



water

CONTRACT AND SPECIFICATIONS

**RIVERHEAD WATER DISTRICT
TOWN OF RIVERHEAD
SUFFOLK COUNTY, NEW YORK**

CONSTRUCTION OF PRE- STRESSED GROUND STORAGE TANK AT PLANT NO. 15



TUTHILLS LANES, JAMESPORT
Project No: RDWD 17-02

TOWN SUPERVISOR
Sean Walter

TOWN COUNCIL
John Dunleavy
Jodi Giglio
Timothy Hubbard
James Wooten

TOWN CLERK
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SUPERINTENDENT OF WATER
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NOVEMBER 2017

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SECTION 001113 - NOTICE TO BIDDERS

Notice is hereby given that SEALED PROPOSALS for:

Construction of Pre-Stressed Ground Storage Tank at Plant No. 15

Contract T - Tank Construction

Tuthills Lane, Jamesport

H2M Project No.: RDWD 1702

will be received by the Town Board of the Town of Riverhead (Owner) at the Town Clerk's office, Town Hall, 200 Howell Avenue, Riverhead, New York 11901, until 10:00 A.M., Prevailing Time on Thursday, December 7, 2017, at which time and place they will be publicly opened and read aloud.

Plans and specifications may be examined on or after Thursday, November 16, 2017 by visiting the Town of Riverhead website: <<http://townofriverheadny.gov>> and click on "Bid Requests". Plans and specifications are available in electronic format only from the aforementioned website.

Each proposal submitted must be accompanied by a certified check or bid bond, made payable to the Town of Riverhead, in an amount equal to five percent (5%) of the total amount of the bid, as a commitment by the bidder that, if its bid is accepted, it will enter into a contract to perform the work and will execute such further security as may be required for the faithful performance of the contract.

The Owner reserves the right to reject any or all bids, waive any informalities and to accept such bid which, in the opinion of the Owner, is in the best interests of the Owner.

BY ORDER OF THE TOWN BOARD
TOWN OF RIVERHEAD
SUFFOLK COUNTY, NEW YORK

ACTING AS THE GOVERNING BODY OF
THE RIVERHEAD WATER DISTRICT

TOWN CLERK, TOWN OF RIVERHEAD

DATED: NOVEMBER 16, 2017

END OF SECTION 001113

SECTION 002113 - INFORMATION FOR BIDDERS

The BOARD OF COMMISSIONERS of the RIVERHEAD WATER DISTRICT (hereinafter called DISTRICT), will receive Sealed Proposals for:

**Construction of Pre-Stressed Ground Storage Tank at Plant No. 15
Contract T - Tank Construction
H2M PROJECT NO.: RDWD 1702**

TIME AND PLACE

Bids are to be submitted in sealed opaque envelopes, and will be received by the Town of Riverhead, at the Town Clerk's office, Town Hall, 200 Howell Avenue, Riverhead, New York, not later than 10:00 A.M. prevailing time, on Thursday, December 7, 2017 at which time and place they will be publicly opened and read aloud. Use of the mails shall be at the Bidder's own risk, and the Bidder shall be responsible for physical delivery of the bid at the time and place set for opening of bids..

ENVELOPES

All proposals and either the certified check or bid bond must be placed in a sealed opaque envelope bearing the Bidder's firm name and address and marked, "NEW GROUND STORAGE TANK AT PLANT NO. 15 FOR THE RIVERHEAD WATER DISTRICT, TOWN OF RIVERHEAD, SUFFOLK COUNTY, NEW YORK", but otherwise unmarked. Bid package shall include Proposal sheets, Qualifications of Bidder sheets, Approval of Subcontractor sheets, and the New York State Uniform Contracting Questionnaire.

PLANS AND SPECIFICATIONS

Plans and specifications may be examined on or after Thursday, November 16, 2017 by visiting the Town of Riverhead website: <http://townofriverheadny.gov> and click on "Bid Requests".

Plans and specifications are available from the aforementioned Town of Riverhead website only. All contractors who intend to submit a bid package are required to register on the web site.

VERBAL ANSWERS

The Town Board, its agents, servants or employees, or the Engineer, will not be responsible in any manner for verbal answers to any inquiries regarding the meaning of the contract drawings or Specifications given prior to the awarding of the contract.

Bid document inquiries may be submitted in writing by the Contractor to the Town until 12:00 P.M. on Friday, December 1, 2017, after which they will no longer be accepted.

PRE-BID SITE MEETING

A pre-bid site meeting will be held on Tuesday, November 28, 2017 at 10:00 am. Contractor presence is not mandatory for bidding.

EXAMINATION OF SITE

Bidders must satisfy themselves by personal examination of the location of the proposed work and of the actual conditions and requirements of the work and shall not, at any time after the submission of a proposal, dispute or complain of such estimate or assert that there was any misunderstanding in regard to the depth or character of excavation to be made or the nature of the work to be done.

PROPOSAL

The Proposal contained herein shall be used in making out bids. Any proposal not in accordance with these instructions or containing bids not asked for may be rejected. While separate prices are required for various items under this contract, it is understood that the contract will be awarded as a whole.

As the estimates of quantities of items stated in the Proposal are approximate only, bidders are required to submit their proposal upon and in the following express conditions, which shall apply and become part of every proposal received.

Bids will be compared by total amounts, said total amount being the sum of the products of the quantities multiplied by the unit price bid for the various items, with due consideration being given to the lump sum prices bid for any contingent or optional items. Unbalanced bids will not be accepted.

Each bidder shall fill out in ink, in both words and figures, in the spaces provided, its unit or lump sum bid, as the case may be, for each item in said Proposal for which it is submitting a bid. If there is any discrepancy between the prices in words and figures, the prices in words shall govern as unit and lump sum prices.

A bid which does not include bids for all items in the Proposal may not be considered valid.

If the contract is not awarded by the Town Board within forty five (45) days after the receipt of bids, the obligation of the bidder under this Proposal may terminate at its option and it shall thereupon be entitled to a refund of its certified check or release of its bid bond furnished by it as security with its proposal.

BOND OR CERTIFIED CHECK

Each proposal from a Contractor shall be accompanied by a bid bond or certified check on a solvent bank of the STATE OF NEW YORK, in the amount of five percent (5%) of the total bid. Such check shall be made payable to TOWN OF RIVERHEAD, RIVERHEAD, NEW YORK, and the amount thereof shall be the measure of liquidated damages which the Town may sustain by failure, neglect or refusal of the bidder to execute and deliver the contract, should the contract be awarded to it. The checks of all unsuccessful bidders will be returned upon the rejection of bids and the awarding of the contract; also, the check of the successful bidder will be returned upon the execution of the contract and the furnishing of the required bond.

NAME OF BIDDER

Each bidder must state, in its proposal, its full name and business address, and the full name of every person, firm or corporation, interested in same, and the address of every person or firm, or president and secretary of every corporation, interested with it.

QUALIFICATIONS OF BIDDERS

The Town Board reserves the right to waive any informalities in, or reject any and all bids. The Board reserves the right to reject any and all bids which do not conform to the Proposal.

All bidders must prove to the satisfaction of the Town Board that they are reputable, reliable and responsible, and that they possess the necessary qualifications (financial, labor, equipment and otherwise) to complete successfully the proposed work.

In determining the qualifications of a bidder, the Town Board will consider its record in the performance of any contracts entered into by it for the work contemplated or of similar nature, may make such investigation as it deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Board all such information and data for this purpose as the Town Board may request.

The Town Board shall be the sole judge of the qualifications of the bidders and of the merits thereof and reserves the right to reject any bid if the record of the bidder in the performance of contracts, payment of bills and meeting of obligations to subcontractors, material men or employees is not satisfactory to the Town Board, or if the evidence submitted by, or the investigation of, such bidders fails to satisfy the Town Board that it is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein ".

PERFORMANCE AND MAINTENANCE BOND

The Contractor shall furnish a Performance Bond, Labor and Materials Bond, and a one (1) year Maintenance Bond each in an amount equal to one hundred (100%) percent of the total contract price as security for its faithful performance of this contract, for the payment of all persons performing labor or furnishing materials in connection with this contract. Such bonds shall also cover any penalties, interest charges and assessments levied by any governmental unit for failure to comply with laws and/or regulations governing public work. The Maintenance Bond shall be an assurance that all work and materials provided under this contract shall be maintained for a minimum period of one (1) year. The Maintenance Bond shall be furnished following final completion, and payment under the contract. The contractor shall be required to furnish all guarantees and warranties of manufacturers of products in connection with this contract, but no manufacturer's limitation of time shall act to limit the responsibility of the contractor or its surety hereunder.

The surety must be licensed in the State of New York and have a BEST A rating, or the surety shall present information satisfactory to the TOWN/DISTRICT to permit the TOWN/DISTRICT to accept the bond.

At the time of submission of bonds or at any time thereafter, the TOWN/DISTRICT may evaluate the surety or sureties proposed, and demand a change of surety if it determines that the financial position of such surety does not provide for a proper protection of the interests of the TOWN/DISTRICT. The TOWN/DISTRICT shall be guided by its legal counsel, and insurance industry consultants in determining proper sureties for TOWN/DISTRICT public works contracts. If the TOWN/DISTRICT notifies the contractor in writing that a surety is unacceptable for any reason, then the contractor shall replace the surety and the bond in question within five (5) business days with a surety and bond deemed suitable by the said TOWN/DISTRICT. The premiums charged for all such bonds shall be a cost of the contractor and not the TOWN/DISTRICT. Upon notice to change surety being forwarded to a contractor, no further payments shall be made until a new bond in proper form naming an acceptable surety is provided.

SIGNATURE OF CONTRACTOR

The bidder to whom a contract may be awarded shall attend at the office of the Town Board, with the sureties offered by it, within seven (7) days, Weekends and Holidays excepted, after date of notification of the acceptance of its proposal, and there sign the contract in quadripartite for the work and furnish approved security for its performance.

In case of failure to do so, the bidder shall be considered as having abandoned the same, and the check accompanying its proposal shall be forfeited to the Town Board, or the penalty of the bid bond shall be invoked.

CONTRACTOR'S INSURANCE

The Contractor shall not commence any work until it has obtained and had approved by the Town all of the insurance specified and required by the Contract.

The Contractor shall not permit any subcontractor to commence any operation on the site until satisfactory proof of carriage of the above required insurance has been posted with, and approved by, the Town Board.

RESPONSIBILITY OF BIDDER

Attention is hereby particularly directed to the provisions of the contract whereby the Contractor will be responsible for any loss or damage that may happen to the work or any part thereof during its progress; and also whereby the Contractor shall make good any defects or faults that may occur during the progress of the work or within twelve (12) months after date of the Engineer's approval of the final payment request.

LABOR RATES

The Contractor shall pay not less than the minimum hourly wage rates on this contract as established in accordance with Section 220 of the Labor Law, as shown on the Wage Schedule and Prevailing Rate Schedule, either shown on the following pages or the current prevailing rates paid at the time of construction.

Each bidder shall submit with its bid a separate sealed list that names each subcontractor that the bidder will use to perform work on the contract, and the agreed-upon amount to be paid to each, for: (i) plumbing and gas fitting, (ii) steam heating, hot water heating, ventilating and air conditioning apparatus and (iii) electric wiring and standard illuminating fixtures. After the low bid is announced, the sealed list of subcontractors submitted with such low bid shall be opened and the names of such subcontractors shall be announced, and thereafter any change of subcontractor or agreed-upon amount to be paid to each shall require the approval of the owner, upon a showing presented to the owner of legitimate construction need for such change, which shall be open to public inspection. Legitimate construction need shall include, but not be limited to, a change in project specifications, a change in construction material costs, a change to subcontractor status as determined pursuant to paragraph (e) of subdivision two (2) of section two hundred twenty-two (222) of the labor law, or the subcontractor has become otherwise unwilling, unable or unavailable to perform the subcontract. The sealed lists of subcontractors submitted by all other bidders shall be returned to them unopened after the contract award.

COMPLETION OF WORK

Work is required to be completed to the satisfaction of the Engineer, and in substantial accordance with the Specifications hereunto annexed and the Plans therein referred to and the Change Orders amended to the Contract.

RESPONSIBILITY OF CONTRACTOR

Attention is hereby particularly directed to the provisions of the contract whereby the Contractor will be responsible for any loss or damage that may happen to the work or any part thereof during its progress; and also whereby the Contractor shall make good any defects or faults that may occur during the progress of the work or within twelve (12) months after its completion and acceptance. Any progress payments made by the Town during the completion of this contract by the Contractor shall not be a waiver of the foregoing provision.

TOWN BOARD TOWN OF
RIVERHEAD
SUFFOLK COUNTY, NEW YORK

END OF SECTION 002113

SECTION 004105 - BIDDER'S DECLARATION

BIDDER'S DECLARATION:

The undersigned, as Bidder, declares that the only person or persons interested in this bid or proposal as principal or principals is or are named herein; and that no other person than herein named has any interest in this proposal or in the contract proposed to be taken; that this bid or proposal is made without any connections with any other person or persons making a bid or proposal for the same purpose; that the bid or proposal is in all respects fair and without collusion or fraud; that it has examined the site of the work and the Contract Documents; and fully understands all the same; and it proposes and agrees, if this proposal is accepted, it will contract with the Town of Riverhead in the Contract accompanying this bid to furnish all the material, implements, etc., and perform all the work required in accordance with the Contract Documents; and it will accept in full payment therefore the following sums to wit:

Acknowledgement that the foregoing Bidder's Declaration is true and factual.

SIGNATURE	PRINT NAME	TITLE	DATE
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END OF SECTION 004105

SECTION 004116 - PROPOSAL

Board:

The undersigned hereby offers to furnish all labor, equipment, materials and appurtenances for **Construction of Pre-Stressed Ground Storage Tank at Plant No. 15**, Contract T - Tank Construction all in accordance with the plans and specifications prepared by H2M architects + engineers for the following unit and lump sum prices:

ITEM 1 - MOBILIZATION AND DEMOBILIZATION

For mobilization, demobilization, bonds, and insurances, as specified.
(Item not to exceed 5% of the total base bid)

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 2A - SITE CLEARING

For clearing the site of plant life and growth as required to allow for installation of ground storage tank, as specified.

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 2B - EARTHWORK

For the removal/installation of required fill, soil preparation, etc. associated with the new tank construction, as specified on the plans.

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 2C - EARTHWORK (ALTERNATE)

For the removal/installation of required fill, soil preparation, etc. associated with the construction of an alternate size tank.

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 3A - NEW GROUND STORAGE TANK

For the design and construction of the new 2.0 MG concrete ground storage tank and all associated accessories, as specified on the plans.

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 3B – NEW GROUND STORAGE TANK (ALTERNATE)

For the design and construction of a new 2.0 MG concrete ground storage tank and all associated accessories. Contractor may modify the diameter, overflow elevation, and buried depth to optimize the construction costs. The dome height of the alternate tank shall not exceed a height of 35 feet above grade.

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 4 - DISINFECTION AND WATER QUALITY SAMPLING

For disinfection and water quality testing as required.

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 5A - CASH ALLOWANCES - QUALITY CONTROL TESTING

Allowances as specified in Section 012100 - Allowances for independent testing laboratory services, as specified.

LUMP SUM: Twenty Five Thousand (\$ 25,000.00)
DOLLARS

ITEM 5B - CASH ALLOWANCES - ADDITIONAL/UNFORSEEN WORK

Allowances as specified in Section 012100 - Allowances for additional work not included in the original scope of this project due to unforeseeable conditions or requested by the owner.

LUMP SUM: Twenty Five Thousand (\$ 25,000.00)
DOLLARS

ITEM 6 - PROJECT RECORD DOCUMENTS

For furnishing all project record documents, as specified.
(Items not to be less than \$5,000.00)

LUMP SUM: _____ (\$ _____)
DOLLARS

TOTAL BASE BID (Sum of Items 1-2B, 3A, 4-6)

DOLLARS (\$ _____)

TOTAL ALTERNATE BID (Sum of Items 1-2A, 2C, 3B, 4-6)

DOLLARS

(\$

)

The Board of the Town of Riverhead reserves the right to award this contract based on either the total bid or any combination of bid items, as may be in the best interest of the Town of Riverhead. The award shall be made to the lowest responsible bidder based upon the bid items awarded. The Board reserves the right to reject any or all bids. The Board reserves the right to award this contract within forty-five (45) days of the bid opening.

Within ten (10) consecutive calendar days after the date of the Notice of Award (weekends and holidays included), the bidder shall execute the contract and furnish the required bonds and insurances. The Notice to Proceed will be issued after the contract has been executed by the Owner.

All work specified under this contract shall be substantially complete by July 6, 2018, and shall be ready for final payment by September 30, 2018. Substantially complete shall only be considered once all tank work is complete, including all disinfection, water quality sampling, and all associated Health Department approvals where the District will have beneficial use of the tank.

Failure of the contractor to complete all work within the specified time will subject him to liquidated damages as set forth in the contract, in the sum of Two Hundred and Fifty dollars (\$250.00) per day, commencing with the respective day from the date of the Notice to Proceed.

In addition to liquidated damages, specific damages will be assessed and deducted from amounts otherwise due the contractor for additional inspection and contract management time required to be expended by the Engineer should the project be completed beyond the contract completion date. Such deduction shall be in accordance with the billing rates and fees established between H2M and the Town of Riverhead.

Each bidder shall submit with its bid a separate sealed list that names each subcontractor that the bidder will use to perform work on the contract, and the agreed-upon amount to be paid to each, for: I) plumbing and gas fitting, II) steam heating, hot water heating, ventilating and air conditioning apparatus, and III) electric wiring and standard illuminating fixtures. After the low bid is announced, the sealed list of subcontractors submitted with such low bid shall be opened and the names of such subcontractors shall be announced, and thereafter any change of subcontractor or agreed-upon amount to be paid to each shall require the approval of the Owner, upon a showing presented to the Owner of legitimate construction need for such change, which shall be open to public inspection. Legitimate construction need shall include, but not be limited to, a change in project specifications, a change in construction material costs, a change to subcontractor status as determined pursuant to paragraph (E) of subdivision two (2) of section two hundred twenty-two (222) of the labor law, or the subcontractor has become otherwise unwilling, unable, or unavailable to perform the subcontract. The sealed lists of subcontractors submitted by all other bidders shall be returned to them unopened after the contract award.

The contractor shall coordinate all work with the Owner to minimize disturbances to Owner operations.

The bidder represents herewith that he is aware of the working conditions, has carefully reviewed the proposal and specifications, has checked and certifies the accuracy of the bid.

The undersigned hereby acknowledges receipt of the following addenda (if any):

ADDENDUM NO.

DATED

_____	_____
_____	_____
_____	_____

Each proposal shall be accompanied by either a certified check drawn on a solvent bank with an office in the State of New York, or a bid bond equal to five percent (5%) of the total amount of the bid and payable to the Town of Riverhead. The certified check or bid bond shall specify which contract it accompanies.

**SECURITY ENCLOSED FOR THIS SECTION
(BASE BID PLUS CONTINGENCY ITEMS)**

**YES / NO
(Circle One)**

PROPOSAL CERTIFICATION

This Bid is hereby submitted by:

BIDDER:

BIDDER'S ADDRESS:

SIGNED BY: _____ TITLE: _____

PRINT NAME: _____ DATE: _____

FEDERAL I.D. NO. OR
SOCIAL SECURITY NO.:

Telephone number where the contractor or a competent representative can accept a telephone message and provide a reasonable reply as soon as possible, but within 24 hours of being contacted.

DAY: _____ NIGHT: _____

EMERGENCY: _____ FAX: _____

EMAIL: _____

Acknowledgement that the Qualification of Bidders section has been fully completed/executed.

SIGNATURE	PRINT NAME	TITLE	DATE
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END OF SECTION 004116

SECTION 004313 - BID SECURITY

Enclosed is a certified check or bid bond for five percent (5%) of the total amount of the bid as required in the foregoing "Information for Bidders".

The Bidder hereby agrees to appear with its sureties at the office of the Town of Riverhead within ten (10) calendar days after due notice from the Board of the Town of Riverhead that the Contract has been awarded to it and is ready for signature; such notice to be given in writing within forty five (45) days of opening of the bids; and, on the signing of such Contract by the Bidder, to furnish the indemnifying bonds as provided in the Contract.

The Bidder hereby further agrees that in the event of its failure or refusal to enter into a contract in accordance with this bid within ten (10) days after due notice from the Board that the Contract has been awarded to it and is ready for signature, as given in accordance with the Contract Documents and/or its failure to execute and deliver the bond for the full amount of the Contract price, as provided in said Contract Documents, the Bidder's check or bid bond which is herewith deposited with the Board (at the option of said Board) become due and payable as ascertained and liquidated damages for such default; otherwise, said check or bid bond will be returned to the undersigned.

The full names and residences of all persons and parties interested in the foregoing bid as principals are as follows:

<u>NAME</u>	<u>ADDRESS</u>
_____	_____
_____	_____
_____	_____

NAME OF BIDDER:

BUSINESS ADDRESS OF BIDDER:

Telephone number where the bidder or a competent representative can accept a telephone message and provide a reasonable reply as soon as possible, but no later than twenty four (24) hours:

DAY: _____ EVENING: _____

DATED AT: _____ THE _____ DAY OF _____, 20____

END OF SECTION 004313

SECTION 004350 - APPROVAL OF SUBCONTRACTORS/SUBCONTRACT LIMITS

Town of Riverhead

Suffolk County, New York

Bidders shall submit to the Owner the names of the Subcontractors which the Bidder proposes to use on the project. The Owner reserves the right to disapprove the use of any proposed subcontractor and in such event the Bidder shall submit the name of another Subcontractor in the like manner and in the time specified by the Owner. Such disapproval shall not result in additional costs to the Owner. The Owner reserves the right to reject any bid if the name of the proposed Subcontractors, or additional subcontractor information, is not submitted as required.

BIDDER:

FIRM NAME: _____

ADDRESS: _____

PREPARED BY: _____

SIGNED BY: _____

TITLE: _____

END OF SECTION 004350

SECTION 004355 - INDEMNITY, LIMITATION OF LIABILITY

1.0 - INDEMNITY

The Contractor and all subcontractors performing work in connection with this Contract shall HOLD HARMLESS, INDEMNIFY and DEFEND the Owner and Engineer, their consultants and each of their officers, agents and employees from any liability, claims, losses or damage including reasonable costs of defense arising out of or alleged to arise from the Contractor's or subcontractor's negligence in the performance of the work described in the Contract Documents, but not including liability that may be due to the sole negligence of the Owner, the Engineer or their officers, agents and employees.

2.0 - LIMITATION OF LIABILITY

The Contractor and all subcontractors agree to limit the liability of the Owner and the Engineer due to the Engineer's professional negligent errors or omissions such that the total aggregate liability of the Engineer to those named shall not exceed Fifty Thousand Dollars (\$50,000) or five percent (5%) of the Contract award amount, whichever is greater.

3.0 - NO CLAIM FOR DELAY

The Contractor and all subcontractors agree to HOLD HARMLESS from any and all claims for loss or damages of any nature against the Owner or Engineer for delays in commencement, performance or completion of the Contract, regardless of whether said delays are, or may be, caused by the Owner, Engineer or any governmental agency.

END OF SECTION 004355

SECTION 004519 - NON-COLLUSIVE BIDDING CERTIFICATE

NON-COLLUSIVE BIDDING CERTIFICATE

Pursuant to Section 103-D of the General Municipal Law, the Contractor makes the following statement under penalty of perjury, and by submission of this bid or proposal, the Bidder certifies that:

(a) this bid or proposal has been independently arrived at without collusion with any other bidder or with any competitor or potential competitor; (b) this bid or proposal has not been knowingly disclosed and will not be knowingly disclosed prior to the opening of the bids or proposals for this project to any other bidder, competitor or potential competitor; (c) no attempt has been or will be made to induce any other person, partnership or corporation to submit or not to submit a bid or proposal; (d) the person signing this bid or proposal certified that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties of perjury, affirms the truth thereof, such penalties being applicable to the Bidder as well as to the person signing in its behalf; (e) attached hereto (if a corporate bidder) is a certified copy of resolution authorizing the execution of this certificate by the signatory of the bid or proposal on behalf of the corporate bidder.

Resolved that

(Name of Corporation)

be authorized to sign and submit the bid or proposal of this corporation for the following project:

Construction of Pre-Stressed Ground Storage Tank at Plant No. 15
Contract T - Tank Construction
(Name of Project)

and to include in such bid or proposal the certificate as to non-collusion required by Section 103-D of the General Municipal Law as the act and deed of said corporation; and for any inaccuracies or misstatements in such certificate, this corporate bidder shall be liable under the penalties of perjury.

The foregoing is a true and correct copy of the resolution adopted by _____

at a meeting of its Board of Directors held on the _____ day of _____, 20____

(Seal of the Corporation)

Secretary:

Respectfully submitted,

FIRM NAME: _____

FIRM ADDRESS:

SIGNED BY: _____

TITLE: _____

END OF SECTION 004519

NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

You have selected the For-Profit Construction questionnaire, commonly known as the “CCA-2,” which may be printed and completed in this format or, **for your convenience, may be completed online using the [New York State VendRep System](#).**

COMPLETION & CERTIFICATION

The person(s) completing the questionnaire must be knowledgeable about the vendor’s business and operations. An owner or official must certify the questionnaire and the signature must be notarized.

NEW YORK STATE VENDOR IDENTIFICATION NUMBER (VENDOR ID)

The Vendor ID is a ten-digit identifier issued by New York State when the vendor is registered on the Statewide Vendor File. This number must now be included on the questionnaire. If the business entity has not obtained a Vendor ID, contact the IT Service Desk at ITServiceDesk@osc.state.ny.us or call 866-370-4672.

DEFINITIONS

All underlined terms are defined in the “New York State Vendor Responsibility Definitions List,” found at <http://www.osc.state.ny.us/vendrep/documents/questionnaire/definitions.pdf>. These terms may not have their ordinary, common or traditional meanings. Each vendor is strongly encouraged to read the respective definitions for any and all underlined terms. By submitting this questionnaire, the vendor agrees to be bound by the terms as defined in the "New York State Vendor Responsibility Definitions List" existing at the time of certification.

RESPONSES

Every question must be answered. Each response must provide all relevant information which can be obtained within the limits of the law. However, information regarding a determination or finding made in error which was subsequently corrected or overturned, and/or was withdrawn by the issuing government entity, is not required. Individuals and Sole Proprietors may use a Social Security Number but are encouraged to obtain and use a federal Employer Identification Number (EIN).

NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

BUSINESS ENTITY INFORMATION				
<u>Legal Business Name</u>		<u>EIN</u> _____		
Address of the <u>Principal Place of Business</u> (street, city, state, zip code)		<u>New York State Vendor Identification Number</u>		
		Telephone ext.		Fax
		Website		
Authorized Contact for this Questionnaire				
Name		Telephone ext.		Fax
Title		Email		
Additional <u>Business Entity</u> Identities: If applicable, list any other <u>DBA</u> , <u>Trade Name</u> , <u>Former Name</u> , Other Identity, or <u>EIN</u> used in the last five (5) years, the state or county where filed and the status (active or inactive).				
Type	Name	EIN	State or County where filed	Status

I. BUSINESS CHARACTERISTICS			
1.0 <u>Business Entity</u> Type – Check appropriate box and provide additional information:			
a) <input type="checkbox"/> <u>Corporation</u> (including <u>PC</u>)	Date of Incorporation		
b) <input type="checkbox"/> <u>Limited Liability Company</u> (<u>LLC</u> or <u>PLLC</u>)	Date Organized		
c) <input type="checkbox"/> <u>Limited Liability Partnership</u>	Date of Registration		
d) <input type="checkbox"/> <u>Limited Partnership</u>	Date Established		
e) <input type="checkbox"/> <u>General Partnership</u>	Date Established	County (if formed in NYS)	
f) <input type="checkbox"/> <u>Sole Proprietor</u>	How many years in business?		
g) <input type="checkbox"/> Other	Date Established		
If Other, explain:			
1.1 Was the <u>Business Entity</u> formed in New York State?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If “No,” indicate jurisdiction where the <u>Business Entity</u> was formed:			
<input type="checkbox"/> United States	State		
<input type="checkbox"/> Other	Country		

NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

I. BUSINESS CHARACTERISTICS			
1.2 Is the <u>Legal Business Entity</u> publicly traded?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If "Yes," provide the <u>CIK code</u> or Ticker Symbol:			
1.3 Is the <u>Business Entity</u> currently <u>registered to do business in New York State</u> ?			<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>Note: Select "Not Required" if the Business Entity is a Sole Proprietor or General Partnership</i>			<input type="checkbox"/> Not Required
If "No," explain why the <u>Business Entity</u> is not required to be <u>registered to do business in New York State</u> :			
1.4 Is the responding <u>Business Entity</u> a <u>Joint Venture</u> ? Note: If the submitting <u>Business Entity</u> is a <u>Joint Venture</u> , also submit a separate questionnaire for each <u>Business Entity</u> comprising the <u>Joint Venture</u> .			<input type="checkbox"/> Yes <input type="checkbox"/> No
1.5 If the <u>Business Entity's Principal Place of Business</u> is not in New York State, does the <u>Business Entity</u> maintain an office in New York State?			<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>(Select "N/A" if <u>Principal Place of Business</u> is in New York State.)</i>			<input type="checkbox"/> N/A
If "Yes," provide the address and telephone number for one office located in New York State.			
1.6 Is the Business Entity a New York State certified <u>Minority-Owned Business Enterprise</u> , or <u>Women-Owned Business Enterprise</u> , or <u>New York State Small Business</u> , or federally certified <u>Disadvantaged Business Enterprise</u> ?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If "Yes," check all that apply:			
<input type="checkbox"/> New York State certified <u>Minority-Owned Business Enterprise</u> (MBE)			
<input type="checkbox"/> New York State certified <u>Women-Owned Business Enterprise</u> (WBE)			
<input type="checkbox"/> <u>New York State Small Business</u>			
<input type="checkbox"/> Federally certified <u>Disadvantaged Business Enterprise</u> (DBE)			
1.7 Identify each person or business entity that is, or has been within the past five (5) years, <u>Principal Owner</u> of 5.0% or more of the firm's shares; a Business Entity Official; or one of the five largest shareholders, if applicable. <i>(Attach additional pages if necessary.)</i>			
<u>Joint Ventures</u> : Provide information for all firms involved.			
Name <i>(For each person, include middle initial)</i>	Title	Percentage of ownership (Enter 0%, if not applicable)	Employment status with the firm
			<input type="checkbox"/> Current <input type="checkbox"/> Former
			<input type="checkbox"/> Current <input type="checkbox"/> Former
			<input type="checkbox"/> Current <input type="checkbox"/> Former
			<input type="checkbox"/> Current <input type="checkbox"/> Former

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE
FOR-PROFIT CONSTRUCTION (CCA-2)**

II. AFFILIATE and JOINT VENTURE RELATIONSHIPS		
2.0 Are there any other <u>construction</u> -related firms in which, now or in the past five years, the submitting <u>Business Entity</u> or any of the individuals or business entities listed in question 1.7 either owned or owns 5.0% or more of the shares of, or was or is one of the five largest shareholders or a director, officer, partner or proprietor of said other firm? (<i>Attach additional pages if necessary.</i>)		<input type="checkbox"/> Yes <input type="checkbox"/> No
Firm/Company Name	Firm/Company EIN (If available)	Firm/Company's Primary Business Activity
Firm/Company Address		
Explain relationship with the firm and indicate percent of ownership, if applicable (enter N/A, if not applicable):		
Are there any shareholders, directors, officers, owners, partners or proprietors that the submitting <u>Business Entity</u> has in common with this firm?		<input type="checkbox"/> Yes <input type="checkbox"/> No
Individual's Name (<i>Include middle initial</i>)	Position/Title with Firm/Company	
2.1 Does the <u>Business Entity</u> have any <u>construction</u> -related <u>affiliates</u> not identified in the response to question 2.0 above? (<i>Attach additional pages if necessary.</i>)		<input type="checkbox"/> Yes <input type="checkbox"/> No
Affiliate Name	Affiliate EIN (If available)	Affiliate's Primary Business Activity
Affiliate Address		
Explain relationship with the affiliate and indicate percent of ownership, if applicable (<i>enter N/A, if not applicable</i>):		
Are there any shareholders, directors, officers, owners, partners or proprietors that the submitting Business Entity has in common with this affiliate?		<input type="checkbox"/> Yes <input type="checkbox"/> No
Individual's Name (<i>Include middle initial</i>)	Position/Title with Firm/Company	
2.2 Has the <u>Business Entity</u> participated in any <u>construction-related Joint Ventures</u> within the past three (3) years? (<i>Attach additional pages if necessary.</i>)		<input type="checkbox"/> Yes <input type="checkbox"/> No
Joint Venture Name	Joint Venture EIN (If available)	Identify parties to the Joint Venture

NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

III. CONTRACT HISTORY

3.0 Has the Business Entity completed any construction contracts? Yes No

If "Yes," list the ten most recent construction contracts the Business Entity has completed using Attachment A – Completed Construction Contracts, found at www.osc.state.ny.us/vendrep/documents/questionnaire/ac3294s.doc.

If less than ten, include most recent subcontracts on projects up to that number.

3.1 Does the Business Entity currently have uncompleted construction contracts? Yes No

If "Yes," list all current uncompleted construction contracts by using Attachment B – Uncompleted Construction Contracts, found at www.osc.state.ny.us/vendrep/documents/questionnaire/ac3295s.doc.

Note: Ongoing projects must be included.

IV. INTEGRITY – CONTRACT BIDDING

Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:

4.0 Been suspended or debarred from any government contracting process or been disqualified on any government procurement? Yes No

4.1 Been subject to a denial or revocation of a government prequalification? Yes No

4.2 Had any bid rejected by a government entity for lack of qualifications, responsibility or because of the submission of an informal, non-responsive or incomplete bid? Yes No

4.3 Had a proposed subcontract rejected by a government entity for lack of qualifications, responsibility or because of the submission of an informal, non-responsive or incomplete bid? Yes No

4.4 Had a low bid rejected on a government contract for failure to make good faith efforts on any Minority-Owned Business Enterprise, Women-Owned Business Enterprise or Disadvantaged Business Enterprise goal or statutory affirmative action requirements on a previously held contract? Yes No

4.5 Agreed to a voluntary exclusion from bidding/contracting with a government entity? Yes No

4.6 Initiated a request to withdraw a bid submitted to a government entity or made any claim of an error on a bid submitted to a government entity? Yes No

For each "Yes," provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, the government entity involved, project(s), relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.

V. INTEGRITY – CONTRACT AWARD

Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:

5.0 Defaulted on or been suspended, cancelled or terminated for cause on any contract? Yes No

5.1 Been subject to an administrative proceeding or civil action seeking specific performance or restitution (except any disputed work proceeding) in connection with any government contract? Yes No

5.2 Entered into a formal monitoring agreement, consent decree or stipulation settlement as specified by, or agreed to with, any government entity? Yes No

5.3 Had its surety called upon to complete any contract whether government or private sector? Yes No

5.4 Forfeited all or part of a standby letter of credit in connection with any government contract? Yes No

NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

V. INTEGRITY – CONTRACT AWARD

Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:

For each “Yes,” provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, the government entity/owners involved, project(s), contract number(s), relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.

VI. CERTIFICATIONS/LICENSES

Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:

- | | |
|--|--|
| 6.0 Had a revocation or <u>suspension</u> of any business or professional permit and/or license? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 6.1 Had a denial, decertification, revocation or forfeiture of New York State certification of <u>Minority-Owned Business Enterprise</u> , <u>Women-Owned Business Enterprise</u> or a federal certification of <u>Disadvantaged Business Enterprise</u> status, for other than a change of ownership? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

For each “Yes,” provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, the government entity involved, relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.

VII. LEGAL PROCEEDINGS/GOVERNMENT INVESTIGATIONS

Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:

- | | |
|--|--|
| 7.0 Been the subject of a criminal <u>investigation</u> , whether open or closed, or an indictment for any business-related conduct constituting a crime under local, state or <u>federal</u> law? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7.1 Been the subject of:
(i.) An indictment, grant of immunity, <u>judgment</u> or conviction (including entering into a plea bargain) for conduct constituting a crime; or
(ii.) Any criminal <u>investigation</u> , felony indictment or conviction concerning the formation of, or any business association with, an allegedly false or fraudulent <u>Minority-Owned Business Enterprise</u> , <u>Women-Owned Business Enterprise</u> , or a <u>Disadvantaged Business Enterprise</u> ? | <input type="checkbox"/> Yes <input type="checkbox"/> No

<input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7.2 Received any <u>OSHA</u> citation, which resulted in a final determination classified as <u>serious</u> or <u>willful</u> ? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7.3 Had a <u>government entity</u> find a willful prevailing wage or supplemental payment violation? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7.4 Had a New York State Labor Law violation deemed willful? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7.5 Entered into a consent order with the New York State Department of Environmental Conservation, or a <u>federal</u> , state or local government enforcement determination involving a violation of <u>federal</u> , state or local environmental laws? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

VII. LEGAL PROCEEDINGS/GOVERNMENT INVESTIGATIONS

Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:

7.6 Other than previously disclosed, been the subject of any <u>citations</u> , notices or violation orders; a pending administrative hearing, proceeding or determination of a violation of: <ul style="list-style-type: none"> • <u>Federal</u>, state or local health laws, rules or regulations; • <u>Federal</u>, state or local environmental laws, rules or regulations; • Unemployment insurance or workers compensation coverage or <u>claim</u> requirements; • Any labor law or regulation, which was deemed willful; • Employee Retirement Income Security Act (ERISA); • <u>Federal</u>, state or local human rights laws; • <u>Federal</u>, state or local security laws? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
--	--

For each "Yes," provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, the government entity involved, relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.

Note: Information regarding a determination or finding made in error, which was subsequently corrected or overturned, and/or was withdrawn by the issuing government entity, is not required.

VIII. LEADERSHIP INTEGRITY

If the Business Entity is a Joint Venture Entity, answer "N/A - Not Applicable" to questions in this section.

Within the past five (5) years has any individual previously identified or any individual currently or formerly having the authority to sign, execute or approve bids, proposals, contracts or supporting documentation on behalf of the Business Entity with any government entity been:

8.0 <u>Sanctioned</u> relative to any business or professional permit and/or license?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
8.1 <u>Suspended, debarred or disqualified</u> from any <u>government contracting process</u> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
8.2 The subject of a criminal <u>investigation</u> , whether open or closed, or an indictment for any business-related conduct constituting a crime under local, state or <u>federal</u> law?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
8.3 Charged with a misdemeanor or felony, indicted, granted immunity, convicted of a crime or subject to a judgment for: <ul style="list-style-type: none"> (i.) Any business-related activity, including but not limited to fraud, coercion, extortion, bribe or bribe-receiving, giving or accepting unlawful gratuities, immigration or tax fraud, racketeering, mail fraud, wire fraud, price-fixing or collusive bidding; or (ii.) Any crime, whether or not business-related, the underlying conduct of which related to truthfulness, including but not limited to the filing of false documents or false sworn statements, perjury or larceny 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

For each "Yes," provide an explanation of the issue(s), the individual involved, the relationship to the submitting Business Entity, the government entity involved, relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE
FOR-PROFIT CONSTRUCTION (CCA-2)**

IX. FINANCIAL AND ORGANIZATIONAL CAPACITY		
9.0 Within the past five (5) years, has the <u>Business Entity</u> or any <u>affiliate</u> received any <u>formal unsatisfactory performance assessment(s)</u> from any <u>government entity</u> on any contract?		<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If "Yes," provide an explanation of the issue(s), the <u>Business Entity</u> involved, the relationship to the submitting <u>Business Entity</u>, the <u>government entity</u> involved, relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</i>		
9.1 Within the past five (5) years, has the <u>Business Entity</u> or any <u>affiliate</u> had any <u>liquidated damages</u> assessed over \$25,000?		<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If "Yes," provide an explanation of the issue(s), the <u>Business Entity</u> involved, the relationship to the submitting <u>Business Entity</u>, relevant dates, the contracting party involved, the amount assessed and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</i>		
9.2 Within the past five (5) years, has the <u>Business Entity</u> or any <u>affiliate</u> had any <u>liens, claims or judgments</u> over \$25,000 filed against the <u>Business Entity</u> which remain undischarged or were unsatisfied for more than 90 days? (Note: Including but not limited to tax warrants or liens. Do not include UCC filings.)		<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If "Yes," provide an explanation of the issue(s), the <u>Business Entity</u> involved, the relationship to the submitting <u>Business Entity</u>, relevant dates, the Lien holder or Claimants' name(s), the amount of the <u>lien(s)</u> and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</i>		
9.3 In the last seven (7) years, has the <u>Business Entity</u> or any <u>affiliate</u> initiated or been the subject of any bankruptcy proceedings, whether or not closed, or is any bankruptcy proceeding pending?		<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If "Yes," provide the <u>Business Entity</u> involved, the relationship to the submitting <u>Business Entity</u>, the bankruptcy chapter number, the court name and the docket number. Indicate the current status of the proceedings as "Initiated," "Pending" or "Closed." Provide answer below or attach additional sheets with numbered responses.</i>		
9.4 What is the <u>Business Entity's</u> Bonding Capacity?		
a. Single Project		b. Aggregate (All Projects)
9.5 List <u>Business Entity's</u> Gross Sales for the previous three (3) Fiscal Years:		
1st Year (Indicate year) Gross Sales	2nd Year (Indicate year) Gross Sales	3rd Year (Indicate year) Gross Sales
9.6 List <u>Business Entity's</u> Average Backlog for the previous three (3) fiscal years: (Estimated total value of uncompleted work on outstanding contracts)		
1st Year (Indicate year) Amount	2nd Year (Indicate year) Amount	3rd Year (Indicate year) Amount
9.7 Attach <u>Business Entity's</u> most recent annual <u>financial statement</u> and accompanying notes or complete Attachment C – Financial Information, found at www.osc.state.ny.us/vendrep/documents/questionnaire/ac3296s.xls . (This information must be attached.)		

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE
FOR-PROFIT CONSTRUCTION (CCA-2)**

X. FREEDOM OF INFORMATION LAW (FOIL)

10.0 Indicate whether any information provided herein is believed to be exempt from disclosure under the Freedom of Information Law (FOIL).
Note: A determination of whether such information is exempt from FOIL will be made at the time of any request for disclosure under FOIL. Attach additional pages if necessary.

Yes No

If "Yes," indicate the question number(s) and explain the basis for the claim.

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE
FOR-PROFIT CONSTRUCTION (CCA-2)**

Certification

The undersigned: (1) recognizes that this questionnaire is submitted for the express purpose of assisting New York State government entities (including the Office of the State Comptroller (OSC)) in making responsibility determinations regarding award or approval of a contract or subcontract and that such government entities will rely on information disclosed in the questionnaire in making responsibility determinations; (2) acknowledges that the New York State government entities and OSC may, in their discretion, by means which they may choose, verify the truth and accuracy of all statements made herein; and (3) acknowledges that intentional submission of false or misleading information may result in criminal penalties under State and/or Federal Law, as well as a finding of non-responsibility, contract suspension or contract termination.

The undersigned certifies that he/she:

- is knowledgeable about the submitting Business Entity’s business and operations;
- has read and understands all of the questions contained in the questionnaire;
- has not altered the content of the questionnaire in any manner;
- has reviewed and/or supplied full and complete responses to each question;
- to the best of his/her knowledge, information and belief, confirms that the Business Entity’s responses are true, accurate and complete, including all attachments, if applicable;
- understands that New York State government entities will rely on the information disclosed in the questionnaire when entering into a contract with the Business Entity; and
- is under an obligation to update the information provided herein to include any material changes to the Business Entity’s responses at the time of bid/proposal submission through the contract award notification, and may be required to update the information at the request of the New York State government entities or OSC prior to the award and/or approval of a contract, or during the term of the contract.

Signature of Owner/Official _____

Printed Name of Signatory _____

Title _____

Name of Business _____

Address _____

City, State, Zip _____

Sworn to before me this _____ day of _____, 20__;

_____ Notary Public

SECTION 004547 - IRAN DIVESTMENT ACT CERTIFICATION

IRAN DIVESTMENT ACT CERTIFICATION

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of section 165-a of the state finance law.

Dated: _____

(Name of corporation or partnership)

(Signature of Individual)

(Officer stating title) (Partner)

(Print Name of Individual)

END OF SECTION 004547

SECTION 004550 - QUALIFICATION OF BIDDERS**Town of Riverhead
Suffolk County, New York**

The Owner may make such investigation as the Owner deems necessary to determine the responsibility of any Bidder or to determine the ability of any Bidder to perform the Work. Bidders shall furnish to the Owner all information and data required by the Owner, including complete financial data, within the time and in the form and manner required by the Owner. The Owner reserves the right to reject any bid if the evidence required by the Owner is not submitted as required or if the evidence submitted by or the investigation of any Bidder fails to satisfy the Owner that the Bidder is responsible, or is able or qualified to carry out the obligations of the Contract or to complete the Work as contemplated. At the discretion of the Owner, any bidder may be required to complete and submit the enclosed New York State Vendor Responsibility Questionnaire to assist in determining the bidder's qualifications.

The following is a list showing the name of the Owner, Location, Date of Construction, General Description of Work, Amount of the Contract and Contract Period for projects of similar nature in size, construction method and construction procedure, which have been completed by the undersigned as the prime contractor, and which have been in operation for a period of not less than one year, (minimum of five such projects).

PROJECT NO. 1Owner:

Contact Name and Phone Number: _____

Location:
_____General Description:

Contract Amount: _____

Contract Period: _____

PROJECT NO. 2Owner:

Contact Name and Phone Number: _____

Location:
_____General Description:

Contract Amount: _____

Contract Period: _____

PROJECT NO. 3

Owner: _____

Contact Name and Phone Number: _____

Location: _____

General Description: _____

Contract Amount: _____

Contract Period: _____

PROJECT NO. 4

Owner: _____

Contact Name and Phone Number: _____

Location: _____

General Description: _____

Contract Amount: _____

Contract Period: _____

PROJECT NO. 5

Owner: _____

Contact Name and Phone Number: _____

Location: _____

General Description: _____

Contract Amount: _____

Contract Period: _____

The Town of Riverhead reserves the right to reject any and all bids which do not include a completed qualifications section and/or do not meet the necessary qualifications criteria, for both prime contractor and subcontractors, as described within this qualifications section, for construction work to be performed and completed as required by the contract documents.

BIDDER

FIRM NAME: _____

ADDRESS: _____

PREPARED
BY: _____

SIGNED BY: _____

TITLE: _____

END OF SECTION 004550

SECTION 004555 - CONTRACTOR'S RESPONSIBILITY

It is the Contractor's responsibility to inform the Engineer in advance when a situation arises that forces the Contractor to cancel work for a given day. For example, if the Contractor informs the Engineer that he will be on the job on a certain day and then has to cancel the appointment because he cannot obtain certain materials or equipment, it is the Contractor's responsibility to inform the Engineer of these latest developments and to let him know that construction observation services will not be needed for that day.

In the event that the Engineer is not given ample warning of such a cancellation and, as a result, unnecessary time is spent sending field personnel out to the project site to observe the previously scheduled construction, sufficient funds will be deducted from monies due the Contractor to reimburse the Engineer for his wasted time.

By the same token, sufficient funds will be deducted from monies due the Contractor to reimburse the Engineer for any services rendered in the field or in the office regarding work that had to be performed a second time due to substandard work on the part of the Contractor on the original work.

END OF SECTION 004555

SECTION 005209 – CONTRACT

SECTION 005209 - CONTRACT

CONTRACT IN QUADRUPLICATE FOR _____
AT TOWN OF RIVERHEAD, SUFFOLK COUNTY, NEW YORK, dated _____, 20__, BY AND
BETWEEN THE TOWN BOARD OF THE TOWN OF RIVERHEAD, SUFFOLK COUNTY, NEW YORK,
acting for and in behalf of the RIVERHEAD WATER DISTRICT (herein called the TOWN DISTRICT), and
_____ (herein called the CONTRACTOR).

WITNESSETH, that the TOWN DISTRICT and the CONTRACTOR, in consideration of the
premises and of the mutual covenants, considerations and agreements herein contained, agree as
follows:

This Contract is hereby awarded to the CONTRACTOR for the work and material called for under his bid
in the Proposal section of the Contract and designated as Items: _____

and if required by the District Engineers, Items: _____

for the sum of: _____

_____ (\$ _____)

for the unit and/or lump sum price(s) as listed in the Proposal herein.

SECTION 005209 – CONTRACT

1. CONTRACT DOCUMENTS AND DEFINITIONS

The Notice to Bidders, Information for Bidders, Proposal, General Conditions, Contract, Specifications and Plans, together with any Addenda, shall form part of this Contract, and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The titles, headings, headlines and marginal notes contained herein are solely to facilitate reference to the various provisions of the contract documents and in no way affect, limit or cast light upon the interpretation of the provisions to which they refer. Whenever the term "contract documents" is used, it shall mean and include this Contract, the Plans, Specifications, any Addenda, and the Notice to Bidders, Information for Bidders, General Conditions and Proposal. In case of any conflict or inconsistency between the provisions of the Contract and those of the Specifications, the provisions of the Contract shall govern.

WORK: The term WORK, as used herein, refers to all of the work proposed to be accomplished at the site of the project and all such other work as is in any manner required to accomplish the completed project, and includes all plant, labor, materials, supplies, equipment and other facilities and acts necessary or proper for or incidental to the carrying out and completion of the terms of this Contract. The term WORK PERFORMED shall be construed to include material delivered to and suitably stored at the site of the project.

EXTRA WORK: The term EXTRA WORK, as used herein, refers to and includes all work required by the TOWN DISTRICT which, in the judgment of the Engineer, with the Town's approval, involves changes in or additions to work required by the Plans, Specifications and any Addenda in their present form.

SUBCONTRACTOR: The term SUBCONTRACTOR, as used herein, shall mean any person, firm or corporation applying labor and material for work at the site of the project, but not including the parties to this Contract.

ENGINEER: In the performance of the work, the TOWN DISTRICT shall be represented by its Consulting Engineer H2M architects + engineers (herein called the ENGINEER).

NOTICE: The term NOTICE, as used herein, shall mean and include written notice. Written notice shall be deemed to have been duly served when delivered to, or at the last known business address of, the person, firm or corporation for whom intended or to his, their, or its duly authorized agents, representatives or officers, or when enclosed in a postage prepaid wrapper or envelope addressed to such person, firm, or corporation at his, their, or its last known business address and deposited in a United States Mail Box.

DIRECTED, REQUIRED, APPROVED, ACCEPTABLE: Whenever they refer to the work, or its performance, "directed", "required", "permitted", "ordered", "designated", "prescribed", and words of like import shall imply the direction, requirement, permission, order, designation or prescription of the Engineer, and "approved", "satisfied", or "satisfactory", "in the judgment of", and words of like import, shall mean approved or acceptable to, or satisfactory to, in the judgment of the Engineer.

2. SCOPE OF THE WORK

The Contractor will furnish all plant, labor, material, supplies, equipment and other facilities and things necessary or proper for or incidental to, the work contemplated by this Contract as required by, and in strict accordance with, the applicable Plans, Specifications and Addenda prepared by the Engineer and/or required by and in strict accordance with, such changes as are ordered and approved pursuant to this Contract, and will perform all other obligations imposed on him by the Contract.

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3. COMPENSATION TO BE PAID TO THE CONTRACTOR

A. Agreed Prices: It is understood and agreed that the Contractor will accept as payment in full the summation of products, of the actual quantities in place upon the completion of the work, as determined by the Engineer's measurements by the unit prices bid, no allowance being made for anticipated profit or for reason of variations from the estimated quantities set forth in the Proposal.

B. Extra Work and/or Changes: The TOWN DISTRICT may, at any time, by a written order, and without notice to the sureties, require the performance of such extra work or changes in the work as it may find necessary or desirable. The amount of compensation to be paid to the Contractor for any extra work, as so ordered, shall be determined as follows:

- (1) By such applicable unit prices, if any, as set forth in the contract; or
- (2) If no such unit prices are set forth, then by unit prices or by a lump sum mutually agreed upon by the TOWN DISTRICT and the Contractor; or
- (3) If no such unit prices are set forth, and if the parties cannot agree upon unit prices or a lump sum, then by actual net cost in money to the Contractor of the materials, permits, wages, or applied labor, premium for Workers' Compensation Insurance, payroll taxes required by law, rental for plant and equipment used (excluding small tools) to which total cost will be added 20 percent as full compensation for all other items of profit, costs and expenses, including administration, overhead, superintendence, insurance, insurance other than Workers' Compensation Insurance, material used in temporary structures, allowances made by the Contractor to subcontractors, additional premiums upon the Performance Bond of the Contractor and the use of small tools.

4. TIME OF ESSENCE

Inasmuch as the provisions of this Contract relating to the time for performance and completion of the work are for the purpose of enabling the TOWN DISTRICT to proceed with the construction of a public improvement, in accordance with a predetermined program, such provisions are of the essence of this Contract.

5. COMMENCEMENT OF WORK

The Contractor agrees that he will commence work within ten (10) consecutive calendar days after signing this Contract, and that the day he commences work shall constitute the first of the consecutive calendar days allowed for completion of the work.

6. TIME FOR COMPLETION

The time for completion of this Contract shall be within the number of calendar days stated in the Bid Proposal and the date of such completion shall be the date of the certificate of completion hereinafter specified.

The TOWN DISTRICT reserves the right to order the Contractor to suspend operations when, in the opinion of the Engineer, improper weather conditions make such action advisable, and to order the Contractor to resume operations when weather and ground conditions permit. The days during which such suspension of work is in force are not chargeable against the specified completion time.

