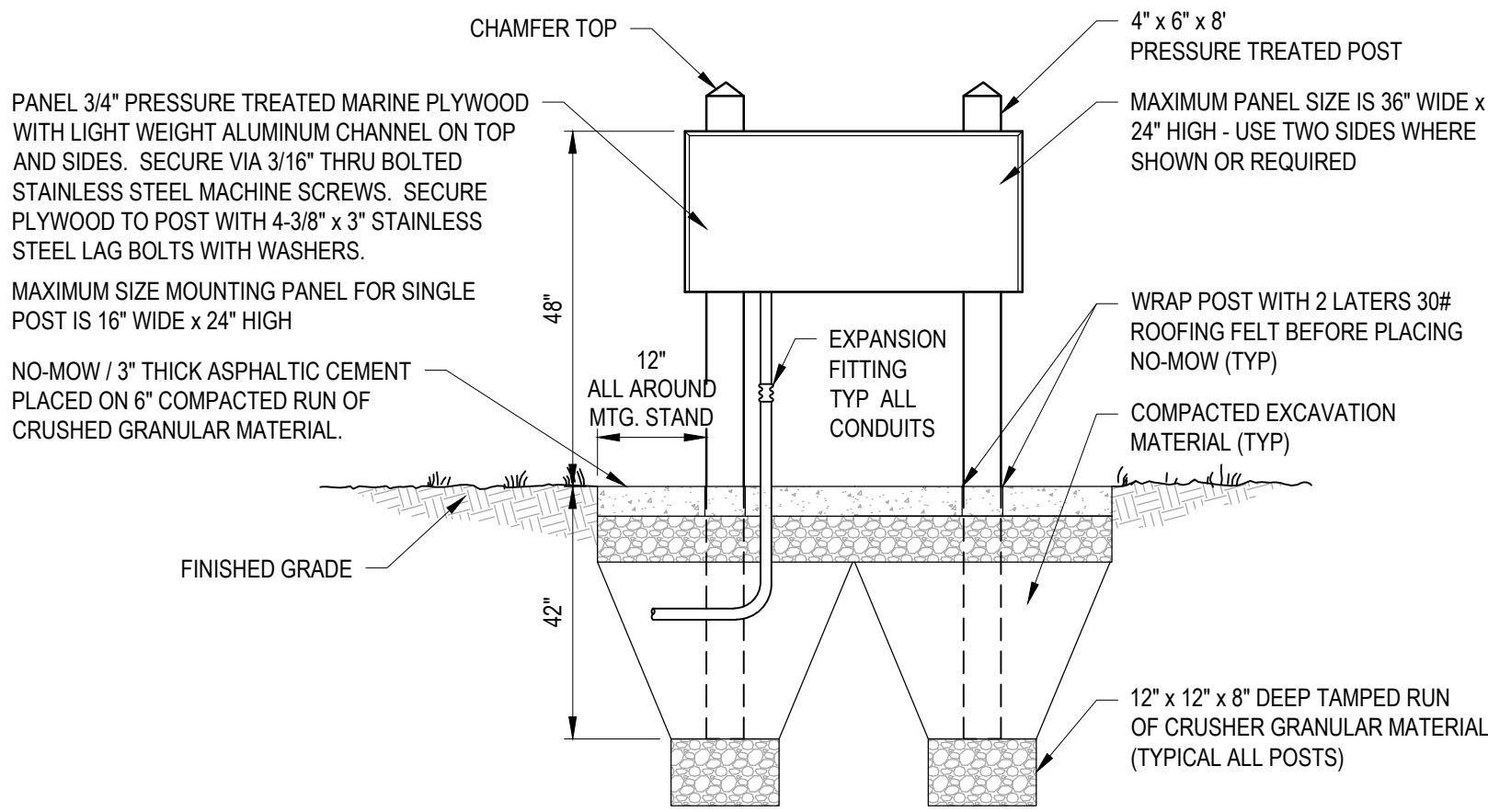
901 FLOAT MOUNTING DETAIL
SCALE: NTS

NOTES:

- CONTACTS- A NORMALLY OPEN, NORMALLY CLOSED MECHANICAL MICRO SWITCH SPDT (SINGLE BREAK) TOTALLY ENCAPSULATED IN EPOXY OR POLYURETHANE. MERCURY SWITCHES ARE NOT ACCEPTABLE.
- CABLE- TYPE STO OR SJO CABLE OF SUFFICIENT LENGTH TO REACH THE FIRST JUNCTION BOX WITH A MINIMUM CONDUCTOR SIZE OF #18AWG.
- SUFFICIENT EXCESS CABLE SHALL BE PROVIDED WITH EACH LIQUID LEVEL SENSOR TO ADJUST ITS VERTICAL POSITION 1 FOOT OF ITS ORIGINAL SETTING.
- PROVIDE STAINLESS STEEL MOUNTING BRACKETS TO SUPPORT ALL FLOAT SWITCHES.
- MANUFACTURER - FLYGT MODEL ENM-10, CONTEGRA FS-90, OR EQUAL.