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7. LIQUIDATED DAMAGES FOR DELAY

The time limit being essential to and of the essence of this Contract, the Contractor hereby agrees that the TOWN DISTRICT shall be, and is hereby authorized to deduct and retain out of the money which may be due or may become due to said Contractor under this agreement, the sum of FIVE HUNDRED DOLLARS (\$500.00) per day, which amount is hereby agreed upon, fixed and determined by the parties hereto as the LIQUIDATED DAMAGES, including overhead charges, services, inspector's wages, and interest on the money invested, that the TOWN DISTRICT will suffer by reason of such default, for each and every day during which the aforesaid work may be incomplete over and beyond the time herein stipulated for its completion, provided, however, that the TOWN DISTRICT shall have the right to extend the time for the completion of said work.

8. EXTENSIONS OF TIME - NO WAIVER

If the Contractor shall be delayed in the completion of his work by reason of unforeseeable causes beyond his control and without his fault or negligence, including but not restricted to Acts of God or of any public enemy, acts or neglect of the TOWN DISTRICT, acts or neglect of any other Contractor, fires, floods, epidemics, quarantine restrictions, strikes, riots, civil commotion or freight embargoes, the period herein above specified for completion of his work shall be extended by such time as shall be fixed by the TOWN DISTRICT.

No such extension of time shall be considered a waiver by the TOWN DISTRICT of its right to terminate the Contract for abandonment or delay by the Contractor as hereinafter provided or relieve the Contractor from full responsibility for performance of his obligations hereunder.

9. CONTRACT SECURITY

A. The Contractor shall furnish a Performance Bond in an amount equal to one hundred percent (100%) of the total contract price as security for the faithful performance of this Contract, and for the payment of all persons performing labor or furnishing materials in connection with this Contract.

B. Additional or Substitute Bond - If, at any time, the TOWN DISTRICT shall be or become dissatisfied with any surety or sureties, then upon the Performance Bond, or if, for any other reason, such bond shall cease to be adequate security to the TOWN DISTRICT, the Contractor shall, within five (5) days after notice from the TOWN DISTRICT, substitute an acceptable bond in such form and sum, and signed by such other surety as may be satisfactory to the TOWN DISTRICT. The premiums on such bonds shall be paid by the Contractor. No further payments shall be deemed due, nor shall be made until the new surety shall have been qualified.

C. Prior to release of the Performance Bond, the Contractor shall deliver to the TOWN DISTRICT a Maintenance Bond equal to one hundred percent (100%) of the total Contract price, including all extras. This Maintenance Bond shall remain in full force and effect for a period of one (1) year after the date of the Engineer's approval of the final payment request and such bond, which shall be executed by the Contractor and issued by a reliable, solvent surety company authorized to do business in the State of New York shall guarantee to the TOWN DISTRICT that the Contractor shall promptly remedy any defects or faults that may occur within twelve (12) months after completion and acceptance of the work performed by the Contractor pursuant to this Contract.

10. CONTRACTOR'S INSURANCE

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The Contractor shall not commence any work until he has obtained and had approved by the TOWN DISTRICT all of the insurance required under this Contract, as enumerated herein:

Compensation Insurance

Public Liability and Property Damage Insurance

Contractor's Protective Liability and Property Damage Insurance

Owner's (TOWN DISTRICT) and Engineer's Protective Public Liability and Property Damage Insurance

Automobile Public Liability and Property Damage Insurance

The Contractor shall not permit any subcontractor to commence any operation on the site until satisfactory proof of carriage of the above required insurance has been posted with, and approved by, the TOWN DISTRICT.

A. Compensation Insurance - The Contractor shall take out and maintain, during the life of this Contract, Workers' Compensation Insurance for all of his employees employed at the site of the project, and in any case of any of the work being sublet, the Contractor shall require the subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees, unless such employees are covered by the protection afforded by the Contractor.

B. Commercial General Liability and Insurance - The Contractor shall take out and maintain during the life of this Contract such insurance as shall protect him and any subcontractor performing work covered by this Contract for claims for damages for personal injury, including accidental death, as well as from claims for property damage which may arise from operations under this Contract, whether such operations be by himself or by any subcontractor, or by any one directly or indirectly employed by either of them, and the amounts of such insurance shall be as follows:

(1) Comprehensive General Liability Insurance in the amount not less than ONE MILLION DOLLARS (\$1,000,000.) each occurrence and TWO MILLION DOLLARS (\$2,000,000.) general aggregate.

(2) Umbrella Liability for bodily injury and property damage in an amount not less than FIVE MILLION DOLLARS (\$5,000,000.)

C. Commercial General Liability and Umbrella Liability - The above policies for commercial general liability and umbrella liability insurance must be so written as to include Contractor's Protective Liability Insurance to protect the contractor against claims arising from the operations of any subcontractor.

The above policies for Commercial General Liability insurance must name the Town of Riverhead, The Riverhead Water District, its employees, public officials, officers, agents, etc., as additional insureds on a primary and non-contributory basis for General Liability, Automobile Liability and/or Excess Umbrella Liability. That additional insured status must be evidenced by a copy of endorsement CG 20 10 10 01, "additional insured – owners, lessee or contractors – scheduled person or organization" endorsement (see attached sample) or its equivalent and copy of endorsement CG 20 37 10 01, "additional insured – owners, lessees or contractors - completed operations" endorsement (see attached sample), or its equivalent.

D. Blanket Waiver of Subrogation – The above policies for workers' compensation insurance as well as comprehensive general liability insurance, automobile insurance, and excess

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umbrella liability insurance shall include waiver of transfer of rights of recovery against the Town of Riverhead, The Riverhead Water District, and H2M architects + engineers. Such waiver of subrogation shall be evidenced by certificate of insurance or copy of endorsement to the appropriate policy.

E. Owner's Protective Liability Insurance – (TOWN DISTRICT, and/or TOWN BOARD, TOWN OF RIVERHEAD as OWNER and H2M architects + engineers as engineer) – If the Town of Riverhead, Riverhead Water District deem necessary, the Contractor shall furnish to the TOWN DISTRICT with respect to the operations he or any of his subcontractors perform, a regular Owner's Protective Liability Insurance Policy for and in behalf of the TOWN DISTRICT and/or TOWN BOARD, TOWN OF RIVERHEAD as OWNER, providing for a limit of not less than ONE MILLION DOLLARS (\$1,000,000.) each occurrence, a total limit of TWO MILLION DOLLARS (\$2,000,000.) general aggregate for all damages arising out of bodily injuries to, or death of, two or more persons in any one accident; and regular Protective Property Damage Insurance providing for a limit of not less than ONE HUNDRED THOUSAND DOLLARS (\$100,000.) for all damages. The insurance must fully cover the legal liability of the TOWN DISTRICT, TOWN BOARD, TOWN OF RIVERHEAD as OWNER and H2M architects + engineers as ENGINEER. The coverage provided under this policy must not be affected if the TOWN DISTRICT performs work in connection with the project either for, or in cooperation with, the Contractor or as an aid thereto, whether the same be a part of the Contract or separate therefrom, by means of its own employees or agents, or if the TOWN DISTRICT directs or supervises the work to be performed by the Contractor.

F. Commercial Automobile Liability - The Contractor shall take out and maintain during the life of the Contract such automobile public liability insurance as shall protect him and any subcontractor performing work covered by this Contract from claims for damages for personal injury, including accidental death as well as from claims for property damage which may arise from operations under this Contract, whether such operations be by himself or by any subcontractor, or by any one directly or indirectly employed by either of them and the amounts of such insurance shall be as follows:

- (1) Automobile Public Liability Insurance in an amount not less than ONE MILLION DOLLARS (\$1,000,000.) for bodily injuries, including wrongful death per occurrence.
- (2) Umbrella Liability for bodily injury and property damage in an amount of not less than FIVE MILLION DOLLARS (\$5,000,000.).

11. PROOF OF CARRIAGE OF INSURANCE

The Contractor shall furnish the TOWN DISTRICT with certificates of each insurer insuring the Contractor or any subcontractor under this Contract, except with respect to subdivision D. of paragraph 10. In respect to this paragraph, the Contractor shall furnish the TOWN DISTRICT with the original insurance policy and a copy to the Engineer.

Both certificates, as furnished, and the insurance policy, as required, shall bear the policy numbers, the expiration date of the policy and the limit or limits of liability thereunder. Both the certificates and the policy shall be further endorsed to provide the TOWN DISTRICT and Engineer with any notice of cancellation at least ten (10) days prior to the actual date of such cancellation.

12. COMPLIANCE WITH LABOR AND PENAL LAWS

The Contractor hereby expressly agrees to comply with all the provisions of the Labor Law and any and all amendments thereto, insofar as the same are applicable to this Contract. The Labor Laws, as amended, provide that no laborer, worker or mechanic in the employ of the Contractor, subcontractor or

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other person doing or contracting to do the whole or a part of the work contemplated by this Contract, shall be permitted or required to work more than eight (8) hours in any one calendar day, except in cases of extraordinary emergency caused by fire, flood, or danger to life or property; that no such person shall be employed more than eight (8) hours in any day or more than five (5) days in any week, except in such emergency; that the wages to be paid for a legal day's work as hereinbefore defined, to laborers, workers, or mechanics upon the work called for under this Contract, or for any materials used upon or in connection therewith shall not be less than the prevailing rate for a day's work in the same trade or occupation in the locality within the State where such work is to be done and each laborer, worker, or mechanic employed by the Contractor, subcontractor, or other person about or upon the work shall be paid the wages herein provided; that employees engaged in the construction outside the limits of cities and villages are no longer exempt from the provisions of the Labor Laws which required the payment of the prevailing rate of wages and the eight (8) hour day.

Section 220A of the Labor Law, as amended by Chapter 472 of the Laws of 1932, provides that before payment is made by or on behalf of the State or any City, County, Town or Village or other civil division of the State, of any sums due on account of a contract for a public improvement, it is the duty of the Comptroller or the financial officer of the Municipal Corporation to require the Contractor and each and every subcontractor to file a certified statement in writing, in satisfactory form, certifying to the amounts then due and owing to any and all laborers for daily or weekly wages on account of labor performed upon the work of the Contract, setting forth therein the names of the persons whose wages are unpaid and the amount due each, respectively.

Section 220B of the Labor Law, as amended, provides that any interested person who shall have previously filed a protest in writing objecting to the payment to any Contractor or subcontractor to the extent of the amount or amounts due or to become due to him for daily or weekly wages for labor performed on the public improvement for which the Contract was entered into, or if, for any other reason, it may be deemed advisable, the Comptroller of the State or other financial officer of the Municipal Corporation may deduct from the whole amount of any payment on account thereof the sum or sums admitted by any Contractor or subcontractor in such statement or statements so filed to be due and owing by him on account of labor performed and may withhold the amount so deducted for the benefit of the laborers for daily or weekly wages, whose wages are unpaid as shown by the verified statements filed by any Contractor or subcontractor and may pay directly to any person the amount or amounts so shown to be due for such wages.

Section 220C of the Labor Law, as amended, provides the penalty for making of a false oath or verification.

Section 220D of the Labor Law provides that the advertised specifications for every Contract for the construction, reconstruction, maintenance and/or repair of highways to which the State, County, Town and/or Village is a party shall contain the provision stating the minimum rate of hourly wage that can be paid, as shall be designated by the Industrial Commissioner, to the laborers employed in the performance of the Contract, either by the Contractor, subcontractor or other person doing or contracting to do the whole or part of the work contemplated by the Contract, and the Contract shall contain a stipulation that such laborers shall be paid not less than such hourly minimum rate of wage. Any person or corporation that willfully pays after entering into such Contract less than such stipulated minimum hourly wage scale shall be guilty of a misdemeanor and, upon conviction, shall be punished for a first offense by a fine of Five Hundred Dollars (\$500.) or by imprisonment for not more than thirty (30) days, or by both fine and imprisonment for a second offense by a fine of One Thousand Dollars (\$1,000.) and, in addition thereto, the Contract on which the violation has occurred shall be forfeited; and no such person or corporation shall be entitled to receive any sum or nor shall any officer, agent or employee of the State pay the same or authorize its payment from the funds under his charge or control to any person or corporation for work done upon any contract, on which the Contractor has been convicted of second offense in violation of the provisions of this Section.

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The minimum wage rates established by the Industrial Commissioner, State of New York, for this Contract, are as set forth in the INFORMATION FOR BIDDERS.

All excavation shall be done in compliance with Article 36 of the General Business Law and notices given as provided by GBL Section 761.

13. PAYMENT OF EMPLOYEES

The Contractor and each of his subcontractors shall pay each of his employees engaged in work on this project under this Contract in full (less deductions made mandatory by law) in cash and not less often than once each week.

14. ESTIMATES AND PAYMENTS

A. Monthly: At the end of each calendar month during the progress of the work, the Contractor shall submit a payment requisition to the Engineer. The Engineer will review the requisition and prepare a payment request based on the estimated amount of work performed and the quantity of materials furnished, based on the prices set forth in the Proposal. In consideration of the work done and the materials furnished, the TOWN DISTRICT will pay or cause to be paid to the Contractor the amount estimated by the Engineer as due him less a sum equal to five percent (5%) of such amount and less such additional amount as may be necessary to satisfy any claims, liens or judgments against the Contractor which have not been suitably discharged. The making of any such estimate or payment made thereon shall not be taken or construed as an acceptance by the Engineer or the TOWN DISTRICT of any work so estimated and paid for. The amount of the monthly estimate remaining unpaid will be retained by the TOWN DISTRICT as a guarantee that the Contractor will faithfully and completely fulfill all obligations imposed by the Contract and Specifications, and against any damages incurred by the TOWN DISTRICT by reason of any failure on the part of the Contractor to fulfill all conditions and obligations herein contained. All partial payments are subject to correction in any subsequent payment. The retained amounts shall be paid as set forth in the following subsection B.

B. Final: Thirty (30) days after the Contractor shall have substantially completed the work required of it under the Contract the Engineer will prepare an approval of Final Payment Request. Thereafter the TOWN DISTRICT will pay to the Contractor the remaining amount of the Contract balance less a sum equal to two (2) times the value of any remaining items to be completed and less an amount necessary to satisfy any claims, liens or judgments against the Contractor which have not been suitably discharged. As the remaining items of work are satisfactorily completed or corrected, the TOWN DISTRICT shall promptly pay, upon receipt of a requisition for these items less an amount necessary to satisfy any claims, liens or judgments against the Contractor which have not been suitably discharged. Any claims, liens and judgments referred to in this section shall pertain to the project and shall be filed in accordance with the terms of the applicable Contract and/or applicable laws.

C. In order to secure the performance of the covenant of the Contractor, prior to release of the Performance Bond, the Contractor shall deliver to the TOWN DISTRICT a Maintenance Bond equal to one hundred percent (100%) of the total Contract price, including all extras. This Maintenance Bond shall remain in full force and effect for a period of one (1) year after the date of the Engineer's approval of the Final Payment Request and such bond, which shall be executed by the Contractor and issued by a reliable, solvent surety company authorized to do business in the State of New York shall guarantee to the TOWN DISTRICT that the Contractor shall promptly remedy any defects or faults that may occur within twelve (12) months after completion and acceptance of the work performed by the Contractor pursuant to this Contract.

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D. Measurements for Payment: The Engineer shall make due measurement of the work done during the progress of the work and his estimate shall be final and conclusive evidence of the amounts of work performed by the Contractor under, and by virtue of, this agreement, and shall be taken as the full measure of compensation to be received by the Contractor. When requested by the Contractor, the Engineer shall measure, re-measure or re-estimate any portion of the work; but the expense of such re-measurement or re-estimating shall, unless material error be proved, be paid for by the Contractor.

E. Should all work not be completed and final payment request not submitted within one (1) year after the punch list has been issued, the TOWN DISTRICT will be under no obligation to make final payment.

15. ACCEPTANCE OF FINAL PAYMENT CONSTITUTES RELEASE

The acceptance by the Contractor of the final payment shall be, and shall operate as a release to the TOWN DISTRICT from all claims and all liabilities to the Contractor for all things done or furnished in connection with this work, and for every act and neglect of the TOWN DISTRICT and other relating to, or arising out of, this work, excepting the Contractor's claims for interest upon the final payment, if these payments be improperly delayed. No payment, however, final or otherwise, shall operate to release the Contractor or his sureties from any obligations under this Contract or the Performance Bond.

16. CONSTRUCTION REPORTS

The Contractor shall submit to the Engineer prior to the commencing of any work under this Contract a detailed schedule and plan of operation, indicating the manner in which the Contractor proposes to prosecute the work, and a time schedule therefore. Such schedules are not intended to bind the Contractor to a predetermined plan or procedure, but rather to enable the Engineer to coordinate the work of the Contractor with work required of and to be performed by others.

The Contractor shall furnish the Engineer with periodic estimates for partial payments as required elsewhere in the contract documents and, in addition thereto, will furnish the Engineer with a detailed estimate for final payment. Prior to being eligible to receive final payment under this Contract, the Contractor shall furnish the Engineer with substantial proof that all bills for services rendered and materials supplied have been paid. The enumeration of the above reports in no way relieves the Contractor of his responsibility under existing Federal or State laws of filing such other reports with agencies other than the TOWN DISTRICT as may be required by such existing laws or regulations.

17. INSPECTION AND TESTS

All material and workmanship shall be subject to inspection, examination and test by the Engineer and other representatives of the TOWN DISTRICT at any time during the construction and at any and all places where manufacturing of materials used and/or construction is carried on.

Without additional charge, the Contractor shall furnish promptly all reasonable facilities, labor and materials necessary to make tests so required safe and convenient.

If, at any time, before final acceptance of the entire work, the Engineer, with the TOWN DISTRICT's approval, considers necessary or advisable an examination of any portion of the work already completed, by removing or tearing out the same, the Contractor shall, upon request, furnish promptly all necessary facilities, labor and materials for such examination. If such work is found to be defective in any material respect, due to the fault of the Contractor or any subcontractor, or if any work shall be covered over without the approval or consent of the Engineer, with the TOWN DISTRICT's

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approval, whether or not the same shall be defective, the Contractor shall be liable for the expenses of such examination and of satisfactory reconstruction.

If, however, such approval and consent shall have been given, and such work is found to meet the requirements of this Contract, the Contractor shall be recompensed for the expense of such examination and reconstruction in the manner herein provided for the payment of costs of extra work pursuant to a Change Order signed by the TOWN DISTRICT and the Contractor.

The selection of laboratories and/or agencies for the inspection and tests of supplies, materials or equipment shall be subject to the approval of the Engineer. Satisfactory documentary evidence that the material has passed the required inspection and test must be furnished the Engineer prior to the incorporation of the material in the work.

Any rejected work shall be removed from the site of the project completely at the expense of the Contractor.

18. PLANS AND SPECIFICATIONS - INTERPRETATIONS

The Contractor shall keep at the site of the work one (1) copy of the Plans and Specifications signed and identified by the Engineer. Anything shown on the Plans and not mentioned in the Specifications or mentioned in the Specifications and not shown on the Plans shall have the same effect as if shown or mentioned respectively in both. In case of any conflict or inconsistency between the Plans and Specifications, the Plans shall govern. Any discrepancy between the figures and drawings shall be submitted to the Engineer, whose decision therein shall be conclusive.

19. SUBSURFACE CONDITIONS FOUND DIFFERENT

Should the Contractor encounter subsurface conditions at the site materially differing from those shown on the Plans or indicated in the Specifications, he shall immediately give notice to the Engineer of such conditions before they are disturbed; the Engineer shall thereupon promptly investigate the conditions and if he finds that they materially differ from those shown on the Plans or indicated in the Specifications, he shall at once make such changes in the Plans and/or Specifications as he may find necessary.

Any increase or decrease of cost resulting from such changes will be adjusted in the manner provided herein for adjustment as to extra and/or additional work and changes shall be by Change Order executed by the TOWN DISTRICT and Contractor.

20. CONTRACTOR'S TITLE TO MATERIALS

No material or supplies for the work shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies used by him in the work.

21. SUPERINTENDENCE BY CONTRACTOR

At the site of the work the Contractor shall employ a Construction Superintendent or Foreman who shall have full authority to act for the Contractor. It is understood that such representative shall be acceptable to the Engineer and shall be one who can be continued in that capacity for the particular job involved unless he ceases to be on the Contractor's payroll.

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22. PROTECTION OF WORK, PERSONS AND PROPERTY

Precaution shall be exercised at all times for the proper protection of all persons, property and work. The safety provisions of applicable laws, building and construction codes shall be observed. Machinery equipment and all hazards shall be guarded or eliminated in accordance with the safety provisions of the Manual of Accident Prevention in Construction, published by the Associated General Contractors of America, to the extent that such provisions are not in contravention of applicable law. The Contractor shall furnish entirely at his own expense any and all additional safety measures deemed necessary by the TOWN DISTRICT or its Engineer to adequately safeguard the traveling public. The Contractor shall give notice to the owners of all utilities which may serve the area and request their assistance in predetermining the location and depth of the various pipes, conduits, manholes and other underground facilities.

The Contractor shall, at all hours of the day, safely guard and protect his own work and adjacent property from any damage and shall replace or make good any such damage, loss or injury unless such be caused directly by errors contained in the contract documents, or by the TOWN DISTRICT or its duly authorized representatives.

The Contractor shall provide and maintain such watchers, barriers, lights, flares and other signals, at his own expense, as will effectively prevent any accident in consequence of his work for which the TOWN DISTRICT might be liable. The Contractor shall be liable for all injury or damage caused by his act or neglect, or that of his employees.

23. PATENT RIGHTS

As part of his obligation hereunder and without any additional compensation, the Contractor will pay for any patent fees or royalties required in respect to the work or any part thereof and will fully indemnify the TOWN DISTRICT for any loss on account of any infringement of any patent rights, unless prior to his use in the work of a particular process or a product of a particular manufacturer, he notifies the TOWN DISTRICT in writing that such process or product is an infringement of a patent.

24. REPRESENTATIONS OF CONTRACTOR

The Contractor represents and warrants:

A. That he is financially solvent and that he is experienced in and competent to perform the type of work involved under this Contract and able to furnish the plan, materials, supplies and/or equipment to be furnished for the work; and

B. That he is familiar with all Federal, State and Municipal Laws, ordinances and regulations which may in any way affect the work of those employed hereunder, including but not limited to any special acts relating to the work; and

C. That such work required by these contract documents as is to be done by him can be satisfactorily constructed and used for the purpose for which it is intended and that such construction will not injure any person or damage any property; and

D. That he has carefully examined the Plans, Specifications, and the site of the work, and that from his own investigation he has satisfied himself as to the nature and location of the work, the character, location, quality and quantity of surface and subsurface materials, structures and utilities likely

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to be encountered, the character of equipment, and other facilities needed for the performance of the work, the general local conditions which may in any way affect the work or its performance.

25. AUTHORITY OF THE ENGINEER

In the performance of the work, the Contractor shall abide by all orders and directions and requirements of the Engineer and shall perform all work to the satisfaction of the Engineer, at such time and places, by such methods, and in such manner and sequence as he may require. The Engineer shall determine the amount, quality, acceptability and fitness of all parts of the work, shall interpret the plans, specifications, contract documents and any extra work orders and shall decide all other questions in connection with the work. Upon request, the Engineer shall confirm in writing any oral orders, directions, requirements or determinations. The enumeration herein or else-where in the contract documents of particular instances in which the opinion, judgment, discretion or determination of the Engineer shall control, or in which work shall be performed to his satisfaction or subject to his approval, or inspection, shall not imply that only matters similar to those enumerated shall be so governed and so performed, but without exception all the work shall be governed and so performed. Nothing herein shall be construed to give the Contractor a claim for extra work unless prior thereto an appropriate Change Order has been executed by the TOWN DISTRICT and Contractor for such work.

26. SURVEYS

The Contractor shall provide all layouts, measurements, lines, and grades necessary for the execution of the work, and will furnish the necessary stakes and spikes for laying out such lines and grades and the unskilled labor necessary to place same and/or assist in measuring.

27. CHANGES AND ALTERATIONS

The TOWN DISTRICT reserves the right to make alterations in the location, line, grade, plans, form or dimensions of the work, or any part thereof, either before or after the commencement of the construction. If such alterations diminish the amount of work to be done, no claim for damages or anticipated profits will be warranted on the work which may be dispensed with. If such alterations increase the amount of work, such increases shall be paid for according to the quantity of work actually done and at the unit prices for such work as contained in the schedule of prices.

If such alterations decrease the amount of work, such decreases shall be a credit to the TOWN DISTRICT based on the quantity of work not performed as agreed to by the TOWN DISTRICT and the Contractor and at the unit prices for such work as contained in the Schedule of Prices.

28. CORRECTION OF WORK

All work and all materials, whether incorporated into the work or not, all processes of manufacture and all methods of construction shall be, at all times and places, subject to the inspection of the Engineer who shall be the final judge of quality, materials, processes of manufacture and methods of construction suitable for the purpose for which they are used. Should they fail to meet his approval they shall be forthwith reconstructed, made good and replaced and/or corrected as the case may be, by the Contractor at his own expense. Rejected materials shall immediately be removed from the site.

If, in the opinion of the Engineer, it is not desirable to replace any defective or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the

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contract documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as, in the judgment of the Engineer, shall be equitable.

The Contractor expressly warrants that his work shall be free from any defects in materials or workmanship, and agrees to correct any defects, settlements, or shrinkages which may appear within one (1) year following the date of the final payment request. Neither the acceptance of the completed work nor payment therefor shall operate to release the Contractor or his sureties from any obligations under or upon this Contract or the Performance Bond.

29. WEATHER CONDITIONS

The Contractor will and will cause his subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If any work or materials shall have been damaged or injured by reason of the failure on the part of the Contractor or any of his subcontractors to protect his, or their work, such work and materials shall be removed and replaced at the expense of the Contractor.

30. THE TOWN DISTRICT'S RIGHT TO WITHHOLD PAYMENTS

The TOWN DISTRICT may withhold from the Contractor so much of any approved payments due him as may, in the judgment of the TOWN DISTRICT, be necessary:

- A. To assure the payment of just claims then due and unpaid of any persons supplying labor or materials for the work;
- B. To protect the TOWN DISTRICT from loss due to defective work not remedied; or
- C. To protect the TOWN DISTRICT from loss due to injury to persons or damage to the work or property of other contractors or subcontractors or others, caused by the act or neglect of the Contractor or any of his subcontractors. The TOWN DISTRICT shall have the right, as agent for the Contractor, to apply any such amount so withheld in such manner as the TOWN DISTRICT may deem proper to satisfy such claims or to secure such protection. Such application of such money shall be deemed payments for the account of the Contractor.

31. THE TOWN DISTRICT'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

If:

- A. The Contractor shall file for any form of bankruptcy relief or make an assignment for the benefit of creditors; or
- B. A receiver or liquidator shall be appointed for the Contractor for any of his property and shall not be dismissed within twenty (20) days after such appointment, or the proceedings in connection therewith shall not be stayed on appeal within the said twenty (20) days; or
- C. The Contractor shall violate any provision of this Contract; or
- D. The Contractor shall fail or refuse to regard laws, ordinances, regulations, or the instructions of the Engineer and/or the TOWN DISTRICT;

SECTION 005209 – CONTRACT

then, and in any such event, the TOWN DISTRICT without prejudice to any other rights or remedy it may have, and after seven (7) days written notice to the Contractor and Contractor's Surety may terminate the employment of the Contractor and take possession of the premises and all material, tools and appliances therein, and complete the work by contract or otherwise, as the TOWN DISTRICT solely may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished.

If the unpaid balance of the compensation to be paid the Contractor hereunder shall exceed the expense of so completing the work (including compensation for additional managerial, engineering, administration, legal, testing and observation services and any damages for delay), such excess shall be paid to Contractor.

If the expense shall exceed the unpaid balance, the Contractor and his sureties shall be liable to the TOWN DISTRICT for such excess.

32. CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

If the work shall be stopped by order of the Court or any public authority, Federal or State agency, for a period of three (3) months through no act or fault of the Contractor or any of his agents, servants, employees, materialmen, or subcontractors, the Contractor may, upon ten (10) days notice to the TOWN DISTRICT, discontinue his performance of the work and/or terminate the Contract.

Upon termination by the Contractor the TOWN DISTRICT may take possession of the work and complete the work by Contract or otherwise, as the TOWN DISTRICT solely may deem expedient.

If the Contract is terminated by the Contractor, the liability of the TOWN DISTRICT to the Contractor shall be for all work executed and for any proven loss sustained upon any materials, equipment, tools, construction equipment, including reasonable profit and damages.

33. RESPONSIBILITY OF WORK

The Contractor agrees to be responsible for the entire work embraced in this Contract until its completion and final acceptance, and that any unfaithful or imperfect work that may become damaged from any cause, either by act or commission or omission to properly guard and protect the work that may be discovered at any time before the completion and acceptance shall be removed and replaced by good and satisfactory work without any charge to the TOWN DISTRICT and that such removal and replacement will be performed immediately on the requirement of the Engineer, notwithstanding the fact that it may have been overlooked by the proper inspector, and partial payment made thereon. It is fully understood by the Contractor that the inspection of the work shall not relieve him of any obligation to do sound and reliable work as herein prescribed, and that any omission to disapprove of any work by the Engineer at or before the time of a partial payment or other estimate shall not be construed to be an acceptance of any defective work.

34. USES OF PREMISES AND REMOVAL OF DEBRIS

The Contractor expressly undertakes at his own expense:

- A. To take every precaution against injury to persons or damages to property;

SECTION 005209 – CONTRACT

B. To store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any of his subcontractors, or other contractors;

C. To place upon any of the completed work only such superimposed loads as are consistent with the safety of that portion of the work;

D. To frequently clean up all refuse, rubbish, scrap materials and debris caused by the operations to the end that at all times the site of the work shall present a neat and orderly and workmanlike appearance;

E. Before the Engineer's approval of the Final Payment Request, to remove all surplus material, temporary structures, plants of any description and debris of any and every nature resulting from his operations and to put the site in a neat and orderly condition.

35. POWER OF THE CONTRACTOR TO ACT IN AN EMERGENCY

In case of an emergency which threatens loss or injury to property and/or safety to life, the Contractor will be permitted to act as he sees fit without previous instructions from the TOWN DISTRICT. He shall notify the TOWN DISTRICT thereof immediately thereafter and any compensation claimed by the Contractor due to extra work made necessary because of his acts in such emergency shall be submitted to the TOWN DISTRICT for approval and Change Order executed by the TOWN DISTRICT and the Contractor.

Where the Contractor has not taken action but has notified the Engineer of an emergency indicating injury to persons or damage to adjoining property or to the work being accomplished under this Contract, then upon authorization from the Engineer to prevent such threatened injury or damage, he shall act as instructed by the Engineer. The amount of reimbursement claimed by the Contractor on account of any such action shall be determined in the manner provided herein for the payment of extra work and shall be incorporated into a Change Order executed by the TOWN DISTRICT and Contractor.

36. SUITS AT LAW

The Contractor shall indemnify and save harmless the TOWN DISTRICT from and against all suits, claims, demands or actions for any injury sustained or alleged to be sustained by any party or parties in connection with the construction of the work or any part thereof, or any commission or omission of the Contractor, his employees or agents or any subcontractors and in case any such action shall be brought against the TOWN DISTRICT, the Contractor shall immediately take care of and defend the same at his own cost and expense.

37. PROVISIONS REQUIRED BY LAW DEEMED INSERTED

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

38. SUBLETTING, SUCCESSOR AND ASSIGNS

SECTION 005209 – CONTRACT

The Contractor shall not sublet any part of the work under this Contract, nor assign any money due him hereunder without first obtaining the written consent of the TOWN DISTRICT. This Contract shall inure to the benefit of and shall be binding upon the parties hereunder and upon their respective successors and assigns, but neither party shall assign or transfer his interest herein in whole or in part without consent of the other.

SECTION 005209 – CONTRACT

IN WITNESS WHEREOF, the parties hereto have set their hands and seals the day and year first above written.

RIVERHEAD WATER DISTRICT

BY: _____
SEAN WALTER, SUPERVISOR

(TOWN SEAL)

CONTRACTOR
BY: _____

TITLE: _____

(SEAL)

STATE OF NEW YORK)
) ss:
COUNTY OF SUFFOLK)

On the ___ day of _____, 20__, before me personally came SEAN WALTER, to me known, who being by me duly sworn, did depose and say that he is the duly elected SUPERVISOR of the TOWN OF RIVERHEAD, COUNTY OF SUFFOLK, NEW YORK, and that at a meeting of the Town Board of the Town of Riverhead, duly held on the ___ day of _____, 20__, the said Board, also acting in its capacity as the Governing Body of the Riverhead Water District, authorized the said SUPERVISOR to execute all and any contracts on behalf of the Board; that he knows the seal of said Town, and that the said Water District seal is also the seal of the Town of Riverhead; that the seal affixed to the foregoing instrument is its corporate seal; that it was affixed thereto by order of the said Board, and that he signed his name thereto and executed the said instrument on behalf of the said Water District by like order and authority.

NOTARY PUBLIC

SECTION 005209 – CONTRACT

ACKNOWLEDGMENT OF CONTRACTOR, IF A CORPORATION

STATE OF NEW YORK)
) ss:
COUNTY OF)

On this ___ day of _____, 20__, before me personally came and appeared _____, to me known, who by me being duly sworn, did depose and say that he resides at _____ that he is the _____ of _____, the Corporation described in and which executed the foregoing instrument, that he knows the seal of said corporation, that one of the seals affixed to said instrument is such seal, that it was so affixed by order of the Directors of said Corporation, and that he signed his name thereto by like order.

NOTARY PUBLIC

SECTION 005209 – CONTRACT

ACKNOWLEDGMENT OF CONTRACTOR, IF A PARTNERSHIP

STATE OF NEW YORK)
) ss:
COUNTY OF)

On this ___ day of _____, 20__, before me personally came and appeared _____,
to me known, and known to me to be one of the members of the firm of _____,
described in and who executed the foregoing instrument, and he acknowledged to me that he executed
the same as and for the act and deed of said form.

NOTARY PUBLIC

END OF SECTION 005209



Andrew M. Cuomo, Governor

Roberta Reardon, Commissioner

Town of Bronxville
Jessica Alves, Staff Engineer
H2M Group
538 Broad Hollow Road
Melville NY 11747

Schedule Year 2017 through 2018
Date Requested 10/09/2017
PRC# 2017011022

Location Riverhead
Project ID# RDWD 1702
Project Type Installation of a new 2 MG ground storage tank at Plant No. 15

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 2017 through June 2018. 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.state.ny.us. 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.state.ny.us.

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.state.ny.us.

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.state.ny.us.

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 Five (5) years from the project's date of completion. [See Spota Bill Notice](#). 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 NYS DOL 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

Town of Bronxville
Jessica Alves, Staff Engineer
H2M Group
538 Broad Hollow Road
Melville NY 11747

Schedule Year 2017 through 2018
Date Requested 10/09/2017
PRC# 2017011022

Location Riverhead
Project ID# RDWD 1702
Project Type Installation of a new 2 MG ground storage tank at Plant No. 15

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 .

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.state.ny.us 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:

www.labor.state.ny.us/workerprotection/safetyhealth/DOSH_ONSITE_CONSULTATION.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://ophp.umdnj.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_osh.cfm

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



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.

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. In most cases the payment or provision of supplements is for each hour worked (noted in the schedule as 'Per hour worked'). Some classifications require the payment or provision of supplements for each hour paid (noted in the schedule as 'Per hour paid'), which require supplements to be paid or provided at a premium rate for premium hours worked. Some classifications may also require the payment or provision of supplements for paid holidays on which no work is performed.

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.state.ny.us) 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

Suffolk County General Construction

Asbestos Worker **10/01/2017**

JOB DESCRIPTION Asbestos Worker **DISTRICT 4**

ENTIRE COUNTIES
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES
 Per Hour: 07/01/2017

Asbestos Worker \$ 44.00
 Removal & Abatement Only*

NOTE: *On Mechanical Systems that are NOT to be SCRAPPED.

SUPPLEMENTAL BENEFITS

Per Hour:
 Asbestos Worker \$ 8.70
 Removal & Abatement Only

OVERTIME PAY
 See (B, B2, *E, J) on OVERTIME PAGE
 Hours worked on Saturdays are paid at time and one half only if forty hours have been worked during the week.

HOLIDAY
 Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8) on HOLIDAY PAGE

REGISTERED APPRENTICES
 Apprentice Removal & Abatement Only:
 1000 hour terms at the following percentage of Journeyman's rates.

1st	2nd	3rd	4th
78%	80%	83%	89%

SUPPLEMENTAL BENEFIT
 Per Hour:
 Apprentice \$ 8.70
 Removal & Abatement 4-12a - Removal Only

Boilermaker **10/01/2017**

JOB DESCRIPTION Boilermaker **DISTRICT 4**

ENTIRE COUNTIES
 Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

WAGES
 Per Hour: 07/01/2017 01/01/2018

Boilermaker	\$ 55.23	\$ 57.17
Repairs & Renovations	\$ 55.23	\$ 57.17

SUPPLEMENTAL BENEFITS
 Per Hour: 07/01/2017 01/01/2018

Boilermaker	32% of hourly	32% of hourly
Repair \$ Renovations	Wage Paid	Wage Paid
	+ \$ 25.27	+ \$ 25.35

NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay.

Repairs & Renovation Includes replacement of parts and repairs & renovation of existing unit.

OVERTIME PAY
 See (D, O) on OVERTIME PAGE
 Repairs & Renovation see (B,E,Q)

HOLIDAY

Paid: See (8, 16, 23, 24) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 11, 12, 15, 16, 22, 23, 24, 25) on HOLIDAY PAGE
 NOTE: *Employee must work in pay week to receive Holiday Pay.
 **Employee gets 4 times the hourly wage rate for working Labor Day.

REGISTERED APPRENTICES

Wage per hour:
 (1/2) Year Terms at the following percentage of Boilermaker's Wage

1st	2nd	3rd	4th	5th	6th	7th
65%	70%	75%	80%	85%	90%	95%

Supplemental Benefits Per Hour:

Apprentice(s)	07/01/2017	01/01/2018
	32% of Hourly Wage Paid Plus Amount Below	32% of Hourly Wage Paid Plus Amount Below
1st Term	\$ 19.35	\$ 19.37
2nd Term	20.20	20.22
3rd Term	21.04	21.06
4th Term	21.89	21.92
5th Term	22.74	22.77
6th Term	23.60	23.62
7th Term	24.43	24.46

NOTE: "Hourly Wage Paid" shall include any and all premium(s)

4-5

Carpenter **10/01/2017**

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per hour: 07/01/2017

Piledriver	\$ 51.63
Dockbuilder	\$ 51.63

SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyworker	\$ 48.62
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OVERTIME PAY

See (B, E2, O) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,11,13,25)

Overtime: See (5,6,11,13,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour

(1)year terms:

1st	2nd	3rd	4th
\$20.65	\$25.82	\$33.56	\$41.30

Supplemental benefits per hour:

Apprentices	\$ 32.49
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8-1556 Db

Carpenter **10/01/2017**

JOB DESCRIPTION Carpenter **DISTRICT 8**

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per hour: 07/01/2017

Carpet/Resilient

Floor Coverer \$ 50.50

INCLUDES HANDLING & INSTALLATION OF ARTIFICIAL TURF AND SIMILAR TURF INDOORS/OUTDOORS.

SUPPLEMENTAL BENEFITS

Per hour worked:

\$ 45.85

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18, 19) on HOLIDAY PAGE.

Paid for 1st & 2nd yr.

Apprentices See (5,6,11,13,16,18,19,25)

Overtime: See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wage per hour - (1) year terms:

1st	2nd	3rd	4th
\$20.20	\$25.25	\$32.83	\$40.40

Supplemental benefits per hour - all apprentice terms:

\$ 31.11

8-2287

Carpenter **10/01/2017**

JOB DESCRIPTION Carpenter **DISTRICT 8**

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per Hour: 07/01/2017

Marine Construction:

Marine Diver \$ 65.38

Marine Tender 46.44

SUPPLEMENTAL BENEFITS

Per Hour Worked:

Journeyman \$ 48.62

OVERTIME PAY

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

HOLIDAY

Paid: See (18, 19) on HOLIDAY PAGE

Overtime: See (5, 6, 10, 11, 13, 16, 18, 19) on HOLIDAY PAGE

8-1456MC

Carpenter **10/01/2017**

JOB DESCRIPTION Carpenter **DISTRICT 8**

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per hour: 07/01/2017

Building
Millwright \$ 51.50

SUPPLEMENTAL BENEFITS

Per hour worked:

Millwright \$ 52.38

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (18,19)* on HOLIDAY PAGE.

Overtime See (5,6,8,11,13,18,19,25) on HOLIDAY PAGE.

* Must show up to work

REGISTERED APPRENTICES

Wages per hour:

(1) year terms:

1st.	2nd.	3rd.	4th.
\$28.33	\$33.48	\$38.63	\$48.93

Supplemental benefits per hour paid:

(1) year terms:

1st.	2nd.	3rd.	4th.
\$34.25	\$37.85	\$42.10	\$48.66

8-740.1

Carpenter

10/01/2017

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per Hour:

07/01/2017

Timberman \$ 46.99

SUPPLEMENTAL BENEFITS

Per Hour Worked:

07/01/2017

\$ 48.23

OVERTIME PAY

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

HOLIDAY

Paid: See (1) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,11,13,25)

Overtime: See (5,6,11,13,25) on HOLIDAY PAGE.

REGISTERED APPRENTICES

Wages per hour:

(1) year terms:

1st	2nd	3rd	4th
\$18.80	\$23.50	\$30.54	\$37.59

Supplemental benefits per hour:

\$ 32.30

8-1556 Tm

Carpenter **10/01/2017**

JOB DESCRIPTION Carpenter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Westchester

PARTIAL COUNTIES

Orange: South of but including the following, Waterloo Mills, Slate Hill, New Hampton, Goshen, Blooming Grove, Mountainville, east to the Hudson River.

Putnam: South of but including the following, Cold Spring, TompkinsCorner, Mahopac, Croton Falls, east to Connecticut border.

Suffolk: West of Port Jefferson and Patchogue Road to Route 112 to the Atlantic Ocean.

WAGES

Per hour:	07/01/2017	10/17/2017
Core Drilling: Driller	\$ 38.82	+ additional \$ 1.66
Driller Helper	30.96	+ additional \$ 1.45

Note: Hazardous Waste Pay Differential:

For Level C, an additional 10% above wage rate per hour

For Level B, an additional 10% above wage rate per hour

For Level A, an additional 10% above wage rate per hour

Note: When required to work on water: an additional \$ 0.50 per hour.

SUPPLEMENTAL BENEFITS

Per hour worked:	07/01/2017	10/17/2017
Driller and Helper	\$ 24.66	\$ 24.66

OVERTIME PAY

OVERTIME: See (B,E,K*,P,R**) on OVERTIME PAGE.

HOLIDAY

Paid: See (5,6) on HOLIDAY PAGE.

Overtime: * See (5,6) on HOLIDAY PAGE.

** See (8,10,11,13) on HOLIDAY PAGE.

8-1536-CoreDriller

Carpenter - Building / Heavy&Highway **10/01/2017**

JOB DESCRIPTION Carpenter - Building / Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:	07/01/2017
Carpenter (Building)	\$ 49.02
Carpenter (Heavy Highway)	\$ 49.02

"NOTE" ADD 15% to straight time hourly wage for NEW YORK STATE D.O.T. and other GOVERNMENTAL MANDATED Off-Shift Work.

SUPPLEMENTAL BENEFITS

Per Hour:

Both Carpenter Categories	\$ 31.47
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OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

One(1) Year Terms at the following:
 Per Hour:

1st	2nd	3rd	4th
\$ 23.48	\$ 27.61	\$ 29.68	\$ 33.81

Supplemental Benefits
 Per Hour:

All Terms: \$ 17.95

4-Reg.Council Nass/Suff

Electrician **10/01/2017**

JOB DESCRIPTION Electrician

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:	07/01/2017	04/28/2018
Telephone and Intergrated Tele-Data System Electrician	\$ 37.13	\$ 37.48

This rate classification applies to ALL Voice, Data & Video work.: Excluding Fire Alarm Systems and Energy Managment Systems (HVAC Controls), in those cases the regular Electrician rate applies. To ensure proper use of this rate please call Nassau Offices at (516)228-3912 or Suffolk Offices at (631)687-4882.

SUPPLEMENTAL BENEFITS

Per Hour:

Tele-Data Electrician	16% of Hourly Wage Paid + \$18.02	16% of Hourly Wage Paid + \$18.68
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NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay

OVERTIME PAY

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

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

4-25tela

Electrician **10/01/2017**

JOB DESCRIPTION Electrician

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:	07/01/2017	03/30/2018
Electrician Electrical Maintenance	\$ 42.70	\$ 43.20
Traffic Signal	\$ 43.60	\$ 44.10

"PLEASE NOTE"

Applicable to "EXISTING ELECTRICAL SYSTEMS" including, but not limited to TRAFFIC SIGNALS & STREET LIGHTING. Not used for addns.

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday, with one-half (1/2) hour allowed for a lunch period.

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:

Electrician	12% of Hourly Wage Paid + \$17.20	12% of Hourly Wage Paid + \$17.61
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NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay

OVERTIME PAY

See (B, E2, K, P) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

One(1) Year Term(s) at the following Percentage
 of Journeyman(s) Wage:

1st	2nd	3rd	4th	5th	6th
40%	50%	60%	70%	80%	90%

Supplemental Benefits:

	Apprentices Hired Prior to 04/26/2014	Apprentices Hired After 04/26/2014
	07/01/2017- 06/30/2018	07/01/2016- 06/30/2018
1st	12% + \$9.90	3% + \$3.66
2nd	12% + \$10.79	8% + \$4.20
3rd	12% + \$11.70	9% + \$5.24
4th	12% + \$12.59	10% + \$ 7.00
5th	12% + \$13.48	11% + \$10.95
6th	12% + \$13.66	12% + \$14.05

NOTE: Percentages are on "Hourly Wage Paid"

NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay

4-25m

Electrician

10/01/2017

JOB DESCRIPTION Electrician

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:	07/01/2017	04/30/2018
Electrician		
Pump & Tank	\$ 41.05	\$ 41.65

SUPPLEMENTAL BENEFITS

Per Hour:

Electrician		
Pump & Tank	65.25% of *Wage Paid	65.25% of *Wage Paid

*Wage Paid includes any and all Premiums

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

1 Year Terms at the Following:

Per Hour:

1st Term	\$ 12.32	\$ 12.50
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2nd Term	\$ 14.37	\$ 14.58
3rd Term	\$ 16.42	\$ 16.66
4th Term	\$ 18.47	\$ 18.74
5th Term	\$ 24.63	\$ 24.99
6th Term	\$ 28.74	\$ 29.16

SUPPLEMENTAL BENEFITS

Per Hour:

All Terms	65.25% of *Wage Paid	65.25% of Wage Paid
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*Wage Paid includes any and all Premiums

4-25 Pump & Tank

Electrician **10/01/2017**

JOB DESCRIPTION Electrician

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:	07/01/2017	04/28/2018
Electrician/Wireman	\$ 51.50	\$ 51.75
HVAC Controls	51.50	51.75
Fire Alarms	51.50	51.75

SUPPLEMENTAL BENEFITS

Per Hour:	07/01/2017	04/28/2018
Electrician/Wireman (all categories)	16% of Hourly Wage Paid + \$24.96	16% of Hourly Wage Paid + \$25.26

NOTE: "Hourly Wage Paid" shall include any and all premium[s]

OVERTIME PAY

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

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

One(1) Year Terms at the following Percentage of Journeyman(s) Wage:

1st	2nd	3rd	4th	5th	6th
35%	35%	40%	45%	60%	75%

Supplemental Benefits Per Hour:

	07/01/2017	04/28/2018
1st	3% + \$2.87	3% + \$2.87
2nd	8% + \$4.84	8% + \$4.84
3rd	9% + \$6.04	9% + \$6.04
4th	10% + \$ 8.19	10% + \$8.19
5th	13% + \$11.03	13% + \$11.03
6th	14% + \$17.29	14% + \$17.29

NOTE: Percentages are on "Hourly Wage Paid"

NOTE: "Hourly Wage Paid" shall include any and all premium(s).

4-25

Electrician **10/01/2017**

JOB DESCRIPTION Electrician

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour: 07/01/2017

Tree Trimmer/Remover
 Line Clearance Specialist \$ 32.72

Groundman \$19.63

These rates apply to all tree trimming/removal contracts including but not limited to "Electrical Line Clearance"/"Long Island Railroad Right of Ways".

All tree removal for heavy highway or building construction contracts MUST use Heavy Highway Laborer and Operating Engineer classifications.

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2017

Tree Trimmer/Remover
 Line Clearance Specialist
 and Groundman 19.75% of Hourly
 Wage Paid +
 \$9.82

NOTE: "Hourly Wage Paid" shall include any and all premium(s) paid

OVERTIME PAY

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

HOLIDAY

Paid: See (5, 6, 8, 16, 23, 24, 25, 26) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 16, 23, 24, 25, 26) on HOLIDAY PAGE

4-1049/Tree

Electrician Lineman

10/01/2017

JOB DESCRIPTION Electrician Lineman

DISTRICT 4

ENTIRE COUNTIES

Nassau, Queens, Suffolk

WAGES

For Utility Distribution & Transmission Line Construction:

Per Hour: 07/01/2017 04/02/2018

Lineman/Splicer	\$ 53.85	\$ 55.60
Material Man	46.85	48.37
Heavy Equip. Operator	43.08	44.48
Groundman	32.31	33.36
Flagman	24.23	25.02

For Natural Gasline Construction:

Per Hour: 07/01/2017

Journeyman U.G.Mech. \$ 44.08

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday.

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:

Utility Distribution & Transmission Line Construction:

07/01/2017 04/02/2018

All Classifications	32% of Hourly Wage Paid + \$ 11.93	32% of Hourly Wage Paid + \$ 12.43
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NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay

Natural Gasline Construction:
 Per Hour: 07/01/2017

Journeyman U.G.Mech. 26% of Hourly
 Wage Paid +
 \$11.96

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

OVERTIME for Natural Gas Mechanic:(B,G,P)

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 16, 23, 25, 26) on HOLIDAY PAGE

Same as Above for Natural Gas Mechanic.

REGISTERED APPRENTICES

1000 hour Terms at the following Percentage of Journeyman's Wage.

(Lineman Only)

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

SUPPLEMENTAL BENEFIT:	07/01/2017	04/02/2018
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All Terms	31% of Hourly Wage Paid + \$11.93	31% of Hourly Wage Paid + \$12.43
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4-1049 Line/Gas

Elevator Constructor **10/01/2017**

JOB DESCRIPTION Elevator Constructor

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

PARTIAL COUNTIES

Rockland: Entire County except for the Township of Stony Point

Westchester: Entire County except for the Townships of Bedford, Lewisboro, Cortland, Mt. Kisco, North Salem, Pound Ridge, Somers and Yorktown.

WAGES

Per hour:	07/01/2017	03/17/2018
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Elevator Constructor	\$ 62.64	\$ 64.48
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Modernization & Service/Repair	49.14	50.49
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SUPPLEMENTAL BENEFITS

Per Hour:		
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Elevator Constructor	\$ 38.27	\$ 39.98
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Modernization & Service/Repair	37.25	38.94
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OVERTIME PAY

Constructor. See (D, M, T) on OVERTIME PAGE.

Modern./Service See (B, F, S) on OVERTIME PAGE.

HOLIDAY

Paid: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES PER HOUR:

*Note:1st Term is based on Average wage of Constructor & Modernization.

Terms 2 thru 4 Based on Journeyman's wage of classification Working in.

1 YEAR TERMS:

1st Term*	2nd Term	3rd Term	4th Term
50%	55%	65%	75%

SUPPLEMENTAL BENEFITS

Elevator Constructor

1st Term	\$ 30.99	\$ 32.50
2nd Term	31.69	33.22
3rd Term	32.82	34.38
4th Term	33.94	35.54

Modernization &
 Service/Repair

1st Term	\$ 30.92	\$ 32.43
2nd Term	31.32	32.83
3rd Term	32.37	33.92
4th Term	33.43	35.01

4-1

Glazier

10/01/2017

JOB DESCRIPTION Glazier

DISTRICT 8

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

WAGES

Per hour:	07/01/2017	05/01/2018
Glazier	\$ 53.90	+ additional
Scaffolding	\$ 54.90	\$ 1.25

Scaffolding includes swing scaffold, mechanical equipment, scissor jacks, man lifts, booms & buckets 24' or more, but not pipe scaffolding.

Repair & Maintenance \$ 27.23

Repair & Maintenance- All repair & maintenance work on a particular building, whenever performed, where the total cumulative contract value is under \$121,550

SUPPLEMENTAL BENEFITS

Per hour paid:	07/01/2017
Journeyworker	\$ 31.99
Repair & Maintenance	\$ 18.24

OVERTIME PAY

See (C*, D* E2, O) on OVERTIME PAGE. (Premium is applied to the respective base wage only.)

* If an optional 8th hour is required to complete the entire project, the same shall be paid at the regular rate of pay. If a 9th hour is worked, then both hours or more (8th & 9th or more) will be paid at double time rate of pay.