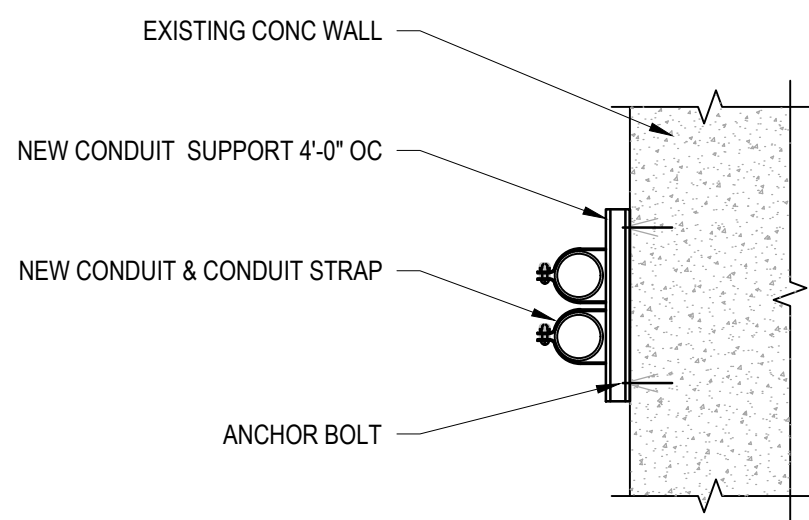
904 EXTERIOR HAZARDOUS LOCATION ENVELOPE DETAIL
SCALE: NTS



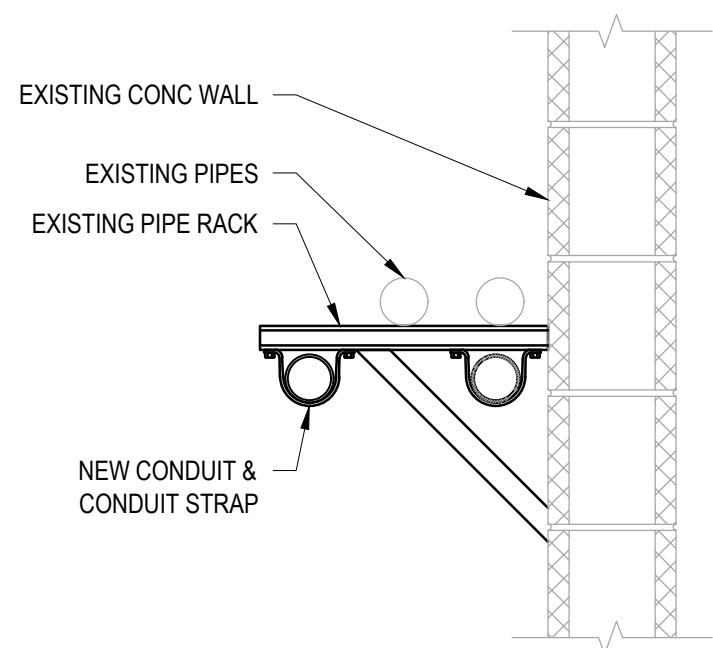
302 MOUNTING STAND DETAILS
SCALE: NTS

NOTES:

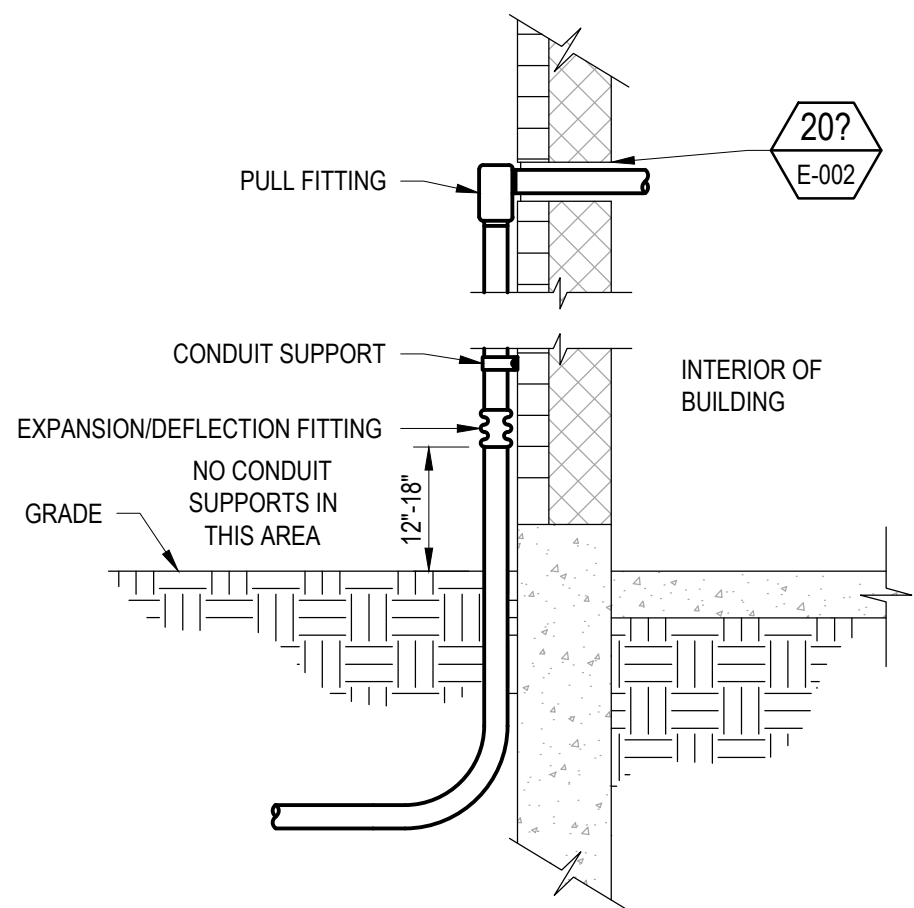
- EXTERIOR HOLDING TANK PUMP CONTROL PANEL MOUNTING STAND IS EXISTING. DETAIL IS SHOWN FOR CLARITY PURPOSES ONLY.