For 'Repair & Maintenance' see (B, B2, F, P) on overtime page.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (4, 6, 16, 25) on HOLIDAY PAGE

For 'Repair & Maintenance' see (5, 6, 16, 25)

REGISTERED APPRENTICES

Wage per hour:

(1) year terms at the following wage rates:

07/01/2017

1st term	\$ 18.44
2nd term	26.61
3rd term	32.10
4th term	42.97

Supplemental Benefits:
 (Per hour worked)

1st term	\$ 15.36
2nd term	21.21
3rd term	23.41
4th term	27.56

8-1281 (DC9 NYC)

Insulator - Heat & Frost

10/01/2017

JOB DESCRIPTION Insulator - Heat & Frost

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2017

Insulators	
Heat & Frost	\$ 64.68

SUPPLEMENTAL BENEFITS

Per Hour:

Insulators	\$ 33.56
Heat & Frost	

OVERTIME PAY

See (A, D, O, V) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages:
 1 year terms Per Hour:

1st	2nd	3rd	4th
\$32.31	\$38.77	\$45.24	\$51.68

Supplemental Benefits per hour:

Apprentice Insulator(s)	
1st	\$ 16.78
2nd	20.14
3rd	23.49
4th	26.85

4-12

Ironworker

10/01/2017

JOB DESCRIPTION Ironworker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

PARTIAL COUNTIES

Rockland: Southern section - south of Convent Road and east of Blue Hills Road.

WAGES

Per hour: 07/01/2017 07/01/2018

Reinforcing & Metal Lathing	\$ 56.28	\$ 2.00/Hr. to be Allocated
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SUPPLEMENTAL BENEFITS

Per hour paid:

Reinforcing & Metal Lathing	\$ 33.30
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OVERTIME PAY

See (B, B1, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 11, 13, 18, 19, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year terms at the following wage rates:

Wages Per Hour:

1st term	2nd term	3rd term	4th Term
\$ 28.38	\$ 32.38	\$ 35.38	\$ 37.38

SUPPLEMENTAL BENEFITS

Per Hour:

1st term	2nd term	3rd term	4th Term
\$ 11.34	\$ 13.34	\$ 17.30	\$ 18.30

4-46Reinf

Ironworker

10/01/2017

JOB DESCRIPTION Ironworker

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per Hour: 07/01/2017 01/01/2018

IRONWORKER:

Ironworker Rigger \$ 60.47 Additional \$1.36

Ironworker Stone Derrickman \$ 60.47

SUPPLEMENTAL BENEFITS

Ironworker: \$ 39.24

OVERTIME PAY

See (B, D1, *E, Q, **V) on OVERTIME PAGE

*Time and one-half shall be paid for all work on Saturday up to eight (8) hours and double time shall be paid for all work thereafter.

** Benefits same premium as wages on Holidays only

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 25) on HOLIDAY PAGE

*Work stops at schedule lunch break with full day's pay.

REGISTERED APPRENTICES

Wage per hour:

1/2 year terms at the following hourly wage rate:

	1st	2nd	3rd	4th	5th	6th
07/01/2017	\$30.34	\$30.34	\$43.07	\$47.89	\$52.70	\$52.70

Supplemental benefits:

Per hour paid:	\$19.63	\$19.63	\$29.47	\$29.47	\$29.47	\$29.47
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9-197D/R

Ironworker

10/01/2017

JOB DESCRIPTION Ironworker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per hour: 07/01/2017 01/01/2018

Ornamental	\$ 45.10	Additional
Chain Link Fence	45.10	\$ 1.25/Hr.
Guide Rail Installation	45.10	To be allocated

SUPPLEMENTAL BENEFITS

Per hour paid:
 Journeyworker: \$ 51.16

OVERTIME PAY

OVERTIME: See (A*,D1,E**,Q,V) on OVERTIME PAGE.

*Time and one-half shall be paid for all work in excess of seven (7) hours at the end of a work day to a maximum of two (2) hours on any regular work day (8th & 9th hours of work) and double time shall be paid for all work thereafter.

**Time and one-half shall be paid for all work on Saturday up to seven (7) hours and double time shall be paid for all work thereafter.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

1st term represents first 1-10 months, thereafter (1/2) year terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th	5th
50%	55%	60%	70%	80%

Supplemental Benefits per hour paid:

1st Term	\$ 38.74
2nd Term	39.93
3rd Term	41.12
4th Term	43.51
5th Term	45.89

4-580-Or

Ironworker

10/01/2017

JOB DESCRIPTION Ironworker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

PER HOUR:	07/01/2017	01/01/2018	07/01/2018
Ironworker:		Additional	Additional
Structural	\$ 50.05	\$1.72/Hr.	\$1.83/Hr.
Bridges		to be allocated	to be allocated
Machinery			

SUPPLEMENTAL BENEFITS

PER HOUR:
 Journeyman \$ 73.03

OVERTIME PAY

See (B, B1, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 18, 19) on HOLIDAY PAGE

REGISTERED APPRENTICES

WAGES PER HOUR:

6 month terms at the following rate:

1st	\$ 26.12
2nd	26.72
3rd - 6th	27.32

Supplemental Benefits
 PER HOUR:
 All Terms 50.72

Laborer - Building **10/01/2017**

JOB DESCRIPTION Laborer - Building **DISTRICT 4**

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

WAGES

Per Hour: 07/01/2017

Building Laborer \$ 39.40

Asbestos Abatement Workers 36.00
 (Re-Roofing Removal see Roofer)

SUPPLEMENTAL BENEFITS

Per Hour:

Building Laborer \$ 29.56

Asbestos Abatement Worker 16.45

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

See also(H)for Fire Watch on OVERTIME PAGE

Asbestos Worker See (B, H)

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

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

Asbestos Worker see (5,6,8 & 28)

REGISTERED APPRENTICES

Regular Hours Work Terms

Term #1 1 hr to 1000hrs

Term #2 1001hrs to 2000hrs

Term #3 2001hrs to 3000hrs

Term #4 3001hrs to 4000hrs

Wages per hour:

1st Term \$ 17.46

2nd Term 20.55

3rd Term 25.43

4th Term 30.41

Benifits per hour

1st Term \$ 19.65

2nd Term 22.44

3rd Term 22.44

4th Term 22.44

Laborer - Heavy&Highway **10/01/2017**

JOB DESCRIPTION Laborer - Heavy&Highway **DISTRICT 4**

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Laborer (Heavy/Highway):

GROUP # 1: Asphalt Rakers, Concrete Curb Formsetters.

GROUP # 2: Asphalt Shovelers, Roller Boys and Tampers.

GROUP # 3: Basic Laborer, Power Tool(Jackhammer), Landscape Construction, Traffic Control Personnel(flaggers)

WAGES PER HOUR:

07/01/2017 06/01/2018

GROUP # 1

Total Wage Paid \$ 49.65 Additional

"Base Wage" 43.52 \$ 2.37

GROUP # 2		
Total Wage Paid	\$ 48.37	Additional
"Base Wage"	42.24	\$ 2.33

GROUP # 3		
Total Wage Paid	\$ 44.48	Additional
"Base Wage"	38.35	\$ 2.21

NOTE: "Base Wage" for Premium/Overtime calculation Only. \$6.13 is difference between "Base" and "Total"

SUPPLEMENTAL BENEFITS

Per Hour:
 ALL GROUPS \$ 29.27

After Forty (40) paid hours in a work week
 OVERTIME PAY \$ 18.34

OVERTIME PAY

OVERTIME PAY
 See (B, E2, F) on OVERTIME PAGE

NOTES: Premium/Overtime Pay to be calculated on "Base Wage" ONLY
 Example Group# 3: \$38.35 X Time and One Half = \$57.53 + \$6.13 = \$63.66
 Premium Pay of 30% of base wage for all Straight time hours on all New York State, D.O.T. and other Government Mandated Off-Shift Work.
 Hazardous Material Work add an Additional 10% of base wage

HOLIDAY

HOLIDAY
 Paid: See (1) on HOLIDAY PAGE
 Overtime: See (1) on HOLIDAY PAGE

REGISTERED APPRENTICES

1000 hour(s) Terms at the following Percentage of the "Base Wage" except
 4th Term calculate at Total Wage Paid.

1st 0-1000/Hrs.	60%
2nd 1001-2000/Hrs.	70%
3rd 2001-3000/Hrs.	80%
4th 3001-4000/Hrs.	90%

Supplemental Benefits per hour:

All APPRENTICES	\$ 29.27
After Forty(40) paid hours in a work Week	\$ 18.34

4-1298

Mason	10/01/2017
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JOB DESCRIPTION Mason **DISTRICT 4**

ENTIRE COUNTIES
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES
 Per Hour: 07/01/2017

Brick/Blocklayer \$ 60.18

SUPPLEMENTAL BENEFITS

Per Hour:
 Brick/Block Layer \$ 27.30

OVERTIME PAY

See (A, E, E2, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(800 hour) Terms at the following Percentage of Journeyworkers Wage:

1st	2nd	3rd	4th	5th
50%	60%	70%	80%	90%

Supplemental Benefits per hour:

All Apprentices \$ 16.90

4-1Brk

Mason - Building

10/01/2017

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Nassau, Rockland, Suffolk, Westchester

WAGES

Per hour: 07/01/2017

Building:

Tile Finisher \$ 43.36

SUPPLEMENTAL BENEFITS

Per Hour:

Journey worker \$ 20.57* per hour paid
plus \$ 8.42 per hour worked

OVERTIME PAY

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

* This portion of Supplemental benefits subject to same premium rate as shown for overtime wages.

Work beyond 10 hours on a Saturday shall be paid at double the hourly wage rate.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE

9-7/88A-tf

Mason - Building

10/01/2017

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Building: 07/01/2017

Wages per hour:

Mosaic & Terrazzo Mechanic \$ 52.46

Mosaic & Terrazzo Finisher 50.86

SUPPLEMENTAL BENEFITS

Journeyworker:

Per hour:

Mosaic & Terrazzo Mechanic \$ 23.55* per hour paid plus
\$ 10.49 per hour worked

Mosaic & Terrazzo Finisher \$23.55* per hour paid plus
\$10.51 per hour worked

OVERTIME PAY

See (A, *E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

Easter Sunday is an observed holiday. Holidays falling on a Saturday will be observed on that Saturday. Holidays falling on a Sunday will be celebrated on the Monday.

REGISTERED APPRENTICES

Wages per hour:
 (750 Hour) terms at the following wage rate.

	1st	2nd	3rd	4th	5th	6th	7th	8th
07/01/2017	\$ 26.23	\$ 28.85	\$ 31.48	\$ 34.10	\$ 36.72	\$ 39.35	\$ 44.59	\$ 49.84

Supplemental benefits per hour:

07/01/2017	\$ 11.78* plus \$ 5.22**
	\$ 12.95* plus \$ 5.73**
	\$ 14.13* plus \$ 6.24**
	\$ 15.31* plus \$ 6.77**
	\$ 16.49* plus \$ 7.29**
	\$ 17.66* plus \$ 7.81**
	\$ 20.02* plus \$ 8.85**
	\$ 22.37* plus \$ 9.90**

* Per Hour paid and subject to same premium as overtime wages.

** Per hour worked

9-7/3

Mason - Building

10/01/2017

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per hour: 07/01/2017 01/01/2018

Building-Marble Restoration:

Marble, Stone & Terrazzo Polisher, etc	\$ 40.62	\$ 40.89
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SUPPLEMENTAL BENEFITS

Per Hour Paid:

Journeyworker:

Building-Marble Restoration:

Marble, Stone & Polisher	\$ 26.06	\$ 26.69
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OVERTIME PAY

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

*ON SATURDAYS, 8TH HOUR AND SUCCESSIVE HOURS PAID AT DOUBLE HOURLY RATE.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE

1ST TERM APPRENTICE GETS PAID FOR ALL OBSERVED HOLIDAYS.

REGISTERED APPRENTICES

WAGES per hour:

(900 hour) terms at the following per cent of journeyman's wages:

	1st 0-900	2nd 901-1800	3rd 1801-2700	4th over 2700
07/01/2017	70%	80%	90%	100%

Supplemental Benefits Per Hour:

07/01/2017	\$ 23.25	\$ 23.98	\$ 24.72	\$ 25.45
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9-7/24-MP

Mason - Building **10/01/2017**

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

WAGES

Wages: 07/01/2017 01/01/2018

Marble Cutters & Setters \$ 58.18 \$ 58.53

SUPPLEMENTAL BENEFITS

Per Hour:

Journeyworker \$ 35.12 \$ 36.22

OVERTIME PAY

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

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage Per Hour:

750 hour terms at the following wage.

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1-750	751-1500	1501-2250	2251-3000	3001-3750	3751-4500	4501-5250	5251-6000	6001-6751	6751-7500
\$23.10	\$25.98	\$28.87	\$31.76	\$34.64	\$37.53	\$40.42	\$43.30	\$49.08	\$54.85

Supplemental Benefits per hour paid at the following term:

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$24.53	\$25.31	\$26.12	\$26.91	\$27.71	\$28.51	\$29.32	\$30.12	\$31.71	\$33.31 9-7/4

Mason - Building **10/01/2017**

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per hour: 07/01/2017 01/01/2018

Marble, Stone, etc.
 Maintenance Finishers: \$ 22.42 \$ 22.67

Note 1: An additional \$2.00 per hour for time spent grinding floor using "60 grit" and below.

Note 2: Flaming equipment operator shall be paid an additional \$25.00 per day.

SUPPLEMENTAL BENEFITS

Per Hour:

Marble, Stone, etc
 Maintenance Finishers: \$ 13.11 \$ 13.34

OVERTIME PAY

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

*Double hourly rate after 8 hours on Saturday

HOLIDAY

Paid: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE
 1st term apprentice gets paid for all observed holidays.

REGISTERED APPRENTICES

WAGES per hour:
 (750 hour) terms at the 07/01/2017
 following percentage
 of journeyman's wage
 rate:

1st term	0-750	70%
2nd term	750-1500	74%
3rd term	1501-2250	78%
4th term	2251-3000	82%
5th term	3001-3750	88%
6th term	3751-4500	96%

Supplemental Benefits:
 Per hour paid

1st term	\$ 12.77
2nd term	12.78
3rd term	12.80
4th term	12.81
5th term	12.83
6th term	12.86

9-7/24M-MF

Mason - Building **10/01/2017**

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES
 Nassau, Rockland, Suffolk, Westchester

WAGES
 Per hour: 07/01/2017

Building:
 Tile Setters \$ 56.13

SUPPLEMENTAL BENEFITS
 Per Hour:

Journey Worker \$23.60* per hour paid
 Plus \$8.57 per hour worked

OVERTIME PAY
 See (B, E, Q, V) on OVERTIME PAGE
 * This portion of benefits subject to same premium rate as shown for overtime wages.
 Work beyond 10 hours on Saturday shall be paid at double the hourly wage rate.

HOLIDAY
 Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

Tile Setters:

(750 hour) term at the following wage rate:

Term:	1st	2nd	3rd	4th	5th	6th	7th	8th
	1-	751-	1501-	2251-	3001-	3751-	4501-	5251
	750	1500	2250	3000	3750	4500	5250	6000
	\$29.13	\$33.57	\$36.69	\$40.13	\$43.77	\$47.22	\$50.15	\$53.93

Supplemental Benefits per hour:

1st term	\$14.95* plus \$0.75	6th term	\$18.45* plus \$1.58
2nd term	\$14.95* plus \$0.89	7th term	\$15.95* plus \$5.62

3rd term	\$15.95* plus \$1.15	8th term	\$20.70* plus \$6.06
4th term	\$16.95* plus \$1.20		
5th term	\$17.45* plus \$1.53		

9-7/52A

Mason - Building / Heavy&Highway **10/01/2017**

JOB DESCRIPTION Mason - Building / Heavy&Highway **DISTRICT 4**

ENTIRE COUNTIES
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES
 WAGES

NOTE: Shall include but not limited to Precast concrete slabs (London Walks)Marble and Granite pavers 2'x 2' or larger.
 Per Hour:

07/01/2017

Stone Setter	\$ 62.98
Stone Tender	\$ 44.89

SUPPLEMENTAL BENEFITS

Per Hour:

Stone Setter	\$ 31.65
Stone Tender	\$ 19.40

OVERTIME PAY

See (*C, **E, Q) on OVERTIME PAGE

* On weekdays the eighth (8th) and ninth (9th) hours are time and one-half all work thereafter is paid at double the hourly rate.

** The first nine (9) hours on Saturday is paid at time and one-half all work thereafter is paid at double the hourly rate.

HOLIDAY

Paid: See (*18) on HOLIDAY PAGE
 Overtime: See (5, 6, 10) on HOLIDAY PAGE
 Paid: *Must work first 1/2.

REGISTERED APPRENTICES

Per Hour:

Stone Setter(800 hour) terms at the following Percentage of Stone Setters wage rate per hour:

1st	2nd	3rd	4th	5th	6th
50%	60%	70%	80%	90%	100%

Supplemental Benefits:
 All Apprentices \$ 19.51

4-1Stn

Mason - Building / Heavy&Highway **10/01/2017**

JOB DESCRIPTION Mason - Building / Heavy&Highway **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per hour: 07/01/2017 01/01/2018

Marble-Finisher	\$ 46.32	\$ 46.66
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SUPPLEMENTAL BENEFITS

Journeyworker:
 per hour paid

Marble- Finisher	\$ 33.29	\$34.03
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OVERTIME PAY

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

HOLIDAY

Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE
* Work beyond 8 hours on a Saturday shall be paid at double the rate.
** When an observed holiday falls on a Sunday, it will be observed the next day.

9-7/20-MF

Mason - Building / Heavy&Highway

10/01/2017

JOB DESCRIPTION Mason - Building / Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour:	07/01/2017	07/01/2018
Cement Mason	\$ 50.97	\$ 2.00/Hr. to be Allocated

SUPPLEMENTAL BENEFITS

Per Hour:

Cement Mason	\$ 32.71
Overtime Rate*	\$ 49.07

OVERTIME PAY

See (*B1, Q, V) on OVERTIME PAGE

* Applies to 9th and 10th hours and Saturday Work

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 8, 11, 13, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year terms at the following Percentage of Journeyworkers Wage.

1st Term	50%
2nd Term	60%
3rd Term	70%

Supplement Benefits per hour paid:

1st Term	\$ 22.08/OT Rate \$ 33.12
2nd Term	\$ 24.21/OT Rate \$ 36.32
3rd Term	\$ 26.33/OT Rate \$ 39.50

4-780

Mason - Heavy&Highway

10/01/2017

JOB DESCRIPTION Mason - Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour:	07/01/2017
Pointer, Caulkers & Cleaners	\$ 52.57

SUPPLEMENTAL BENEFITS

Per Hour:

Pointer, Cleaners & Caulkers	\$ 26.00
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OVERTIME PAY

See (B, E2, H) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One (1) year terms at the following wage rates.

1st	2nd	3rd	4th
\$ 25.89	\$ 28.97	\$ 34.12	\$ 41.33

Apprentices Supplemental Benefits:
 (per hour paid)

\$ 13.64	\$ 18.15	\$ 20.90	\$ 21.60
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4-1PCC

Operating Engineer - Building

10/01/2017

JOB DESCRIPTION Operating Engineer - Building

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

BUILDING CATEGORIES:

CLASS " AA "CRANES:

ABI Machine (150,000lbs and over or 149,999lbs and under when driving steel sheet piles),Crane, Truck Crane, Derrick, Dragline, Dredge, Crawler Crane, Tower Crane & Pile Driver, Vertical Drill Rig (115,000lbs and over).

CLASS "A":

ABI Machine (149,999 and under used for augering and drilling), Asphalt Spreader, Backhoe Crawler(360 swing), Barrier Machine, CAP (ice machine), Cherrypicker CAP (over 70 tons), CMI or Maxim Spreader, Concrete Pump, Directional Boring, GradAll, Grader, Hydraulic Cherrypicker/Crane (2seats), Hoist (3drum or multi platform), Laser Screed, Loading Machine (Bucket/CAP 10yrds or more), Milling Machine (Large), Power Winch (stone setting/structural steel), Scoop Carry-All Scraper (in tandem), Sideboom Tractor (includes tank work), Track Alignment Machine, Stone Spreader (self propelled), Striping Machine (long line/truck mounted), Tree Grapple, Zamboni.

CLASS "B":

Backhoe (other than 360), Belt Screte, Boom Truck, Bulldozer, Boring Machine/Auger, Cherry Picker(under 70 Tons), Conveyor-Multi, Curb Machine (asphalt or concrete), Dinky Locomotive, Drill Rig (dowels)Fork Lift, Hoist (2 Drum), Loading Machine & Front Loader, Mechanical Compactors (machine drawn), Mulch Machine(Machine Fed), Post Hole/Auger, Power Wincher (Not Included in Class "A"), Asphalt Roller, Hydraulic Pump with Boring Machine, Scoop, Carryall/Scaper, Skid Loader/Skid Steer/Bobcat, Trenching Machine, Vermeer Cutter, Work Boat, Inspection/Safety Boat.

CLASS "C":

Concrete Finish/Saw/Spreader, Dirt Roller, Hoist (1 drum), Interior Hoist, Milling Machine (small), Oiler Truck Crane (pile work), Power Broom, Vactor Truck, VacAll.

CLASS "D":

Boiler (thermoplastic), Concrete Breaker, Conveyer, Curing Machine, Fork Lift or Walk Behind (power operated), Generator, Hydra Hammer, Compactors (mechanical or hand operated), Maintenance Engineer (small equipment/well point), Mechanic (field man), Micro-Trap with Compressor, Power Winch Truck Mounted, Pin Puller, Portable Heaters, Power Buggies, Pump (double action diaphragm), Pump (4 inch or over), Pump (hydraulic/submersible) Jet Pump, Pulvi-Mixer, Ridge Cutter, Shot Blaster.

CLASS "E":

Batching Plant, Compressor (structural steel/2 or more battery), Generator (small), Grinder, Ground Heater, Power Grinder, Mixer with Skip, Mulching Machine (hand fed), Power Washer, Pumps (up to 3 inch/single action 1 to 3 inches), Pump (gypsum), Root Cutter, Stump Chipper, Track Tamper, Tractor (caterpillar or wheel), Trenching Machine (hand), Welding Machine (pile work/structural steel), Deckhand on Work Boat.

	07/01/2017	06/01/2018
Class "AA"	\$ 73.56	Additional \$ 3.03/Hr
Cranes: Boom length over 100 feet add \$ 1.00 per hour		
" " " 150 " " \$ 1.50 " "		
" " " 250 " " \$ 2.00 " "		
" " " 350 " " \$ 3.00 " "		
Class "A"	\$ 61.03	Additional \$ 2.80/Hr
Add \$3.50 for Hazardous Waste Work		
Class "B"	\$ 57.86	\$ 2.68/Hr
Add \$2.50 for Hazardous Waste Work		

Class "C"	\$ 55.74	\$ 2.62/Hr
Add \$1.50 for Hazardous Waste Work		
Class "D"	\$ 44.18	\$ 0.00
Add \$1.00 for Hazardous Waste Work		
Class "E"	\$ 42.23	\$ 0.00

SUPPLEMENTAL BENEFITS

Per Hour:

All Classes	\$ 36.65
Overtime Rate	30.35

OVERTIME PAY

See (D, O) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

"NOTE" Employee must be Employed day before and day after Holiday to receive Holiday Pay.

REGISTERED APPRENTICES

One(1) Year Terms at the following Rate:

1st Term	\$ 20.84
2nd Term	21.67
3rd Term	22.33

Supplemental Benefits per hour:

All Apprentices	\$ 15.64
Overtime Rate	5.60

4-138

Operating Engineer - Building / Heavy&Highway

10/01/2017

JOB DESCRIPTION Operating Engineer - Building / Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:	07/01/2017	08/01/2017
Well Driller	\$ 35.75	\$ 36.07
Well Driller Helper	\$ 31.22	\$ 31.39

Hazardous Waste Differential

Added to Hourly Wage:

Level A	\$ 3.00
Level B	2.00
Level C	1.00

Monitoring Well Work

Add to Hourly Wage:

Level A	\$ 3.00
Level B	2.00

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2017

Well Driller & Helper	\$ 10% of straight time rate plus \$ 11.95
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Additional \$ 3.45 for Premium Time

OVERTIME PAY

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

HOLIDAY

Paid: See (5, 6, 16, 23) on HOLIDAY PAGE
Overtime: See (5, 6, 16, 23) on HOLIDAY PAGE

REGISTERED APPRENTICES

Apprentices at 12 Month Terms

Wages Per Hour: 07/01/2017

1st Term \$ 20.84
2nd Term \$ 21.67
3rd Term \$ 22.33

SUPPLEMENTAL BENEFITS

Per Hour:

1st Term 10% of Wage + \$ 5.10
2nd Term 10% of Wage + \$ 5.60
3rd Term 10% of Wage + \$ 6.60

BENEFITS AT PREMIUM TIME

Per Hour:

1st Term 10% of Wage + \$ 5.85
2nd Term 10% of Wage + \$ 6.60
3rd Term 10% of Wage + \$ 8.10

4-138well

Operating Engineer - Heavy&Highway

10/01/2017

JOB DESCRIPTION Operating Engineer - Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Party Chief - One who directs a survey party
Instrument Man - One who runs the instrument and assists Party Chief
Rodman - One who holds the rod and in general, assists the survey party
Categories cover GPS & Under Ground Surveying

Per Hour: 07/01/2017
Heavy Highway/Building

Party Chief \$ 67.76
Instrument Man 51.66
Rodman 44.30

SUPPLEMENTAL BENEFITS

Per Hour:

Heavy Highway/Building \$ 34.23

Premium*:
Heavy Highway/Building \$ 43.40

Premium**:
Heavy Highway/Building \$ 52.56

* Applies to instances where 1-1/2 regular rate are paid

**Applies to instances where 2 times the rate are paid.

OVERTIME PAY

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

* Doubletime paid on the 9th hour on Saturday.

HOLIDAY

Paid: See (5, 6, 9, 11, 12, 15, 25) on HOLIDAY PAGE
Overtime: See (5, 6, 9, 11, 12, 15, 25) on HOLIDAY PAGE

4-15D-N/S co.

Operating Engineer - Heavy&Highway

10/01/2017

JOB DESCRIPTION Operating Engineer - Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

HEAVY/HIGHWAY CATEGORIES:

CLASS "AA" CRANES:

Crane, Truck Crane, Derrick, Dragline, Dredge, Crawler Crane, Tower Crane, Pile Driver.

CLASS "A":

Asphalt Spreader, Backhoe Crawler/Hydraulic Excavator (360 up to & over 150,000lbs), Barrier Machine, Cherrypicker (over 70 tons), Concrete Pump, Directional Boring, Grader, Gradall, Hoist, Hydraulic Cherrypicker/crane, Loading Machine (bucket 10 yds. or more), Laser Screed, Milling Machine (Large), Power Winch-Stone Setting/Structural Steel or Truck Mounted, Powerhouse, Road Paver, Scoop-Carryall-Scaper in Tandem, Side Boom Tractor, Stone Spreader(self propelled), Striping Machine (long line/truck mounted), Tree Grapple, Tank Work, Track Alignment Machine.

CLASS "B":

Backhoe (other than 360), Boom Truck, Bulldozer, Boring Machine/Auger, Cherry Picker (under 70 tons), Conveter-Multi, Curb Machine Asphalt/Concrete, Post Hole-Auger, Fork Lift, Hoist (2 drum), Loading Machine & Front Loader, Mulch Machine (machine fed), Power Wincher (all others not included in class A), Asphalt Roller, Hydraulic Pump with Boring Machine, Scoop, Carryall/Scraper, Skid Loader/Skid Steer, Maintenance Man on Tower Crane, Trenching Machine, Vermeer Cutter, Work Boat, Inspection/Safety Boat.

CLASS "C":

Concrete Finish/Saw/Spreader, Dirt Roller, Hoist (1 drum), Interior Hoist, Oiler Truck Crane(Pile work), Power Broom, Small Milling Machine, Vactor Truck/VacAll Truck.

CLASS "D":

Concrete Breaker, Conveyor, Curing Machine, Fireman, Fork lift (walk behind), Generator, Hydra Hammer, Maintenance Engineer, Compactors (hand operated), Pin Puller, Portable Heaters, Power Buggies, Pumps (double action, 4 inch and over, Hydraulic & Submersible), Jet Pump, Ridge Cutter, Robotic Unit Operator(Trenchless Pipe Rehab), Shotblaster.

CLASS "E":

Batching Plant (On Job Site), Compressor, Generator(small), Grinder, Mixer, Mulching Machine (Hand Feed), Oiler, Pumps (Single action up to 3 In.), Pump (Gypsum), Root Cutter, Stump Chipper, Oiler, Trenching Machine (Hand,walk behind), Track Tamper, Tractor (caterpillar or wheel),Welding Machine (Pile work & Structural Steel), Deckhand on Work Boat, Inspection/Safety Boat.

	07/01/2017	06/01/2018
Class "AA"	\$ 72.86	Additional \$3.03
Cranes: Boom Length over 100 feet add \$ 1.00 per hour		
" " " 150 " " \$ 1.50 " "		
" " " 250 " " \$ 2.00 " "		
" " " 350 " " \$ 3.00 " "		
Class "A"	\$ 64.40*	Additional \$ 2.80
*Add \$3.50 for Hazardous Waste Work.		
Class "B"	\$ 60.12*	\$ 2.68
*Add \$2.50 for Hazardous Waste Work.		
Class "C"	\$ 57.95*	\$ 2.62
*Add \$1.50 for Hazardous Waste Work		
Class "D"	\$ 46.08	\$ 0.00
*Add \$1.00 for Hazardous Waste Work		
Class "E"	\$ 44.12	\$ 0.00

"NOTE": ADD 30% to straight time hourly wage for NEW YORK STATE D.O.T. and other GOVERNMENTAL MANDATED off-shift work.

SUPPLEMENTAL BENEFITS

Per Hour:

ALL CLASSES \$ 36.90

Note: OVERTIME AMOUNT \$ 30.35

OVERTIME PAY

See (D, O) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 7, 8) on HOLIDAY PAGE
 Overtime: See (5, 6, 7, 8) on HOLIDAY PAGE

"Note" Employee must be employed day before and day after a holiday to receive holiday pay.

REGISTERED APPRENTICES

Wage per hour:

REGISTERED APPRENTICES

One(1) Year Terms at the following Rate:

1st Term	\$ 20.84
2nd Term	21.67
3rd Term	22.33

SUPPLEMENTAL BENEFITS:

APPRENTICES	\$ 15.64
Note: Overtime Amount	\$ 5.60

4-138

Operating Engineer - Marine Dredging

10/01/2017

JOB DESCRIPTION Operating Engineer - Marine Dredging

DISTRICT 4

ENTIRE COUNTIES

Albany, Bronx, Cayuga, Chautauqua, Clinton, Columbia, Dutchess, Erie, Essex, Franklin, Greene, Jefferson, Kings, Monroe, Nassau, New York, Niagara, Orange, Orleans, Oswego, Putnam, Queens, Rensselaer, Richmond, Rockland, St. Lawrence, Suffolk, Ulster, Washington, Wayne, Westchester

WAGES

These wages do not apply to Operating Engineers on land based construction projects. For those projects, please see the Operating Engineer Heavy/Highway Rates. The wage rates below for barge mounted cranes and other equipment are only for marine dredging work in navigable waters found in the counties listed above.

Per Hour:		
DREDGING OPERATIONS	07/01/2017	10/01/2017
CLASS A		
Operator, Leverman,	\$ 37.25	\$ 38.18
Lead Dredgeman		
CLASS A1	To conform to Operating Engineer	
Dozer,Front Loader	Prevailing Wage in locality where work	
Operator	is being performed including benefits.	
CLASS B		
Barge Operator	\$ 32.21	\$33.02
Spider/Spill		
Tug Operator(over1000hp),		
OperatorII, Fill Placer,		
Derrick Operator, Engineer,		
Chief Mate, Electrician,		
Chief Welder,		
Maintenance Engineer		
Certified Welder,	\$ 30.33	\$ 31.09
Boat Operator(licensed)		
CLASS C		
Drag Barge Operator,	\$ 29.50	\$ 30.24
Steward, Mate,		
Assistant Fill Placer,		
Welder (please add)\$ 0.06		
Boat Operator	\$ 28.54	\$ 29.26
CLASS D		

Shoreman, Deckhand, \$ 23.71 \$ 24.30
 Rodman, Scowman, Cook,
 Messman, Porter/Janitor

Oiler(please add)\$ 0.09

SUPPLEMENTAL BENEFITS

Per Hour:

THE FOLLOWING SUPPLEMENTAL BENEFITS APPLY TO ALL CATEGORIES

All Classes A & B	07/01/2017 \$10.75 plus 8% of straight time wage, Overtime hours add \$ 0.63	10-01-2017 \$11.23 plus 8% of straight time wage, Overtime hours add \$ 0.63
All Class C	\$10.45 plus 8% of straight time wage, Overtime hours add \$ 0.48	\$10.93 plus 8% of straight time wage, Overtime hours add \$ 0.48
All Class D	\$10.15 plus 8% of straight time wage, Overtime hours add \$ 0.33	\$10.63 plus 8% of straight time wage, Overtime hours add \$ 0.33

OVERTIME PAY

See (B, F, R) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 15, 26) on HOLIDAY PAGE

4-25a-MarDredge

Operating Engineer - Survey Crew - Consulting Engineer 10/01/2017

JOB DESCRIPTION Operating Engineer - Survey Crew - Consulting Engineer **DISTRICT 9**

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Suffolk, Westchester

PARTIAL COUNTIES

Dutchess: That part in Dutchess County lying South of the North City line of Poughkeepsie.

WAGES

Feasibility and preliminary design surveying, any line and grade surveying for inspection or supervision of construction.

Per hour: 07/01/2017
 Survey Classifications

Party Chief \$ 42.29
 Instrument Man 35.39
 Rodman 31.04

SUPPLEMENTAL BENEFITS

Per Hour:

All Crew Members: \$ 17.70

OVERTIME PAY

OVERTIME:.... See (B, E*, Q, V) ON OVERTIME PAGE.

*Doubletime paid on the 9th hour on Saturday.

HOLIDAY

Paid: See (5, 6, 7, 11, 16) on HOLIDAY PAGE
 Overtime: See (5, 6, 7, 11, 16) on HOLIDAY PAGE

9-15dconsult

Operating Engineer - Trenchless Pipe Rehab 10/01/2017

JOB DESCRIPTION Operating Engineer - Trenchless Pipe Rehab

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

IMPORTANT NOTE: This Category & Classifications are now located in
Operating Engineers/Heavy Highway & Laborers/ Heavy Highway.

Per Hour:

07/01/2017
(SEE)

Robotic Unit Operator

Operator(class D)

Technician/Boiler, Generator

Operator(classes C&D)

AM Liner/Hydra Seal

Laborer(Grp#3)

Hobas Pipe, Polyethylene Pipe or
Pull and Inflate Liner

Laborer(Grp#3)

OVERTIME PAY

HOLIDAY

4-138TrchPReh

Painter

10/01/2017

JOB DESCRIPTION Painter

DISTRICT 8

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Suffolk, Westchester

WAGES

Per hour:

07/01/2017

Brush

\$ 46.85*

Abatement/Removal of lead based
or lead containing paint on
materials to be repainted.

46.85*

Spray & Scaffold

\$ 49.85*

Fire Escape

49.85*

Decorator

49.85*

Paperhanger/Wall Coverer

50.03

*Subtract \$ 0.10 to calculate premium rate.

SUPPLEMENTAL BENEFITS

Per hour worked:

07/01/2017

Paperhanger

\$ 26.19

All others

24.47

Premium

26.97**

**Applies only to "All others" category,not paperhanger journeyman.

OVERTIME PAY

See (A, H) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

One (1) year terms at the following wage rate.

Per hour:	07/01/2017
Appr 1st term...	\$ 17.85*
Appr 2nd term...	23.26*
Appr 3rd term...	28.14*
Appr 4th term...	37.52*

*Subtract \$ 0.10 to calculate premium rate.

Supplemental benefits:	
Per Hour worked:	07/01/2017
Appr 1st term...	\$ 12.77
Appr 2nd term...	15.62
Appr 3rd term...	18.06
Appr 4th term...	22.88

8-NYDC9-B/S

Painter **10/01/2017**

JOB DESCRIPTION Painter

DISTRICT 8

ENTIRE COUNTIES

Putnam, Suffolk, Westchester

PARTIAL COUNTIES

Nassau: All of Nassau except the areas described below: Atlantic Beach, Ceaderhurst, East Rockaway, Gibson, Hewlett, Hewlett Bay, Hewlett Neck, Hewlett Park, Inwood, Lawrence, Lido Beach, Long Beach, parts of Lynbrook, parts of Oceanside, parts of Valley Stream, and Woodmere. Starting on the South side of Sunrise Hwy in Valley Stream running east to Windsor and Rockaway Ave., Rockville Centre is the boundary line up to Lawson Blvd. turn right going west all the above territory. Starting at Union Turnpike and Lakeville Rd. going north to Northern Blvd. the west side of Lakeville road to Northern blvd. At Northern blvd. going east the district north of Northern blvd. to Port Washington Blvd. West of Port Washington blvd. to St. Francis Hospital then north of first traffic light to Port Washington and Sands Point, Manor HAven, Harbour Acres.

WAGES

Per hour:	07/01/2017
Drywall Taper	\$ 46.85

SUPPLEMENTAL BENEFITS

Per hour worked:	07/01/2017
Journeyman	\$ 22.47

OVERTIME PAY

See (A, H) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages - Per Hour:	07/01/2017
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1500 hour terms at the following wage rate:

1st term	\$ 17.85
2nd term	\$ 23.26
3rd term	\$ 28.14
4th term	\$ 37.52

Supplemental Benefits - Per hour:

One year term (1500 hours) at the following dollar amount.

1st year	\$ 11.73
2nd year	\$ 14.42
3rd year	\$ 16.70
4th year	\$ 21.20

8-NYDCT9-DWT

Painter - Bridge & Structural Steel **10/01/2017**

JOB DESCRIPTION Painter - Bridge & Structural Steel

DISTRICT 8

ENTIRE COUNTIES

Albany, Bronx, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Kings, Montgomery, Nassau, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Ulster, Warren, Washington, Westchester

WAGES

Per Hour Worked:

STEEL:

Bridge Painting:	07/01/2017	10/01/2017	10/01/2018
From May 1st to Nov. 15th -			
	\$ 49.50	\$ 50.00	\$ 51.00
	+ 6.38*	+ 6.63*	+ 6.63*
From Nov. 16th to April 30th -			
	\$ 49.50	\$ 50.00	\$ 51.00
	+ 6.38*	+ 6.63*	+ 6.63*

*Not subject to overtime and limited to first 40 hours

NOTE: All premium wages are to be calculated on base rate per hour only.

EXCEPTION: During the period of May 1st to November 15th, for the first and last week of employment on the project, and for the weeks of Memorial Day, Independence Day and Labor Day, this rate shall be paid for the actual number of hours worked.

Power Tool/Spray is an additional \$6.00 per hour above hourly rate, whether straight time or overtime

NOTE: Generally, 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.

SUPPLEMENTAL BENEFITS

Per Hour Worked:

Journeyworker:	07/01/2017	10/01/2017	10/01/2018
From May 1st to Nov. 15th -			
Hourly Rate up to 40 hours	\$ 30.90	\$ 31.90	\$ 33.60
Hourly Rate after 40 hours	7.50	7.50	7.50
From Nov. 16th to April 30th -			
Hourly Rate up to 50 hours	\$ 29.70	\$ 31.90	\$ 33.60
Hourly Rate after 50 hours	7.50	7.50	7.50

EXCEPTION: During the period of May 1st to November 15th, for the first and last week of employment on the project, and for the weeks of Memorial Day, Independence Day and Labor Day, this rate shall be paid for the actual number of hours worked.

OVERTIME PAY

See (A, F, R) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (4, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage - Per hour worked:

Apprentices: (1) year terms	07/01/2017	10/01/2017	10/01/2018
1st year	\$ 22.35	\$ 22.65	\$ 23.13
2nd year	33.53	33.98	34.73
3rd year	44.70	45.30	46.30

Supplemental Benefits - Per hour worked:

1st year	\$ 12.36	\$ 12.76	\$ 13.44
2nd year	18.54	19.14	20.16
3rd year	24.72	25.52	26.88

8-DC-9/806/155-BrSS

Painter - Line Striping

10/01/2017

JOB DESCRIPTION Painter - Line Striping

DISTRICT 8

ENTIRE COUNTIES

Albany, Bronx, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Kings, Montgomery, Nassau, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Ulster, Warren, Washington, Westchester

WAGES

Per hour:

Painter (Striping-Highway):	07/01/2017
Striping-Machine Operator*	\$ 27.11
Linerman Thermoplastic	\$ 32.37

Note: * Includes but is not limited to: Positioning of cones and directing of traffic using hand held devices. Excludes the Driver/Operator of equipment used in the maintenance and protection of traffic safety.

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 paid:	07/01/2017
Journeyworker:	
Striping-Machine operator	\$ 14.18
Linerman Thermoplastic	\$ 14.55

OVERTIME PAY

See (B, E, E2, F, S) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 20) on HOLIDAY PAGE
 Overtime: See (5, 8, 11, 12, 15, 16, 17, 20, 21, 22) on HOLIDAY PAGE

8-1456-LS

Painter - Metal Polisher **10/01/2017**

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

	07/01/2017	06/01/2018
Metal Polisher	\$ 29.73	\$ 30.58
Metal Polisher**	30.68	31.53
Metal Polisher***	33.23	34.08

**Note: Applies on New Construction & complete renovation

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

SUPPLEMENTAL BENEFITS

Per Hour:	07/01/2017	06/01/2018
Journeyworker:		
All classification	\$ 7.55	\$ 7.65

OVERTIME PAY

See (B, E, E2, 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:

	07/01/2017	06/01/2018
1st year	\$ 12.14	\$ 14.25
2nd year	13.44	15.50
3rd year	16.29	18.25

Supplemental benefits:
 Per hour paid:

	07/01/2017	06/01/2018
1st year	\$ 5.62	\$ 5.62
2nd year	5.62	5.62
3rd year	5.62	5.62

8-8A/28A-MP

Plumber **10/01/2017**

JOB DESCRIPTION Plumber **DISTRICT 4**

ENTIRE COUNTIES
 Nassau, Suffolk

WAGES

Per Hour: 07/01/2017 05/10/2018

Plumber/ PUMP & TANK	\$ 44.24	\$ 44.49
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SUPPLEMENTAL BENEFITS

Per Hour:

Plumber	\$ 25.23	\$ 26.98
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OVERTIME PAY

See (B, Q, *V) on OVERTIME PAGE
 (V) For Sundays & Holidays if Worked Only

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

One(1) Year Terms at the Following
 Percentage of Journeymans wage:

1st Term	30%
2nd Term	40%
3rd Term	50%
4th Term	60%
5th Term	70%
6th Term	85%

Supplemental Benefits Per Hour:

1st Term	\$13.31	\$15.06
2nd Term	\$13.95	\$15.70
3rd Term	\$14.77	\$16.52
4th Term	\$15.15	\$17.40
5th Term	\$18.38	\$20.13

4-200 Pump & Tank

Plumber **10/01/2017**

JOB DESCRIPTION Plumber **DISTRICT 4**

ENTIRE COUNTIES
 Nassau, Suffolk

WAGES

Per Hour: 07/01/2017 11/01/2017

Plumber \$ 51.48 \$ 52.98

SUPPLEMENTAL BENEFITS

Per Hour:

Plumber \$ 38.72 \$ 39.22

OVERTIME PAY

See (A, E, Q, *V) on OVERTIME PAGE
 CODE "V" is only for SUNDAYS and HOLIDAYS THAT ARE WORKED

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

One(1) Year Terms at the following percentage of Plumbers Rate:

1st Term	2nd Term	3rd Term	4th Term	5th Term
30%	40%	50%	60%	70%

Supplemental Benefits per hour:

	07/01/2017	11/01/2017
1st Term	\$ 25.16	\$ 25.66
2nd Term	27.47	27.97
3rd Term	28.24	29.34
4th Term	30.33	30.83
5th Term	31.91	32.41

4-200

Plumber **10/01/2017**

JOB DESCRIPTION Plumber **DISTRICT 4**

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:

	07/01/2017	05/01/2018
Plumber		
MAINTENANCE ONLY	\$ 30.30	\$ 30.80

Maintenance: Correction of problem(s)with the existing fixture or group of fixtures, preventive repairs or servicing of said fixtures

SUPPLEMENTAL BENEFITS

SUPPLEMENTAL BENEFITS

Per Hour:

Plumber		
Maintenance	\$ 15.15	\$ 15.65

OVERTIME PAY

See (B, J) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 15, 16) on HOLIDAY PAGE

4-200 Maintance

Roofer **10/01/2017**

JOB DESCRIPTION Roofer **DISTRICT 4**

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour	07/01/2017	05/01/2018
ROOFER/Waterproofeer		
Total Wage	\$ 44.00	\$1.50 Per Hour

to be Paid to be allocated

"Base" Wage 40.00**

SUPPLEMENTAL BENEFITS

Per Hour:

ROOFER/Waterproofer \$ 31.62

OVERTIME PAY

Per Hour:

NEW ROOF SEE (B,E,Q)

RE-ROOF SEE (B,E,E2,Q)

NOTE:** Overtime Pay to be calculated on "BASE" Wage then add \$4.00.

(Example: \$40.00 x time and one half = \$60.00 + \$4.00 = \$64.00)

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 13, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) Year terms at the following Percentage of Roofers/Waterproofers Wage.

1st	2nd	3rd	4th
40%	50%	70%	80%

Supplemental Benefits per hour:

07/01/2017

1st Term	\$ 8.81
2nd Term	10.90
3rd Term	22.27
4th Term	25.38

4-154

Sheetmetal Worker

10/01/2017

JOB DESCRIPTION Sheetmetal Worker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per Hour: 07/01/2017

Sign Erector \$ 47.67

NOTE: Structurally Supported Overhead Highway Signs(See STRUCTURAL IRON WORKER CLASS)

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2017

Sign Erector \$ 44.44

OVERTIME PAY

See (A, F, S) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 10, 11, 12, 16, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 10, 11, 12, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Per Hour:

6 month Terms at the following percentage of Sign Erectors wage rate:

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
35%	40%	45%	50%	55%	60%	65%	70%	75%	80%

SUPPLEMENTAL BENEFITS

Per Hour:

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$12.55	\$14.23	\$15.89	\$17.57	\$24.30	\$26.84	\$29.27	\$31.47	\$33.65	\$35.83

4-137-SE

Sheetmetal Worker

10/01/2017

JOB DESCRIPTION Sheetmetal Worker

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2017

Sheetmetal Worker \$ 53.22
Temporary Operation or
Maintenance of Fans 42.58

SUPPLEMENTAL BENEFITS

Per Hour:
Sheetmetal Worker \$ 45.04
Maintenance Worker 45.04

OVERTIME PAY

See (B, E, E2, Q, V) on OVERTIME PAGE
For Maintenance See Codes B,E, Q & V

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Per Hour:Wages

Six(6) Month Terms As Follows:

1st & 2nd Term \$ 18.67
3rd & 4th Term 23.98
5th & 6th Term 29.29
7th Term 37.28
8th Term 39.83
9th Term 42.59

Per Hour: Supplemental Benifits

1st & 2nd Term \$ 16.49
3rd & 4th Term 22.75
5th & 6th Term 26.79
7th Term 32.84
8th Term 34.88
9th Term 36.84

4-28

Steamfitter

10/01/2017

JOB DESCRIPTION Steamfitter

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2017

AC Service/Heat Service \$ 39.50
Steamfitter Maintenance

Refrigeration, A/C, Oil Burner and Stoker Service and Repair.
Refrigeration Compressor installation up to 5hp (combined).
Air Condition / Heating Compressor installation up to 10hp (combined).

SUPPLEMENTAL BENEFITS

Per Hour

AC Service/Heat Service \$ 12.75
 Steamfitter Maintenance

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 11, 15, 25, 26) on HOLIDAY PAGE

4-638B-StmFtrRef

Steamfitter **10/01/2017**

JOB DESCRIPTION Steamfitter

DISTRICT 4

ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2017

Steam/Sprinkler \$ 61.81
 Fitter

Temporary \$ 46.99
 Heat & AC

NOTE: Add 30% to Hourly Wage for "Contracting Agency" Mandated Off Shift Work.

SUPPLEMENTAL BENEFITS

Per Hour:

Steam/Sprinkler \$ 49.18
 Fitter

Temporary \$ 40.23
 Heat & AC

OVERTIME PAY

See (C, *D, O, V) on OVERTIME PAGE

(*D) On all HVAC and Mechanical contracts that do not exceed \$15,000,000. and on all fire protection/sprinklet contracts that do not exceed \$1,500,000.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

1 year Terms at the Following:

WAGES per hour:

1st Term	2nd Term	3rd Term	4th Term	5th Term
\$ 24.76	\$ 30.94	\$ 40.29	\$ 49.46	\$ 52.55

SUPPLEMENTAL BENEFIT per hour:

1st Term	2nd Term	3rd Term	4th Term	5th Term
\$ 20.20	\$ 25.04	\$ 32.28	\$ 39.52	\$ 41.94

4-638A-StmSpFtr

Teamster - Asphalt Delivery **10/01/2017**

JOB DESCRIPTION Teamster - Asphalt Delivery

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:

Heavy Construction Work:

Shall include the supply of Asphalt for construction, improvement and modification of all or any part of Streets, Highways, Bridges, Tunnels, Railroads, Canals, Dams, Airports, Schools, Power Generation Plants, where distance between project and asphalt plant is not more than 50 miles.

TRUCK DRIVER
 07/01/2017
 Asphalt Delivery \$ 35.535

Light Construction Work:

Shall include the supply of Asphalt for construction of Single & Multi Family Homes, Town Houses, Apartment Buildings, including Driveways, Streets and Curbs within those projects. Parking Lots, Office Buildings, where distance between project and asphalt plant is not more than 50 miles.

TRUCK DRIVER
 07/01/2017
 Asphalt Delivery \$ 29.94

SUPPLEMENTAL BENEFITS

Per Hour:

Heavy Construction Work
 TRUCK DRIVER

07/01/2017
 Asphalt Delivery \$ 41.76

Light Construction Work
 TRUCK DRIVER

07/01/2017
 Asphalt Delivery \$ 11.55

OVERTIME PAY

See (B, *B2, E, **I, P, ***R, ****U) on OVERTIME PAGE

(NOTE) PREMIUM PAY of 25% on straight time hours for New York State D.O.T. and or other GOVERNMENTAL MANDATED off shift work.

Note: (B,E,P,T&*U) Apply to Heavy Construction.

Note: (B2,I,T&*U) Apply to Light Construction.

Note: (*U) Only applies after 8 hours worked on holiday.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, *16, **25) on HOLIDAY PAGE

NOTE:(*16) Paid at Double if Worked; (**25) Paid at Double if Worked.

4-282

Teamster - Building

10/01/2017

JOB DESCRIPTION Teamster - Building

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:

Truck Driver (Building Demolition & Debris)

07/01/2017
 Trailers \$ 33.61
 Straight Jobs \$ 33.31

SUPPLEMENTAL BENEFITS

Per Hour:

All Classifications

07/01/2017
 \$ 33.20

OVERTIME PAY

See (B, E, S1) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 12, 15, 25, 26) on HOLIDAY PAGE

4-282

Teamster - Delivery of Concrete

10/01/2017

JOB DESCRIPTION Teamster - Delivery of Concrete

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:

Heavy Construction Work:

Shall Include the supply of Ready-Mix Concrete for construction, improvement and modification of all or any part of Streets, Highways, Bridges, Tunnels, Railroads, Canals, Dams, Airports, Schools & Power Generation Plants, where distance between project and asphalt plant is not more than 50 miles.

TRUCK DRIVER

Concrete Delivery 07/01/2017
\$ 39.685

Light Construction Work:

Shall include the supply of Ready-Mix Concrete for construction of Single & Multi Family Homes, Town Houses, Apartment Buildings, including Driveways, Streets and Curbs within those projects. Parking Lots and Office Buildings, where distance between project and asphalt plant is not more than 50 miles.

TRUCK DRIVER

Concrete Delivery 07/01/2017
\$ 36.255

SUPPLEMENTAL BENEFITS

Per Hour:

Heavy Construction Work 07/01/2017
Concrete Delivery \$ 40.665

Light Construction Work 07/01/2017
Concrete Delivery \$ 12.775

OVERTIME PAY

NOTE: Heavy Construction:B2,I
Light Construction:B,E,P

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, *16, **25) on HOLIDAY PAGE
NOTE:(*16) Paid at Double if Worked. (**25) Paid at Double if Worked.

4-282ns

Teamster - Heavy&Highway **10/01/2017**

JOB DESCRIPTION Teamster - Heavy&Highway

DISTRICT 4

ENTIRE COUNTIES

Nassau, Suffolk

WAGES

Per Hour:

Heavy Construction Work:

Shall include the construction, improvement or modification of all or any part of Streets, Highways, Bridges, Tunnels, Railroads, Canals, Dams, Airports, Schools, Power Generation Plants.

Site Excavating 07/01/2017
(Chauffeurs) \$ 37.545

Light Construction Work:

Shall include the construction, improvment and modification of Single & Multi Family Homes, Town Houses, Apartment Buildings, including Driveways, Streets and Curbs within those projects. Parking Lots and Office Buildings.

Site Excavating 07/01/2017
(Chauffeurs) \$ 32.42

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2017

Heavy Construction Work
Chauffeurs \$ 44.3725

Light Construction Work
Chauffeurs \$ 11.55

OVERTIME PAY

See (B, *B2, E, **I, P, ***R, ****U) on OVERTIME PAGE

(NOTE) PREMIUM PAY of 25% on straight time hours for NEW YORK STATE D.O.T. and or other GOVERNMENTAL MANDATED off shift work.

Note: (B,E,P,T & *U) Apply to Heavy Construction.

Note: (B2,I,T & *U) Apply to Light Construction.