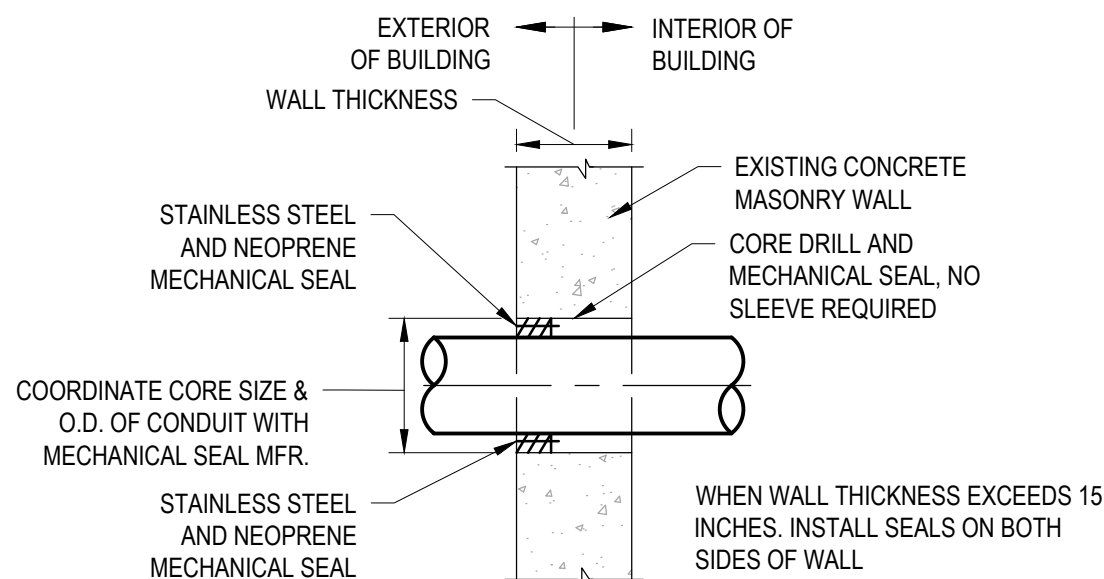
502 VERTICAL WALL MOUNT CONDUIT SUPPORT DETAIL
SCALE: NTS



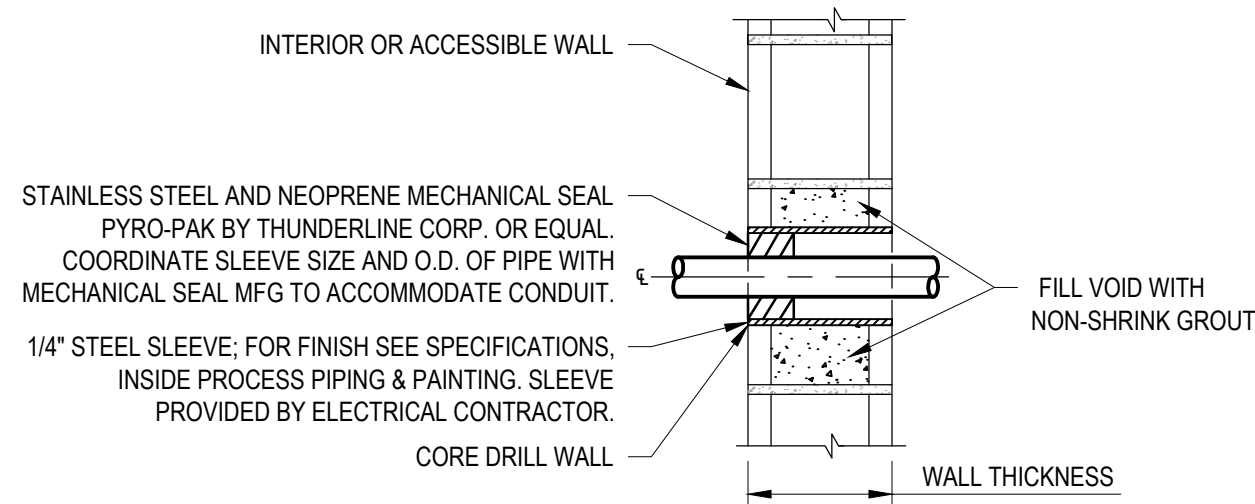
503 HORIZONTAL WALL MOUNT CONDUIT SUPPORT DETAIL
SCALE: NTS



201 TYPICAL BELOW GRADE TO ABOVE GRADE CONDUIT DETAIL
SCALE: NTS



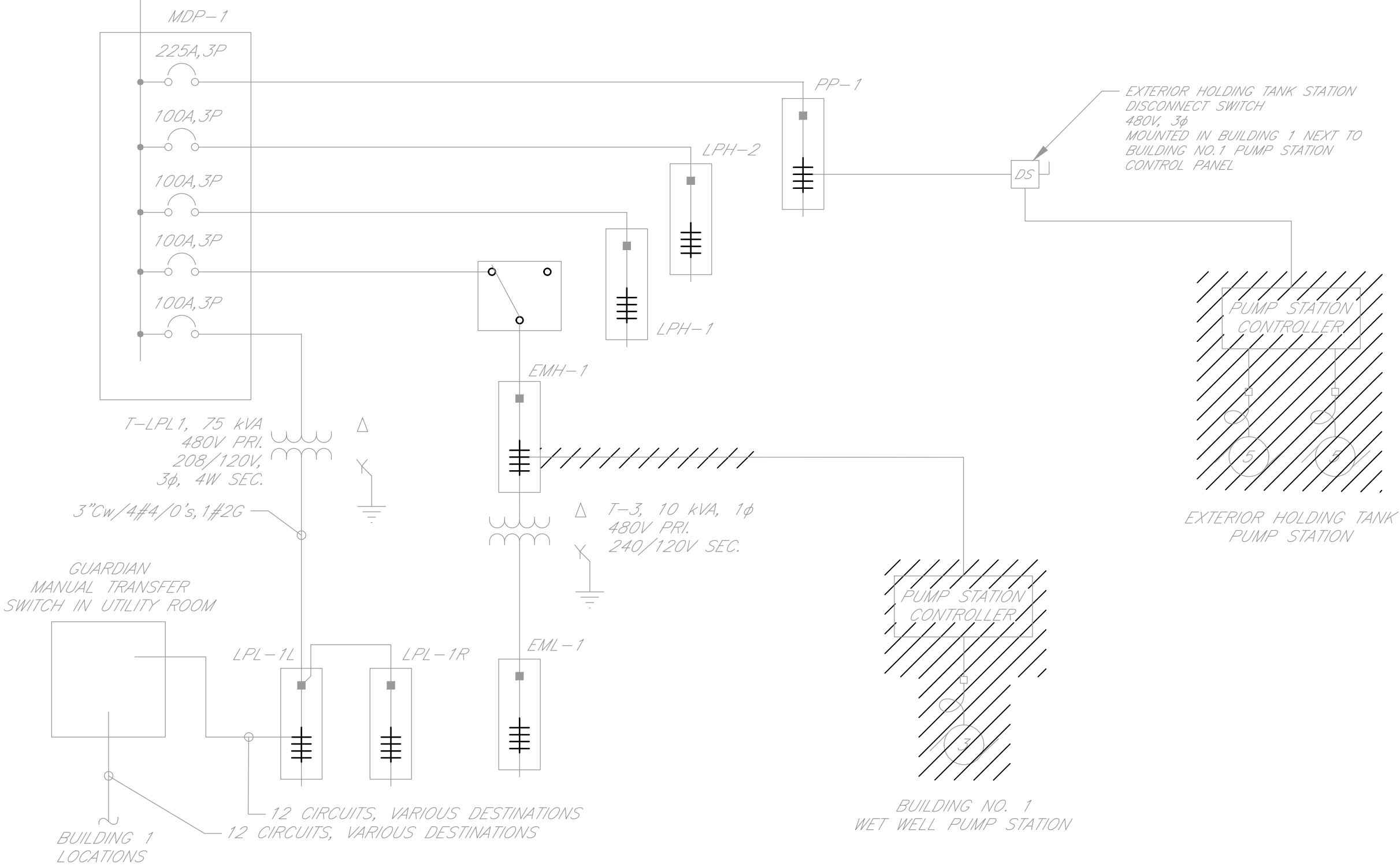
203 CONDUIT PENETRATION THRU CONCRETE WALL
SCALE: NTS