Note: (*U) Only applies after 8 hours work on holiday

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, *16, **25) on HOLIDAY PAGE

NOTE:(*16) Paid at Double if Worked. (**25) Paid at Double if Worked.

4-282

Welder

10/01/2017

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 07/01/2017

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, if worked

- (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, if worked
- (U) Four times the hourly rate for Holidays, if worked
- (V) Including benefits at SAME PREMIUM as shown for overtime
- (W) Time and one half for benefits on all overtime hours.

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



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

NOTE: The agency issuing the determination and providing the information, is denoted under the heading 'Fiscal Officer'. DOL = NYS Dept. of Labor; NYC = New York City Comptroller's Office; AG = NYS Attorney General's Office; DA = County District Attorney's Office.

A list of those barred from bidding, or being awarded, any public work contract or subcontract with the State, under section 141-b of the Workers' Compensation Law, may be obtained at the following link, on the NYS DOL Website:

<https://dbr.labor.state.ny.us/EDList/searchPage.do>

NYSDOL Bureau of Public Work Debarment List 05/17/2017

Article 8

AGENCY	Fiscal Officer	FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	DOL		4618 FOSTER AVE LLC		C/O KAHAN & KAHAN 225 BROADWAY-SUITE 715NEW YORK NY 10007	02/05/2013	02/05/2018
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	****4486	ABBEY PAINTING CORP		21107 28TH AVENUE BAYSIDE NY 11360	07/02/2012	07/02/2017
DOL	DOL	****9095	ABDO TILE CO		6179 EAST MOLLOY ROAD EAST SYRACUSE NY 13057	06/25/2010	07/02/2017
DOL	DOL	****9095	ABDO TILE COMPANY		6179 EAST MOLLOY ROAD EAST SYRACUSE NY 13057	06/25/2010	07/02/2017
DOL	NYC		ABDUL KARIM		C/O NORTH AMERICAN IRON W 1560 DECATUR STREETRIDGWOOD NY 11385	05/15/2015	05/15/2020
DOL	DOL	****8488	ABELCRAFT OF NEW YORK CORP		640 ASHFORD AVENUE ARDSLEY NY 10502	08/27/2013	08/27/2018
DOL	DOL	****1219	ABSOLUTE GENERAL CONTRACTING INC		1229 AVENUE U BROOKLYN NY 11229	01/28/2013	01/28/2018
DOL	DOL	****4539	ACCOMPLISHED WALL SYSTEMS INC		112 OSCAWANA HEIGHTS ROAD PUTNAM VALLEY NY 10542	08/27/2013	08/27/2018
DOL	DOL	****8018	ACCURATE MECHANICAL LLC		9547 BUSTLETON AVENUE PHILADELPHIA PA 19115	02/05/2014	02/05/2019
DOL	DOL		ACCURATE MECHANICAL OF PHILADELPHIA LLC		9547 BUSTLETON AVENUE PHILADELPHIA PA 19115	02/05/2014	02/05/2019
DOL	DOL	****3344	ACT INC		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	NYC		ADRIANA SELA	C/O COLONIAL ROOFING COMPANY INC	247 48TH STREET BROOKLYN NY 11220	02/05/2014	02/05/2019
DOL	DOL	****6367	ADVANCED METALS		387 RIVERSIDE DRIVE JOHNSON CITY NY 13790	10/01/2012	10/01/2017
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	****2538	AGG MASONRY INC		160 72ND ST - SUITE 721 BROOKLYN NY 11209	03/19/2013	03/19/2018
DOL	DOL		AJ TORCHIA		10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL		ALISHER KARIMOV		C/O AGG MASONRY INC 7105 3RD AVENUEBROOKLYN NY 11209	03/19/2013	03/19/2018
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 IMPROVEMEN T	10153 ROBERTS RD SAUQUOIT NY 13456	08/09/2016	08/09/2021
DOL	DOL	****4274	AMERICAN STEEL MECHANICAL INC		693 PAINTER STREET MEDIA PA 19063	02/20/2013	02/20/2018
DOL	DOL		ANDREW DIPAUL		C/O CONSOLIDATED INDUSTRI 2051 ROUTE 44/55MODENA NY 12548	12/11/2012	12/11/2017
DOL	NYC		ANDRZEJ WROBEL		24 CONGRESS LANE SOUTH RIVER NJ 08882	05/01/2013	05/01/2018
DOL	NYC		ANISUL ISLAM		C/O RELIANCE GENERAL CONS 644 OCEAN PARKWAYBROOKLYN NY 11230	09/02/2015	09/02/2020
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

NYS DOL Bureau of Public Work Debarment List 05/17/2017

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DOL	DOL	****3020	APCO CONTRACTING CORP		24 SOUTH MARYLAND AVENUE PORT WASHINGTON NY 11050	09/24/2012	09/02/2020
DOL	DOL	****3219	APOLLO CONSTRUCTION SERVICES CORP	APOLLO PAINTING CO	157 TIBBETTS ROAD YONKERS NY 10705	03/12/2014	03/12/2019
DOL	DOL		APOLLO PAINTING CO		157 TIBBETTS ROAD YONKERS NY 10705	03/12/2014	03/12/2019
DOL	DOL	****3295	APOLLO PAINTING CORP		3 ALAN B SHEPART PLACE YONKERS NY 10705	03/12/2014	03/12/2019
DOL	AG	****0194	APPLIED CONSTRUCTION INC		46 RUGBY ROAD WESTBURY NY 11590	11/20/2013	11/20/2018
DOL	NYC	****8403	AQUA JET PAINTING CORP		10 VIKING DRIVE WEST ISLIP NY 11795	04/16/2014	04/16/2019
DOL	NYC	****9232	ARKAY CONSTRUCTION INC		102-104 GREYLOCK AVENUE BELLEVILLE NJ 07109	07/15/2015	07/15/2020
DOL	DOL	****3953	ASCAPE LANDSCAPE & CONSTRUCTION CORP		634 ROUTE 303 BLAUVELT NY 10913	07/26/2012	11/19/2018
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		AUDLEY O'BRIEN		1273 NORTH AVENUE/#1 CP NEW ROCHELLE NY 10804	04/07/2015	04/07/2020
DOL	DOL		AVIS R HILL		3510 HICKORY WALK LANE ELLENWOOD GA 32094	01/22/2015	01/22/2020
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	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	DOL		BEVERLY F WILLIAMS		1238 PRESIDENT STREET BROOKLYN NY 11225	11/18/2013	11/18/2018
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	****6156	C & J LANDSCAPING & MAINTENANCE INC		520 PINE HILL ROAD CHESTER NY 10940	06/23/2014	06/23/2019
DOL	DOL		CARIBBEAN POOLS		C/O DOUGLAS L MALARKEY 64 VICTORIA DRIVEBINGHAMTON NY 13904	02/04/2016	02/04/2021
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	****8530	CAZ CONTRACTING CORP		37-11 35TH AVENUE LONG ISLAND CITY NY 11101	08/26/2013	08/26/2018
DOL	DOL	****8809	CBE CONTRACTING CORP		142 EAST MARKET STREET LONG BEACH NY 11561	03/07/2017	03/07/2022
DOL	DOL	****5556	CERTIFIED INSTALLERS INC		113 N MAPLE AVENUE GREENSBURG PA 15601	02/21/2013	02/21/2018
DOL	DOL	****7655	CHAMPION CONSTRUCTION SERVICES CORP		2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020
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

NYSDOL Bureau of Public Work Debarment List 05/17/2017

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DOL	DOL	****3360	CITY LIMITS GROUP INC		2279 HOLLERS AVENUE BRONX NY 10475	01/07/2014	06/23/2019
DOL	DOL	****0671	CJ-HEARNE CONSTRUCTION CO		SUITE 204 131 PONCE DE LEON AVENUE ATLANTA GA 30308	12/01/2015	12/01/2020
DOL	NYC	****2905	COLONIAL ROOFING COMPANY INC		247 48TH STREET BROOKLYN NY 11220	02/05/2014	02/05/2019
DOL	NYC	****3182	COLORTECH INC		5990 58TH AVENUE MASPETH NY 11378	11/18/2013	11/18/2018
DOL	DOL	****2703	CONKLIN'S TECH- MECHANICAL INC		5 PARKER AVENUE POUGHKEEPSIE NY 12601	03/25/2014	03/25/2019
DOL	DOL	****4175	CONSOLIDATED INDUSTRIAL SERVICES INC		2051 ROUTE 44/55 MODENA NY 12548	12/11/2012	01/28/2018
DOL	DOL		CONSTANTINOS ZERVAS		37-11 35TH AVENUE LONG ISLAND CITY NY 11101	08/26/2013	08/26/2018
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	****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		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	NYC		DAWN AVILA AKA DAWN BECHTOLD		1ST FLOOR STORE FRONT 88-10 LITTLE NECK PARKWAY FLORAL PARK NY 11001	06/24/2014	06/24/2019
DOL	NYC		DAWN BECHTOLD AKA DAWN AVILA		1ST FLOOR STORE FRONT 88-10 LITTLE NECK PARKWAY FLORAL PARK NY 11001	06/24/2014	06/24/2019
DOL	DOL		DEAN ROBBINS III		212 OXFORD WAY SCHENECTADY NY 12309	12/11/2012	09/16/2018
DOL	DOL		DEBBIE STURDEVANT		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	NYC	****3865	DECOMA BUILDING CORPORATION		134 EVERGREEN PL/STE 101 EAST ORANGE NJ 07018	12/30/2013	12/30/2018
DOL	DOL		DEDA GAZIVODAN		C/O DAKA PLUMBING AND H 2561 ROUTE 55 POUGHQUAG NY 12570	02/19/2016	02/19/2021
DOL	DOL	****1446	DELTA CONTRACTING PAINTING AND DECORATING INC		437 SUNRISE HIGHWAY WEST BABYLON NY 11707	08/12/2013	08/12/2018
DOL	DOL	****3538	DELTA CONTRACTING PAINTING AND DESIGN INC		75 MCCULLOCH DRIVE DIX HILLS NY 11746	10/19/2010	08/12/2018
DOL	DOL		DEMETRIOS KOUTSOURAS		530 BEECH STREET NEW HYDE PARK NY 11040	07/02/2012	07/02/2017
DOL	DOL		DENNIS SCHWANDTNER		C/O YES SERVICE AND REPAIR 145 LODGE AVE HUNTINGTON STATION NY 11476	08/09/2016	08/09/2021
DOL	DOL	****9868	DESANTIS ENTERPRISES		161 OSWEGO RIVER ROAD PHOENIX NY 13135	09/24/2013	11/18/2018
DOL	NYC	****8234	DEWATERS PLUMBING AND HEATING LLC		30 COLUMBUS CIRCLE EASTCHESTER NY 10709	08/21/2012	08/21/2017
DOL	DOL	****9252	DI BERNARDO TILE AND MARBLE CO INC		15 WALKER WAY ALBANY NY 12205	03/21/2014	03/21/2019
DOL	DOL		DIANE DEAVER		731 WARWICK TURNPIKE HEWITT NJ 07421	06/25/2012	12/11/2017
DOL	NYC		DIMITRIOS KOUTSOUKOS		C/O ASTORIA GENERAL CONTR 35-34 31ST STREET LONG ISLAND CITY NY 11106	09/02/2015	09/02/2020
DOL	DA	****6789	DOL	DBA NAME QMC	BUILDING 12 ALBANY NY 12240	12/01/2017	12/01/2018

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DOL	DOL		DORIS SKODA		C/O APCO CONTRACTING CORP 24 SOUTH MARYLAND AVENUE PORT 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
DOL	DOL		DOUGLAS L MALARKEY	MALARKEY CONSTRUCTION	64 VICTORIA DRIVE B INGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL	****6982	DUFOUR GROUP INC	DUFOUR MASONRY	353 WEST 56TH STREET #7M NEW YORK NY 10019	06/10/2014	06/10/2019
DOL	DOL		DUFOUR MASONRY		353 WEST 56TH ST #7M NEW YORK NY 10019	06/10/2014	06/10/2019
DOL	DOL		DUFOUR MASONRY & RESTORATION INC		353 WEST 56TH STREET #7M NEW YORK NY 10019	06/10/2014	06/10/2019
DOL	DOL	****5840	DYNA CONTRACTING INC		363 88TH STREET BROOKLYN NY 11209	11/18/2013	11/18/2018
DOL	DOL		E C WEBB		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL		EARL GALBREATH		640 ASHFORD AVENUE ARDSLEY NY 10502	08/27/2013	08/27/2018
DOL	DOL		EARL L WILSON	WILSON BROTHER DRYWALL CONTRACTORS	36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
DOL	DOL	****1496	EAST COAST DRYWALL INC		1238 PRESIDENT STREET BROOKLYN NY 11225	11/18/2013	11/18/2018
DOL	DOL		EDWARD L GAUTHIER		C/O IMPERIAL MASONRY REST 141 ARGONNE DRIVE KENMORE NY 14217	10/03/2012	10/03/2017
DOL	NYC		EDWARD MENKEN		C/O AQUA JET PAINTING 10 VIKING DRIVE WEST ISLIP NY 11795	04/16/2014	04/16/2019
DOL	NYC	****0900	EF PRO CONTRACTING INC		147 BROOME AVENUE ATLANTIC BEACH NY 11509	03/03/2014	03/03/2019
DOL	NYC		EFSTRATIOS BERNARDIS		23-73 48TH STREET LONG ISLAND CITY NY 11103	04/24/2014	04/24/2019
DOL	DOL		ELIZABETH RAMADANI		C/O RAMADA CONSTRUCTION 80 SAVO LOOP STATEN ISLAND NY 10309	01/07/2014	01/07/2019
DOL	DOL		ELLEN DESANTIS	DESANTIS ENTERPRISES	161 OSWEGO RIVER ROAD PHOENIX NY 13135	09/24/2013	11/18/2018
DOL	DOL	****0780	EMES HEATING & PLUMBING CONTR		5 EMES LANE MONSEY NY 10952	01/20/2002	01/20/3002
DOL	AG		EMILIO FRANZA		90 JUNIUS STREET BROOKLYN NY 11212	01/23/2014	01/23/2019
DOL	DOL		EMPIRE CONCRETE SERVICES LLC		101 SULLYS TRAIL/SUITE 20 PITTSFORD NY 14534	11/18/2013	01/07/2019
DOL	DOL	****0511	EMPIRE CONCRETE SYSTEMS LLC		101 SULLYS TRAIL/ SUITE 2 PITTSFORD NY 14534	11/18/2013	01/07/2019
DOL	DOL	****2353	EMPIRE CONSTRUCTORS LLC		101 SULLYS TRAIL/SUITE 20 PITTSFORD NY 14534	11/18/2013	01/07/2019
DOL	DOL		EMPIRE PRECAST LLC		101 SULLYS TRAIL/SUITE 20 PITTSFORD NY 14534	11/18/2013	01/07/2019
DOL	DOL	****3270	EMPIRE TILE INC		6 TREMONT COURT HUNTINGTON STATION NY 11746	03/08/2016	03/08/2021
DOL	DOL		ERIKA BARNETT		253 BEACH BREEZE LANE UNIT BARVERNE NY 11692	02/05/2013	02/05/2018
DOL	DOL		ESTEVEES & FRAGA CONSTRUCTION CO INC		986 MADISON AVENUE PATERSON NJ 07501	01/03/2013	01/03/2018
DOL	DOL		ESTEVEES & FRAGA INC		986 MADISON AVENUE PATERSON NJ 07501	01/03/2013	01/03/2018
DOL	DOL		EVELIO ELLEDIAS		114 PEARL STREET PORT CHESTER NY 10573	08/15/2012	08/15/2017
DOL	NYC		EVERTON CARLESS		134 EVERGREEN PL/STE 101 EAST ORANGE NJ 07018	12/30/2013	12/30/2018
DOL	DOL	****7403	F & B PAINTING CONTRACTING INC		2 PARKVIEW AVENUE HARRISON NY 10604	09/26/2016	09/26/2021
DOL	DOL		F KALAFATIS		2279 HOLLERS AVENUE BRONX NY 10475	01/07/2014	06/23/2019
DOL	DOL		FANTASTIC PAINTING		493 LANSING ROAD FULTONVILLE NY 12072	11/18/2013	11/18/2018

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DOL	DOL		FAY MATTHEW		C/O CHAMPION CONSTRUCTION 2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	DOL		FAZIA GINA ALI-MOHAMMED	C/O CHAMPION CONSTRUCTION	2131 SCHENECTADY AVENUE BROOKLYN NY 11234	11/18/2015	11/18/2020
DOL	DOL	****1311	FLOZ-ON PAINTING & DECORATING INC		12 DUNDERBERG ROAD TOMKINS NY 10986	10/16/2013	10/16/2018
DOL	DOL	****8961	FLOZ-ON PAINTING INC		12 DUNDERBERG ROAD TOMKINS NY 10986	10/16/2013	10/16/2018
DOL	DOL		FMS		4 LEGHORN COURT NEW YORK NY 11746	11/28/2012	11/28/2017
DOL	DOL	****8067	FORTH SPORT FLOORS INC		P O BOX 74 EAST GREENBUSH NY 12061	02/28/2012	10/01/2017
DOL	DOL		FRAN MICELI		2279 HOLLERS AVENUE BRONX NY 10475	01/07/2014	06/23/2019
DOL	DOL		FRANCES KALAFATIS		2279 HOLLERS AVENUE BRONX NY 10475	01/07/2014	06/23/2019
DOL	DOL		FRANCES KALAFATIS-MICELI		2279 HOLLERS AVENUE BRONX NY 10475	01/07/2014	06/23/2019
DOL	DOL		FRANK BENEDETTO		C/O F & B PAINTING CONTRA 2 PARKVIEW AVENUE HARRISON NY 10604	09/26/2016	09/26/2021
DOL	DOL		FRANK DEMARTINO		101-61 99TH STREET OZONE PARK NY 11416	02/15/2017	02/15/2022
DOL	DOL		FRANK J MERCANDO		134 MURRAY AVENUE YONKERS NY 10704	12/11/2009	02/03/2019
DOL	DOL		FRANK MICELI JR	C/O FRANK MICELI JR CONTRACTING INC	19 CLIFF STREET NEW ROCHELLE NY 10801	10/16/2013	10/16/2018
DOL	DOL	****1321	FRANK MICELI JR CONTRACTING INC		19 CLIFF STREET NEW ROCHELLE NY 10801	10/16/2013	10/16/2018
DOL	DOL		FRED ABDO	ABDO TILE COMPANY AKA ABDO TILE CO	6179 EAST MOLLOY ROAD EAST SYRACUSE NY 13057	06/25/2010	07/02/2017
DOL	DOL	****2724	FRESH START PAINTING CORP		157 TIBBETS ROAD YONKERS NY 10705	03/12/2014	03/12/2019
DOL	DOL		G FUCCI CONSTRUCTION SERVICES		3 ALAN B SHEPARD PLACE YONKERS NY 10705	03/12/2014	03/12/2019
DOL	DOL	****6767	G FUCCI PAINTING INC		C/O SPIEGEL & UTRERA 1 MAIDEN LANE - 5TH FL NEW YORK NY 10038	03/12/2014	03/12/2019
DOL	DOL	****4546	GAF PAINTING LLC		157 TIBBETS ROAD YONKERS NY 10705	03/12/2014	03/12/2019
DOL	DOL		GALINDA ROTENBERG		C/O GMDV TRANS INC 67-48 182ND STREET FRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	DOL		GARDEN STATE PAINTING		157 TIBBETS ROAD YONKERS NY 10705	03/12/2014	03/12/2019
DOL	DOL		GARY MCDOWELL	GM CONSTRUCTION & LAWN CARE SERVICE	76 PLEASANT STREET WELLSVILLE NY 14895	06/11/2013	06/11/2018
DOL	DOL		GEORGE DI BERNARDO		C/O DI BERNARDO TILE 15 WALKER WAY ALBANY NY 12205	03/21/2014	03/21/2019
DOL	DA		GEORGE LUCEY		150 KINGS STREET BROOKLYN NY 11231	01/19/1998	01/19/2998
DOL	DOL	****1075	GLOBAL TANK CONSTRUCTION LLC		P O BOX 1238 SALINA OK 74365	11/28/2012	11/28/2017
DOL	DOL	****0878	GM CONSTRUCTION & LAWN CARE SERVICE		76 PLEASANT STREET WELLSVILLE NY 14895	06/11/2013	06/11/2018
DOL	DOL	****5674	GMDV TRANS INC		67-48 182ND STREET FRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	DOL	****0090	GOLDS FLOORING INSTALLATIONS INC		25 HAMILTON ROAD MONTICELLO NY 12701	10/16/2013	10/16/2018
DOL	DOL		GREGORY A FUCCI		C/O PAF PAINTING SERVICES 157 TIBBETS ROAD YONKERS NY 10705	03/12/2014	03/12/2019
DOL	DOL		GREGORY FUCCI JR		C/O APOLLO CONSTRUCTION 157 TIBBETS ROAD YONKERS NY 10705	03/12/2014	03/12/2019
DOL	DOL	****9456	GUILLO CONTRACTING CORP		P O BOX 229 CALVERTON NY 11933	07/08/2013	07/08/2018

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DOL	NYC	****0346	H N H CONTRACTORS CORP		4558 BROADWAY # 6 NEW YORK NY 10040	08/04/2014	08/04/2019
DOL	DOL		HALSSAM FOSTOK		5 HANSEN PLACE WAYNE NJ 07470	09/18/2013	09/18/2018
DOL	NYC		HAMEEDUL HASAN		240 HOME STREET TEANECK NJ 07666	08/04/2014	08/04/2019
DOL	AG	****9918	HARA ELECTRIC CORP		2461 47TH STREET ASTORIA NY 11103	09/26/2013	09/26/2018
DOL	NYC		HARMEL SINGH		15 CLINTON LANE HICKSVILLE NY 11801	02/25/2016	02/25/2021
DOL	NYC		HAROLD KUEMMELE		58-83 54TH STREET MASPETH NY 11378	02/26/2016	02/26/2021
DOL	AG		HARVINDER SINGH PAUL		90 JUNIUS STREET BROOKLYN NY 11212	01/23/2014	01/23/2019
DOL	DOL		HENRY VAN DALRYMPLE		2663 LANTERN LANE ATLANTA GA 30349	12/01/2015	12/01/2020
DOL	DOL		HI-TECH CONTRACTING CORP		114 PEARL STREET PORT CHESTER NY 10573	08/15/2012	08/15/2017
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	****8426	IMPERIAL MASONRY RESTORATION INC		141 ARGONNE DRIVE KENMORE NY 14217	10/03/2012	10/03/2017
DOL	DOL	****7001	INTEGRATED CONSTRUCTION & POWER SYSTEMS INC		SUITE 100 2105 W GENESEE STREETS YRACUSE NY 13219	01/06/2016	01/06/2021
DOL	DOL		ISABEL FRAGA		C/O THREE FRIENDS CONSTR 986 MADISON AVENUE PATERSON NJ 07501	01/03/2013	01/03/2018
DOL	AG	****0000	J A M CONSTRUCTION CORP		SUITE 125 265 SUNRISE HIGHWAY ROCKVILLE CENTRE NY 10457	04/07/2016	04/07/2021
DOL	DOL	****7598	J M RICH LLC		P O BOX 268 STILLWATER NY 12170	09/16/2013	03/21/2019
DOL	DOL	****3478	J N P CONSTRUCTION CORP		50 LOUIS COURT P O BOX 1907 SOUTH HACKENSACK NY 07606	03/21/2014	03/21/2019
DOL	DOL		J N RICH LLC		P O BOX 268 STILLWATER NY 12170	09/16/2013	03/21/2019
DOL	DOL	****9368	J TECH CONSTRUCTION		PO BOX 64782 ROCHESTER NY 14624	09/24/2012	09/24/2017
DOL	DOL		J THE HANDYMAN			09/24/2012	09/24/2017
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		JACQUELINE HOWE		C/O FLOZ-ON PAINTING INC 12 DUNDERBERG ROAD TOMKINS NY 10986	10/16/2013	10/16/2018
DOL	DOL	****8627	JAG I LLC		635 LUZERNE ROAD QUEENSBURY NY 12804	09/16/2013	09/16/2018
DOL	DOL	****2868	JAG INDUSTRIES INC		175 BROAD ST - SUITE 320 GLENS FALLS NY 12801	09/16/2013	09/16/2018
DOL	DOL		JAMES B RHYNDERS		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL		JAMES BOYCE		C/O EMPIRE CONCRETE SYST 101 SULLYS TRAIL/SUITE 20 PITTSFORD NY 14534	11/18/2013	01/07/2019
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 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 M RICH		P O BOX 268 STILLWATER NY 12170	09/16/2013	03/21/2019
DOL	DOL		JASON W MILLIMAN		C/O ROCHESTER ACOUSTICAL P O BOX 799 HILTON NY 14468	02/19/2016	02/19/2021

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DOL	DOL		JAY PRESUTTI		C/O CONSOLIDATED INDUSTRI 2051 ROUTE 44/55MODENA NY 12548	01/28/2013	01/28/2018
DOL	DOL		JEFF P BRADLEY		520 PINE HILL ROAD CHESTER NY 10940	06/23/2014	06/23/2019
DOL	NYC		JEFFREY CASSIDY		14 RAILROAD AVENUE VALHALLA NY 10595	05/15/2014	04/02/2020
DOL	DOL		JERALD HOWE		C/O FLOZ-ON PAINTING INC 12 DUNDERBERG ROADTOMKINS NY 10986	10/16/2013	10/16/2018
DOL	DOL		JEROME LACITIGNOLA		C/O CATSKILL FENCE INSTAL 5445 ROUTE 32 CATSKILL NY 12414	08/22/2014	08/22/2019
DOL	NYC		JERRY DEWATERS		30 COLUMBUS CIRCLE EASTCHESTER NY 10709	08/21/2012	08/21/2017
DOL	DOL		JESSICA WHITESIDE		C/O BRRESTORATION NY INC 140 ARCADIA AVENUEOSWEGO NY 13126	09/12/2016	09/12/2021
DOL	DOL		JOHN DESCUL		437 SUNRISE HIGHWAYA WEST BABYLON NY 11704	08/12/2013	08/12/2018
DOL	DOL		JOHN H LEE	JOHN LEE QUALITY PAVING	67 WILER ROAD HILTON NY 14468	01/28/2013	01/28/2018
DOL	DOL	*****1749	JOHN LEE QUALITY PAVING		67 WILER ROAD HILTON NY 14468	01/28/2013	01/28/2018
DOL	DOL		JON E DEYOUNG		261 MILL ROAD P O BOX 296EAST AURORA NY 14052	07/29/2015	07/29/2020
DOL	DOL	*****9368	JORGE I DELEON	J TECH CONSTRUCTI ON	PO BOX 64782 ROCHESTER NY 14624	09/24/2012	09/24/2017
DOL	DOL		JORGE VILLALOBOS		94-25 57TH AVENUE - APT 5 ELMHURST NY 11373	01/12/2015	01/12/2020
DOL	DOL		JOSE MONTAS		27 BUTLER PLACE YONKERS NY 10710	03/18/2011	03/19/2020
DOL	AG		JOSEPH FALCONE		SUITE 125 265 SUNRISE HIGHWAYROCKVILLE 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	DOL		JOSEPH MARTONE		112 OSCAWANA HEIGHTS ROAD PUTNAM VALLEY NY 10542	08/27/2013	08/27/2018
DOL	DOL		JOSHUA DEBOWSKY		9547 BUSTLETON AVENUE PHILADELPHIA PA 19115	02/05/2014	02/05/2019
DOL	DOL		JOYA MUSCOLINO		10 ST CHARLES STREET THORNWOOD NY 10594	09/03/2013	09/03/2018
DOL	DOL		JUANA MARTINEZ		C/O LEAD CONSTRUCTION 27 BUTLER PLACEYONKERS NY 10710	03/19/2015	03/19/2020
DOL	DOL	*****4340	JUBCO SITE DEVELOPMENT LLC		462 LAKEVIEW AVENUE VALHALLA NY 10595	12/16/2013	12/16/2018
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		KAREN HARTMAN		C/O GUILLO CONTRACTING P O BOX 229CALVERTON NY 11933	07/08/2013	07/08/2018
DOL	NYC		KATHLEEN SELA	C/O COLONIAL ROOFING COMPANY INC	247 48TH STREET BROOKLYN NY 11220	02/05/2014	02/05/2019
DOL	DOL		KEITH SCHEPIS		C/O KJS HAULING AND HOME 95 MAPLE AVENUENEW CITY NY 10956	04/15/2013	04/15/2018
DOL	DOL		KEN DEAVER		731 WARWICK TURNPIKE HEWITT NJ 07421	06/25/2012	12/11/2017
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