205 TYPICAL CONDUIT THRU BLOCK WALL
SCALE: NTS

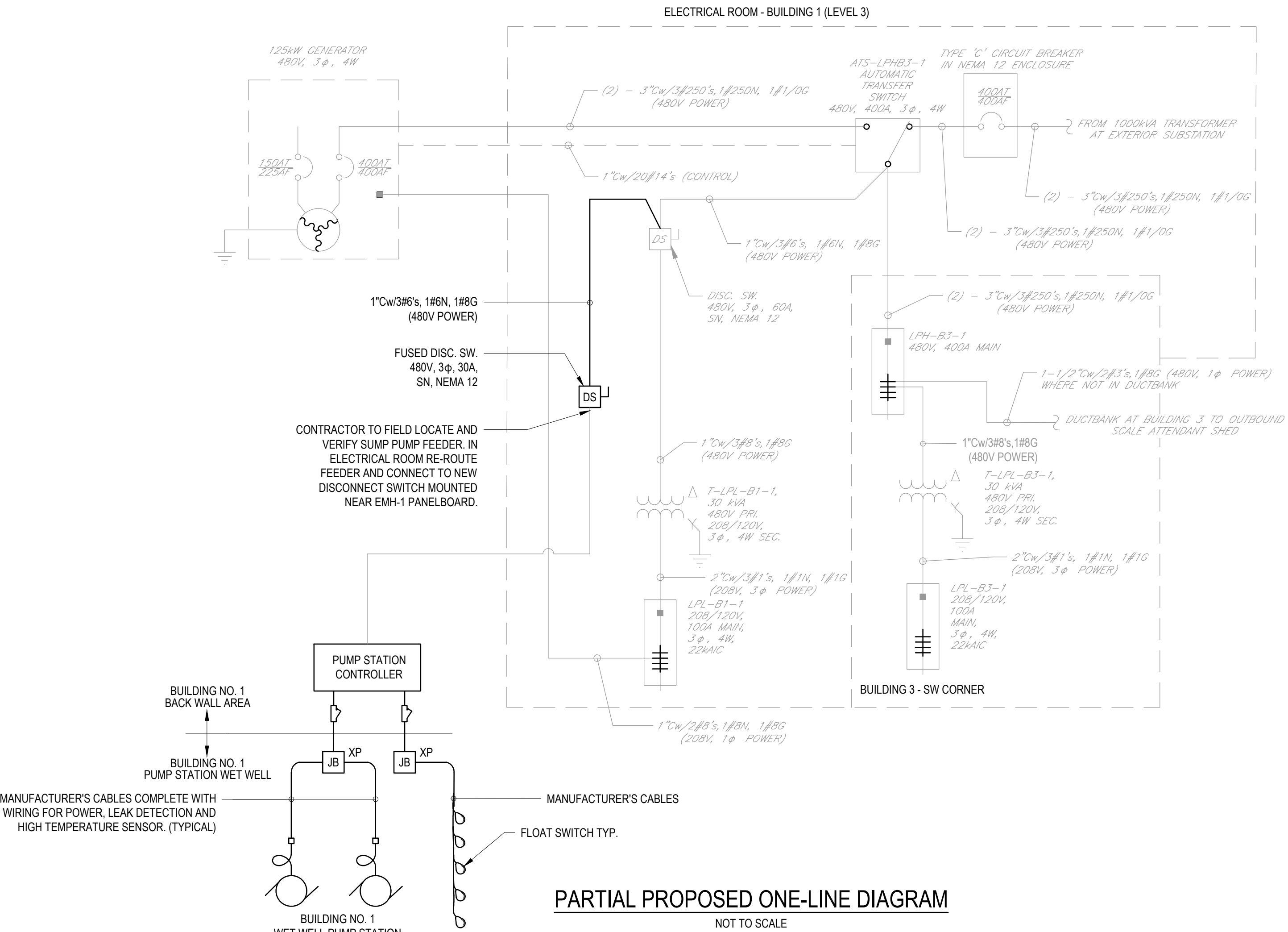
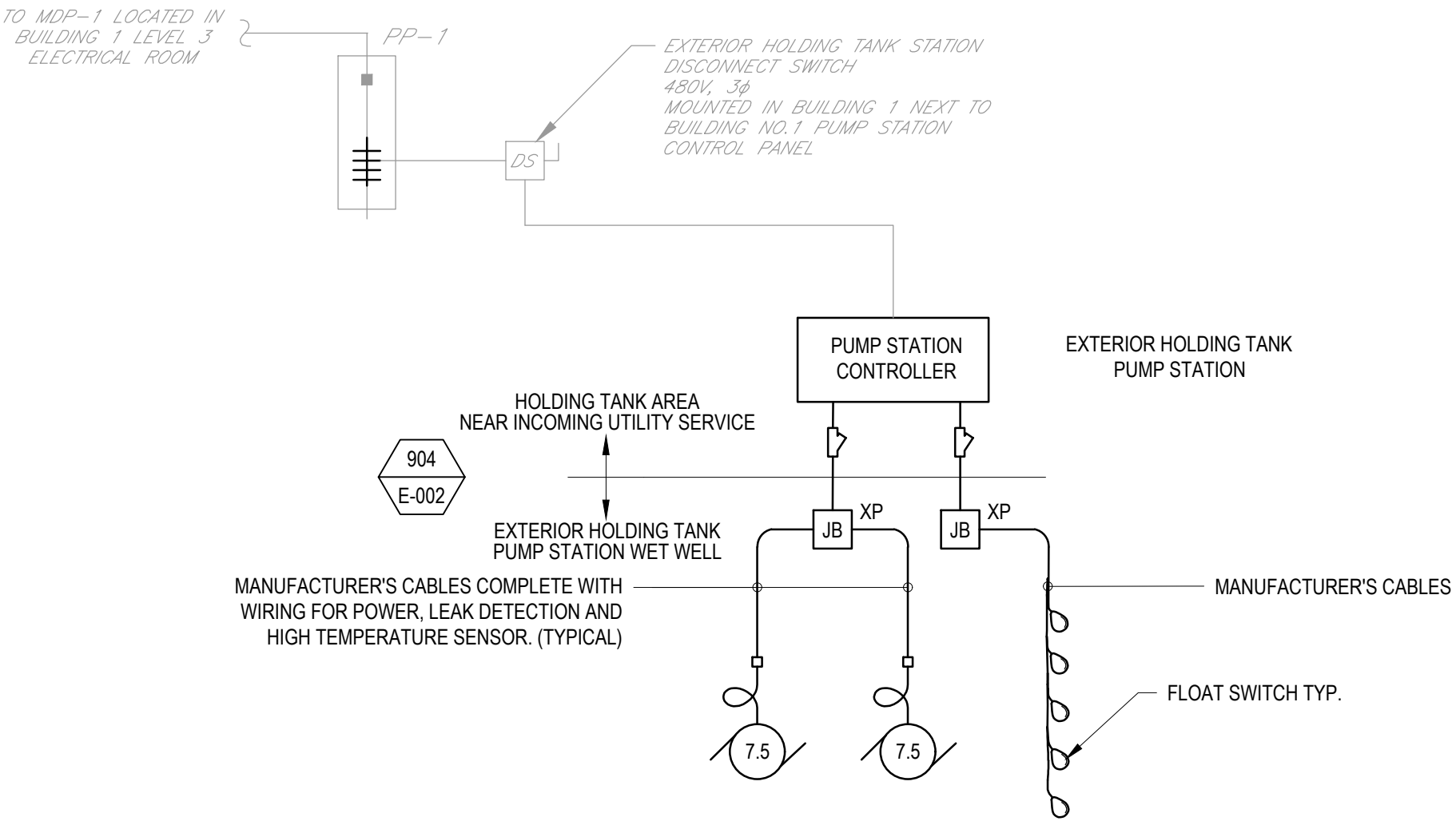
					Notes Underground facilities, structures, and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.	Bar is one inch on original size sheet 0 1"		 GHD Consulting Services Inc. One Remington Park Drive Cazenovia NY 13035 USA T 1 315 679 5800 F 1 315 679 5801 W www.ghd.com	Drawn E. PARTRIDGE	Designer E. PARTRIDGE	Client ONONDAGA COUNTY RESOURCE RECOVERY AGENCY
									Drafting Check T. DEVINE	Design Check T. DEVINE	Project ROCK CUT ROAD TRANSFER STATION
									Project Director J. HEATH	Date 07/2019	Title SANITARY/LEACHATE SYSTEM REHABILITATION ELECTRICAL DETAILS
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FROM UNIT LOAD CENTER IN
BUILDING 1 ELECTRICAL ROOM



PARTIAL EXISTING ONE-LINE DIAGRAM
NOT TO SCALE

//// - ITEMS SCHEDULED FOR DEMOLITION

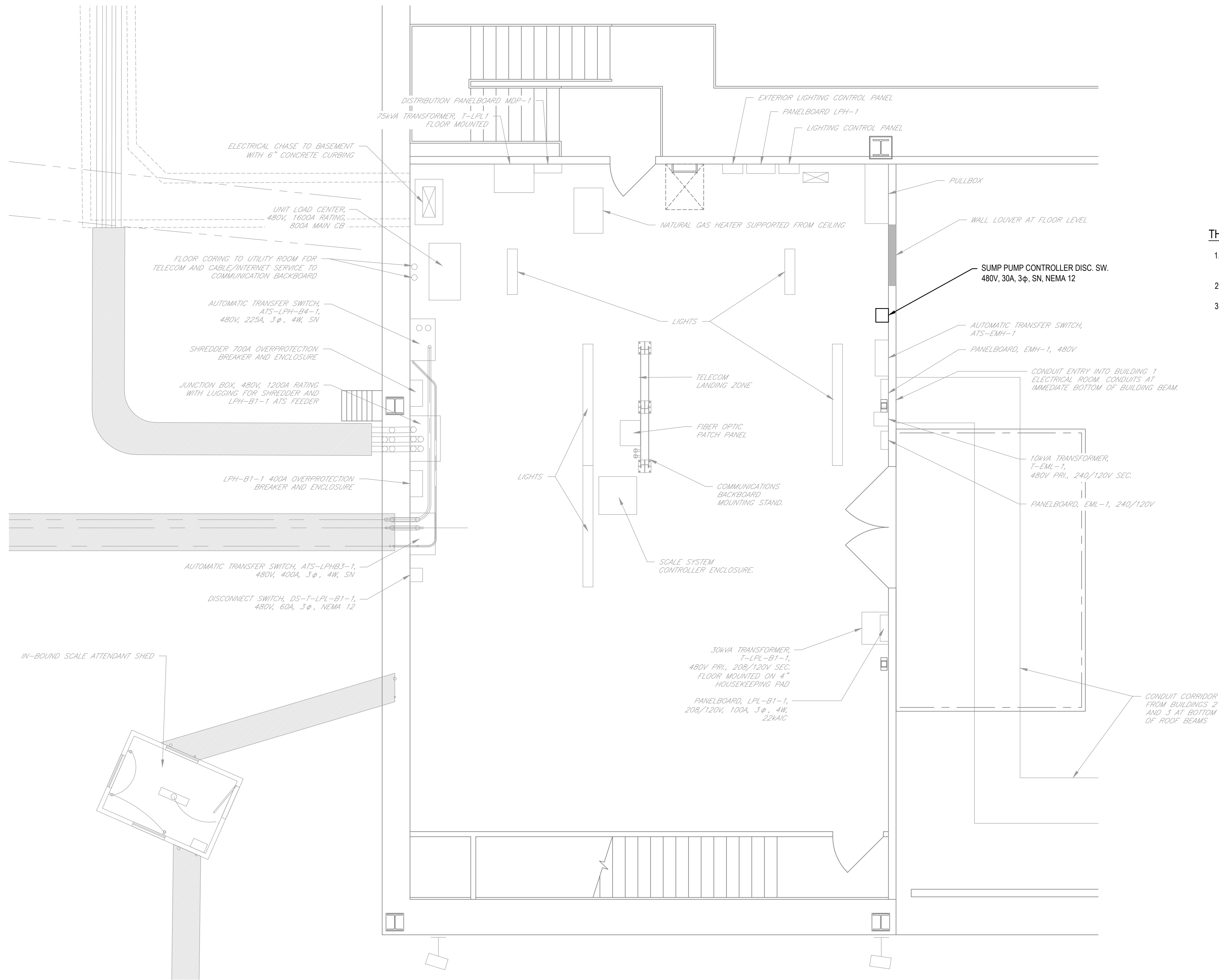
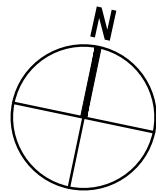


PROPOSED ONE-LINE NOTES:

- POWER FOR BUILDING NO. 1 PUMP STATION WILL NOT BE AVAILABLE UNTIL BUILDING NO. 3 AND 4 ELECTRICAL INFRASTRUCTURE WORK IS INSTALLED AND ENERGIZED.
- BUILDING NO. 1 PUMP STATION POWER TO BE ON BACK-UP POWER.



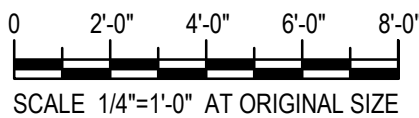
					Notes Underground facilities, structures, and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.	Bar is one inch on original size sheet 0 1"		 GHD Consulting Services Inc. One Remington Park Drive Cazenovia NY 13035 USA T 1 315 679 5800 F 1 315 679 5801 W www.ghd.com	Drawn E. PARTRIDGE	Designer E. PARTRIDGE	Client ONONDAGA COUNTY RESOURCE RECOVERY AGENCY
					It is violation of New York State education law for any person, unless acting under the direction of a licensed professional engineer, to alter an item on this drawing in anyway. If an item is altered, the altering engineer shall affix to the item his/her seal and the notation "altered by" followed by his/her signature and date of such alteration and a specific description of the alteration.	Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2019 GHD			Drafting Check T. DEVINE	Design Check T. DEVINE	Project ROCK CUT ROAD TRANSFER STATION
0	FOR BIDDING	EPP	BLS	08/2019					Project Director J. HEATH	Date 07/2019	Title SANITARY/LEACHATE SYSTEM REHABILITATION - PARTIAL EXISTING AND PROPOSED ONE-LINE DIAGRAMS
No.	Issue	Drawn	Approved	Date					This document shall not be used for construction unless signed and sealed for construction.	Scale NOT TO SCALE	Project No. 111-23638 Contract No. 2
									Original Size ANSI D	Sheet No. E004	



- THIRD FLOOR PLAN NOTES:**
- POWER FOR BUILDING NO. 1 PUMP STATION WILL NOT BE AVAILABLE UNTIL BUILDING NO. 3 AND 4 ELECTRICAL INFRASTRUCTURE WORK IS INSTALLED AND ENERGIZED.
 - BUILDING NO. 1 PUMP STATION POWER TO BE ON BACK-UP POWER.
 - SEE PARTIAL PROPOSED ONE-LINE DIAGRAM ON SHEET E-004 FOR WIRING CONNECTIVITY OF BUILDING NO. 1 PUMP STATION DISCONNECT SWITCH.

BUILDING 1 THIRD FLOOR PLAN

SCALE: 1/4" = 1'-0"



					Notes	Bar is one inch on original size sheet 0 1"		 GHD Consulting Services Inc. One Remington Park Drive Cazenovia NY 13035 USA T 1 315 679 5800 F 1 315 679 5801 W www.ghd.com	Drawn E. PARTRIDGE	Designer E. PARTRIDGE	Client Project Title Project No. 111-23638 Contract No. 2
					Underground facilities, structures, and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.				Drafting Check T. DEVINE	Design Check T. DEVINE	
					It is violation of New York State education law for any person, unless acting under the direction of a licensed professional engineer, to alter an item on this drawing in anyway. If an item is altered, the altering engineer shall affix to the item his/her seal and the notation "altered by" followed by his/her signature and date of such alteration and a specific description of the alteration.	Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2019 GHD		Project Director J. HEATH	Date 07/2019	Original Size ANSI D Sheet No. E005	
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No.	Issue	Drawn	Approved	Date							