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DOL	DOL	****2463	KJS HAULING AND HOME IMPROVEMENT INC		95 MAPLE AVENUE NEW CITY NY 10956	04/15/2013	04/15/2018
DOL	AG		KOSTAS "GUS" ANDRIKOPOULOS		2461 47TH STREET ASTORIA NY 11103	09/26/2013	09/26/2018
DOL	DOL	****6033	KUSNIR CONSTRUCTION		2677 ANAWALK ROAD KATONAH NY 10536	08/03/2012	08/03/2017
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	DOL	****4505	LARAPINTA ASSOCIATES INC		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	DOL		LARRY DOMINGUEZ		114 PEARL STREET PORT CHESTER NY 10573	08/15/2012	08/15/2017
DOL	DOL		LAURA A. GAUTHIER		C/O IMPERIAL MASONRY REST 141 ARGONNE DRIVEKENMORE NY 14217	10/03/2012	10/03/2017
DOL	DOL		LAURI MARTONE		112 OSCAWANA HEIGHTS ROAD PUTNAM VALLEY NY 10542	08/27/2013	08/27/2018
DOL	DOL		LAVERN GLAVE		C/O RAW POWER ELECTRIC 3 PARK CIRCLEMIDDLETOWN NY 10940	09/15/2014	09/15/2019
DOL	DOL		LAWRENCE J RUGGLES		P O BOX 371 ROUND LAKE NY 12151	05/12/2014	05/12/2019
DOL	DOL	****1364	LEAD CONSTRUCTION SERVICES INC		3 ALAN B SHEPARD PLACE YONKERS NY 10705	03/19/2015	03/19/2020
DOL	DOL	****0597	LEED INDUSTRIES CORP	HI-TECH CONTRACTING CORP	114 PEART STREET PORT CHESTER NY 10573	08/15/2012	08/15/2017
DOL	DOL	****4388	LEN J CONSTRUCTION LLC		P O BOX 10007 ALBANY NY 12201	06/24/2016	01/30/2022
DOL	AG		LEONID FRIDMAN		APT 5 200 BRIGHTON, 15TH STBROOKLYN NY 11235	01/23/2014	01/23/2019
DOL	DOL		LEROY NELSON JR		C/O LEN J CONSTRUCTION LL P O BOX 10007ALBANY NY 12201	06/24/2016	01/30/2022
DOL	DOL		LINDSEY R CRILL		143 FILLMORE AVENUE BUFFALO NY 14210	01/08/2015	01/08/2020
DOL	DOL	****8453	LINPHILL ELECTRICAL CONTRACTORS INC		523 SOUTH 10TH AVENUE MOUNT VERNON NY 10553	01/07/2011	04/15/2018
DOL	DOL		LINVAL BROWN		523 SOUTH 10TH AVENUE MOUNT VERNON NY 10553	01/07/2011	04/15/2018
DOL	NYC	****2850	M A 2 FLAGS CONTRACTING CORP		25-18 100TH STREET EAST ELMHURST NY 11369	08/21/2013	08/21/2018
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	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	NYC	****3141	MACKIEY REED ELECTRIC INC		1ST FLOOR STORE FRONT 88-10 LITTLE NECK PARKWAYFLORAL PARK NY 11001	06/24/2014	06/24/2019
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	DOL		MAR CONTRACTING CORP		620 COMMERCE STREET THORNWOOD NY 10594	09/24/2012	09/24/2017
DOL	DOL		MARGARET FORTH		P O BOX 74 EAST GREENBUSH NY 12061	02/28/2012	10/01/2017

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DOL	DOL		MARIA ESTEVES AKA MARIA MARTINS		C/O THREE FRIENDS CONSTR 986 MADISON AVENUEPATERSON NJ 07501	01/03/2013	01/03/2018
DOL	DOL		MARIA MARTINS AKA MARIA ESTEVES		C/O THREE FRIENDS CONSTR 986 MADISON AVENUEPATERSON NJ 07501	01/03/2013	01/03/2018
DOL	DOL		MARIACHI'S PIZZERIA		C/O DOUGLAS L MALARKEY 64 VICTORIA DRIVEBINGHAMTON NY 13904	02/04/2016	02/04/2021
DOL	DOL		MARIO LUIS		31 DURANT AVENUE BETHEL CT 06801	07/02/2012	07/02/2017
DOL	DOL		MARK MIONIS		6409 LAND O LAKES BLVD LAND O LAKES FL 34638	11/10/2015	11/10/2020
DOL	DOL	*****5533	MARQUISE CONSTRUCTION & DEVELOPMENT CORP		10 ST CHARLES STREET THORNWOOD NY 10594	09/03/2013	09/03/2018
DOL	DOL	*****8810	MARQUISE CONSTRUCTION ASSOCIATES INC		20 BOSWELL ROAD PUTNAM VALLEY NY 10579	09/03/2013	09/03/2018
DOL	DOL	*****1134	MARQUISE CONSTRUCTION CORP		10 ST CHARLES STREET THORNWOOD NY 10594	09/03/2013	09/03/2018
DOL	DOL		MARVIN A STURDEVANT		29 MAPLEWOOD DRIVE BINGHAMTON NY 13901	02/21/2017	02/21/2022
DOL	DOL		MATTHEW IDEMA GENERAL CONTRACTORS INC		91 COLLEGE AVENUE POUGHKEEPSIE NY 12603	12/04/2015	12/04/2020
DOL	DOL	*****6416	MCCALL MASONRY		P O BOX 304 SAYRE PA 18840	08/09/2016	08/09/2021
DOL	DOL	*****9028	MCINTOSH INTERIORS LLC		8531 AVENUE B BROOKLYN NY 11236	02/05/2013	02/05/2018
DOL	DOL	*****4259	MERCANDO CONTRACTING CO INC		134 MURRAY AVENUE YONKERS NY 10704	12/11/2009	02/03/2019
DOL	DOL	*****0327	MERCANDO INDUSTRIES LLC		134 MURRAY AVENUE YONKERS NY 10704	12/11/2009	02/03/2019
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	DOL	*****9198	MICHAEL CZECHOWICZ	OCTAGON CO	37-11 35TH AVENUE-2ND FL LONG ISLAND CITY NY 11101	01/08/2013	01/08/2018
DOL	DOL		MICHAEL F LEARY JR		3813 SNOWDEN HILL ROADNEW HARTFORD NY 13413	06/19/2013	06/19/2018
DOL	DOL		MICHAEL F LEARY JR METAL STUD & DRYWALL		3813 SNOWDEN HILL ROAD NEW HARTFORD NY 13413	06/19/2013	06/19/2018
DOL	NYC		MICHAEL HIRSCH		C/O MZM CORP 163 S MAIN STREETNEW CITY NY 10956	01/28/2016	01/28/2021
DOL	DOL		MICHAEL KTISTAKIS		363 88TH STREET BROOKLYN NY 11209	11/18/2013	11/18/2018
DOL	DOL	*****6033	MICHAEL KUSNIR	KUSNIR CONSTRUCTI ON	2677 ANAWALK ROAD KATONAH NY 10536	08/03/2012	08/03/2017
DOL	DOL		MICHAEL MARGOLIN		4 LEGHORN COURT NEW YORK NY 11746	11/28/2012	11/28/2017
DOL	DOL		MICHAEL WILSON	WILSON BROTHER DRYWALL CONTRACTOR S	36 ABERSOLD STREET ROCHESTER NY 14621	08/31/2015	08/31/2020
DOL	DOL		MICHELLE L BARBER		635 LUZERNE ROAD QUEENSBURY NY 12804	09/16/2013	09/16/2018
DOL	NYC		MIGUEL ACOSTA		25-18 100TH STREET EAST ELMHURST NY 11369	08/21/2013	08/21/2018
DOL	NYC		MILANCE HADZIC		22 CALIFORNIA AVE - STE 1 PATERSON NJ 07503	03/11/2015	03/11/2020
DOL	AG		MOHAMMAD RIAZ		46 RUGBY ROAD WESTBURY NY 11590	11/20/2013	11/20/2018
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	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

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DOL	DOL		MURRAY FORTH		P O BOX 74 EAST GREENBUSH NY 12061	02/28/2012	10/01/2017
DOL	DOL		MUZAFFAR HUSSAIN		C/O ABSOLUTE GENERAL CONT 1129 AVENUE UBROOKLYN NY 11229	01/28/2013	01/28/2018
DOL	NYC	****3613	MZM CORP		163 S MAIN STREET NEW CITY NY 10956	01/28/2016	01/28/2021
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	DOL		NICHOLAS DEGREGORY JR	NJ DEGREGORY & COMPANY	1698 ROUTE 9 GLENS FALLS NY 12801	05/23/2013	05/23/2018
DOL	NYC		NICHOLAS PROVENZANO		147 BROOME AVENUE ATLANTIC BEACH NY 11509	03/03/2014	03/03/2019
DOL	NYC		NICHOLAS PROVENZANO		147 BROOME AVENUE ATLANTIC BEACH NY 11509	03/03/2014	03/03/2019
DOL	DOL	****5279	NJ DEGREGORY & COMPANY		1698 ROUTE 9 GLENS FALLS NY 12801	05/23/2013	05/23/2018
DOL	DOL		NJ DEGREGORY & SONS CONSTRUCTION		1698 ROUTE 9 GLENS FALLS NY 12801	05/23/2013	05/23/2018
DOL	NYC	****1968	NORTH AMERICAN IRON WORKS INC		1560 DECATUR STREET RIDGECREEK 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	****9198	OCTAGON CO		37-11 35TH AVENUE-2ND FL LONG ISLAND CITY NY 11101	01/08/2013	01/08/2018
DOL	NYC	****8337	OPTIMUM CONSTRUCTION INC		23-73 48TH STREET LONG ISLAND CITY NY 11103	04/24/2014	04/24/2019
DOL	NYC		ORSON ARROYO		C/O METRO DUCT SYSTEMS 12-19 ASTORIA BOULEVARDLONG ISLAND CITY NY 11102	04/16/2014	11/19/2020
DOL	DOL	****4546	PAF PAINTING CORP		161 TIBBETTS ROAD YONKERS NY 10705	03/12/2014	03/12/2019
DOL	DOL	****5242	PAF PAINTING SERVICES INC	GARDEN STATE PAINTING	157 TIBBETTS ROAD YONKERS NY 10103	03/12/2014	03/12/2019
DOL	DOL		PAF PAINTING SERVICES OF WESTCHESTER INC		C/O SPIEGEL & UTRERA 1 MAIDEN LANE - 5TH FLNEW YORK NY 10038	03/12/2014	03/12/2019
DOL	DOL	****8802	PAT'S HEATING AND AIR CONDITIONING LTD		P O BOX 371 ROUND LAKE NY 12151	05/12/2014	05/12/2019
DOL	DOL		PATRICIA M RUGGLES		P O BOX 371 ROUND LAKE NY 12151	05/12/2014	05/12/2019
DOL	DOL		PAUL VERNA		C/O AMERICAN STEEL MECHA 693 PAINTER STREETMEDIA PA 19063	02/20/2013	02/20/2018
DOL	DOL	****9569	PERFORM CONCRETE INC		31 DURANT AVENUE BETHEL CT 06801	07/02/2012	07/02/2017
DOL	NYC		PETER LUSTIG		30 COLUMBUS CIRCLE EASTCHESTER NY 10709	08/21/2012	08/21/2017
DOL	DOL		PETER M PERGOLA		3 WEST MAIN ST/SUITE 208 ELMSFORD NY 10523	01/23/2017	01/23/2022
DOL	NYC		PETER TRITARIS		5990 58TH AVENUE MASPETH NY 11378	11/18/2013	11/18/2018
DOL	DOL	****2989	PROFESSIONAL ESTIMATING & BUSINESS CORP		157 TIBBETS ROAD YONKERS NY 10705	03/12/2014	03/12/2019
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	DOL	****0015	RAMADA CONSTRUCTION CORP		80 SAVO LOOP STATEN ISLAND NY 10309	01/07/2014	01/07/2019
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		RANTI K PARIKH		13 LORIANN ROAD WARREN NJ 07059	07/15/2015	07/15/2020

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DOL	DOL	****2633	RAW POWER ELECTRIC CORP		3 PARK PLACE MIDDLETOWN NY 10940	09/16/2013	09/15/2019
DOL	NYC		RAYMOND PEARSON		P O BOX 957 PORT JEFFERSON STA NY 11776	03/12/2014	03/12/2019
DOL	DOL		REBECCA THORNE		113 N MAPLE AVENUE GREENSBURG PA 15601	02/21/2013	02/21/2018
DOL	DOL		REGINALD WARREN		C/O RAW POWER ELECTRIC 3 PARK CIRCLE MIDDLETOWN NY 10940	09/15/2014	09/15/2019
DOL	NYC	****3461	RELIANCE GENERAL CONSTRUCTION INC		644 OCEAN PARKWAY BROOKLYN NY 11230	09/02/2015	09/02/2020
DOL	DOL		REVOLUTIONARY FLOORS LLC		P O BOX 268 STILLWATER NY 12170	09/16/2013	03/21/2019
DOL	DOL		RHINO CONCRETE LLC		101 SULLYS TRAIL/SUITE 20 PITTSFORD NY 14534	11/18/2013	01/07/2019
DOL	DA		RIANN MULLER		2740 SW MARTIN DOWNS BLVD PALM CITY FL 34990	08/25/2016	08/25/2021
DOL	DOL		RICHARD WILSON		C/O DUFOUR GROUP INC 353 WEST 56TH STREET #7M NEW YORK NY 10019	06/10/2014	06/10/2019
DOL	DOL	****8618	RIEKS CONTRACTING LLC		4804 GAHWILER ROAD AUBURN NY 13021	05/01/2015	05/01/2020
DOL	DOL		ROBBYE BISSE SAR		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	01/11/2003	01/11/3003
DOL	DOL	****1855	ROBERT D BISHOP JR	ROBERT D BISHOP JR	P O BOX 112 MORRISONVILLE NY 12962	07/15/2014	07/15/2019
DOL	DOL		ROBERT D BISHOP JR		P O BOX 112 MORRISONVILLE NY 12962	07/15/2014	07/15/2019
DOL	NYC		ROBERT GUIDO		3256 BRUNER AVENUE BRONX NY 10469	07/29/2014	07/29/2019
DOL	DOL		ROBERT L EVANS		128A NORTH STAMFORD ROAD STAMFORD CT 06903	05/23/2013	05/23/2018
DOL	DOL		ROBERT TORDELLA		125 CHAUTAUQUA AVENUE LAKEWOOD NY 14750	06/24/2015	06/24/2020
DOL	DOL		ROCCO ESPOSITO		C/O ROCMAR CONTRACTING CO 620 COMMERCE STREET THORNWOOD NY 10594	09/24/2012	09/24/2017
DOL	DOL	****3859	ROCHESTER ACOUSTICAL CORP		P O BOX 799 HILTON NY 14468	02/19/2016	02/19/2021
DOL	DOL		ROCMAR CONSTRUCTION CORP		620 COMMERCE STREET THORNWOOD NY 10594	09/24/2012	09/24/2017
DOL	DOL	****7083	ROCMAR CONTRACTING CORP		620 COMMERCE STREET THORNWOOD NY 10594	09/24/2012	09/24/2017
DOL	NYC		RODNEY SCOTT		201 HEMPSTEAD AVENUE WEST HEMPSTEAD NY 11552	10/30/2015	10/30/2020
DOL	DOL		ROMEO WARREN		C/O RAW POWER ELECTRIC CORP 3 PARK PLACE MIDDLETOWN NY 10940	09/16/2013	09/15/2019
DOL	DOL		ROSS J MUSCOLINO		10 ST CHARLES STREET THORNWOOD NY 10594	09/03/2013	09/03/2018
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		S & S ELECTRIC		235 BROADWAY SCHENECTADY NY 12306	06/19/2013	06/19/2018
DOL	NYC		SABIR MUHAMMED		SUITE B-8 782 PELHAM PARKWAY SOUTH BRONX 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	DOL	****4923	SCHENLEY CONSTRUCTION INC		731 WARWICK TURNPIKE HEWITT NJ 07421	06/25/2012	12/11/2017
DOL	NYC	****2117	SCOTT ELECTRICAL LLC		201 HEMPSTEAD AVENUE WEST HEMPSTEAD NY 11552	10/30/2015	10/30/2020
DOL	DOL		SCOTT LEONARD	GLOBAL TANK CONSTRUCTION LLC	P O BOX 1238 SALINA OK 74365	11/28/2012	11/28/2017
DOL	DOL	****9751	SCW CONSTRUCTION		544 OLD ROUTE 23 ACRE NY 12405	02/14/2017	02/14/2022
DOL	DOL		SEAKCO CONSTRUCTION COMPANY LLC		128A NORTH STAMFORD ROAD STAMFORD CT 06903	05/23/2013	05/23/2018

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DOL	DOL	****9030	SEAKCO NEW YORK LLC	SEAKCO CONSTRUCTION COMPANY	128A NORTH STAMFORD ROAD STAMFORD CT 06903	05/23/2013	05/23/2018
DOL	DOL		SEAN BURBAGE	C/O SEAN BURBAGE CORP	445 ROOSA GAP ROAD BLOOMINGBURG NY 12721	04/14/2014	04/14/2019
DOL	DOL	****6586	SEAN BURBAGE CORP		445 ROOSA GAP ROAD BLOOMINGBURG NY 12721	04/14/2014	04/14/2019
DOL	NYC		SHAHZAD ALAM		21107 28TH AVE BAYSIDE NY 11360	07/02/2012	07/02/2017
DOL	DOL	****6904	SIGNING STAR LIMITED LIABILITY COMPANY		5 HANSEN PLACE WAYNE NJ 07470	09/18/2013	09/18/2018
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		SPORTSCRAFTERS INC		113 N MAPLE AVENUE GREENSBURG PA 15601	02/21/2013	02/21/2018
DOL	DOL	****3496	STAR INTERNATIONAL INC		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	08/11/2003	08/11/3003
DOL	DOL		STEPHEN BIANCHI		462 LAKEVIEW AVENUE VALHALLA NY 10595	12/16/2013	12/16/2018
DOL	DOL	****9751	STEPHEN C WAGAR		544 OLD ROUTE 23 ACRE NY 12405	02/14/2017	02/14/2022
DOL	DOL		STEPHEON SHELDON	FANTASTIC PAINTING	493 LANSING ROAD FULTONVILLE NY 12072	11/18/2013	11/18/2018
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	DOL		STUART CHAITIN		634 ROUTE 303 BLAUVET NY 10913	07/26/2012	11/19/2018
DOL	NYC	****9432	SUBLINK LTD		346 THIRD AVENUE PELHAM NY 10803	11/19/2015	11/19/2020
DOL	DOL	****3210	SUPER SWEEP	FMS	4 LEGHORN COURT NEW YORK NY 11746	11/28/2012	11/28/2017
DOL	DOL		SUZANNE G GOLD	C/O GOLDS FLOORING INSTALLATION S INC	25 HAMILTON ROAD MONTICELLO NY 12701	10/16/2013	10/16/2018
DOL	DOL	****7441	T & T CONCRETE INC		2560 HAMBURG TURNPIKE P O BOX 367LACKAWANNA NY 14218	07/08/2015	07/08/2020
DOL	DOL	****9676	T D CONTRACTORS CORP	T D CONTRACTORS INC	113 N MAPLE AVENUE GREENSBURG PA 15601	02/21/2013	02/21/2018
DOL	DOL		T D CONTRACTORS INC		113 N MAPLE AVENUE GREENSBURG PA 15601	02/21/2013	02/21/2018
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		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		TECH-MECHANICAL FAB DC INC		5 PARKER AVENUE POUGHKEEPSIE NY 12601	03/25/2014	03/25/2019
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	****8174	THE DALRYMPLE CORPORATION		UNIT 278 541 10TH STREET NWTALANTA 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		THE THORNE GROUP INC		113 N MAPLE AVENUE GREENSBURG PA 15601	02/21/2013	02/21/2018
DOL	DOL	****2070	THE UNIVERSAL GROUP OF NEW YORK INC		212 OXFORD WAY SCHENECTADY NY 12309	12/11/2012	09/16/2018
DOL	DOL	****9243	THE WELCOME MAT PROPERTY MANAGEMENT LLC		P O BOX 268 STILLWATER NY 12170	09/16/2013	03/21/2019

NYS DOL Bureau of Public Work Debarment List 05/17/2017

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DOL	DOL		THOMAS DESANTIS	DESANTIS ENTERPRISES	161 OSWEGO RIVER ROAD PHOENIX NY 13135	09/24/2013	11/18/2018
DOL	NYC		THOMAS SCARINCI		130-43 92ND AVENUE RICHMOND HILLS NY 11418	11/27/2013	11/27/2018
DOL	DOL	****2734	THREE FRIENDS CONSTRUCTION CORP		986 MADISON AVENUE PATERSON NJ 07501	01/03/2013	01/03/2018
DOL	NYC	****6253	THUNDER BROTHERS CORP		24 CONGRESS LANE SOUTH RIVER NJ 08882	05/01/2013	05/01/2018
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		TIMOTHY F BARBER		635 LUZERNE ROAD QUEENSBURY NY 12804	09/16/2013	09/16/2018
DOL	NYC	****1523	TM MECHANICAL CORP		130-43 92ND AVENUE RICHMOND HILLS NY 11418	11/27/2013	11/27/2018
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		TROY D CLARKE	ADVANCED METALS	387 RIVERSIDE DRIVE JOHNSON CITY NY 13790	10/01/2012	10/01/2017
DOL	DOL	****9407	TURBO GROUP INC		15-68 208TH STREET BAYSIDE NY 11360	06/23/2016	06/23/2021
DOL	AG	****6490	UNIVERSAL STEEL FABRICATORS INC		90 JUNIUS STREET BROOKLYN NY 11212	01/23/2014	01/23/2019
DOL	NYC	****7174	V&R CONTRACTING		P O BOX 957 PORT JEFFERSON STA NY 11776	03/12/2014	03/12/2019
DOL	NYC		VALERIE VISCONTI		346 THIRD AVENUE PELHAM NY 10803	11/19/2015	11/19/2020
DOL	NYC		VEAP SELA	C/O COLONIAL ROOFING COMPANY INC	247 48TH STREET BROOKLYN NY 11220	02/05/2014	02/05/2019
DOL	DOL	****3270	VEZANDIO CONTRACTING CORP		530 BEECH STREET NEW HYDE PARK NY 11040	07/02/2012	07/02/2017
DOL	NYC		VICK CONSTRUCTION		21 DAREWOOD LANE VALLEY STREAM NY 11581	12/31/2013	12/31/2018
DOL	NYC		VICKRAM MANGRU	VICK CONSTRUCTION	21 DAREWOOD LANE VALLEY STREAM NY 11581	12/31/2013	12/31/2018
DOL	DOL		VICTOR ROTENBERG		C/O GMDV TRANS INC 67048 182ND STREET FRESH MEADOWS NY 11365	06/24/2016	06/24/2021
DOL	NYC		VINCENT PIZZITOLA		P O BOX 957 PORT JEFFERSON STA NY 11776	03/12/2014	03/12/2019
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		WESLEY J STAROBA		206 TALLY HO COURT SCHENECTADY NY 12303	06/19/2013	06/19/2018
DOL	DOL	****0078	WESLEY J STAROBA INC	S & S ELECTRIC	235 BROADWAY SCHENECTADY NY 12306	06/19/2013	06/19/2018
DOL	DOL		WILLIAM CONKLIN		5 PARKER AVENUE POUGHKEEPSIE NY 12601	03/25/2014	03/25/2019
DOL	DOL		WILLIAM DEAK		C/O MADISON AVE CONSTR CO 39 PENNY STREET WEST ISLIP NY 11795	11/02/2016	11/02/2021
DOL	DOL		WILLIAM MAZZELLA		134 MURRAY AVENUE YONKERS NY 10704	02/03/2014	02/03/2019
DOL	DOL		WILLIAM THORNE		113 N MAPLE AVENUE GREENSBURG PA 15601	02/21/2013	02/21/2018
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	****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

SECTION 011100 - SUMMARY OF WORK

PART 1 - GENERAL

1.01 BRIEF PURPOSE OF PROJECT / GENERAL

- A. The purpose of the project is to construct a new 2.0 million gallon concrete ground storage tank at the Riverhead Water Districts Plant No. 15 Facility on Tuthills Lane in Jamesport.
- B. All work shown and specified in the Contract Documents shall be the work of this Construction Contract.
- C. This Section provides an abbreviated summary of the work for the Construction Contracts associated with the Owner's program to construct the project.

1.02 NOMENCLATURE

- A. Where the terms "Engineer/Architect", "Architect/Engineer", "Engineer", or "Architect" are used throughout these Contract Documents, they shall mean the firm of H2M architects + engineers as may be abbreviated by H2M or H2M Group.
- B. The terms "Contractor" and/or "Prime Contractor" where used within the body of a specific Construction Contract, (i.e.; Contract G, Contract E, and Contract T), shall refer to the individual or company who has entered into an agreement with the Owner to perform the work contained within those Contract Documents. The lack of word capitalization shall be incidental.

1.03 ABBREVIATED SUMMARY OF CONTRACT G WORK

- A. Furnish all labor, equipment, materials, tools, means, methods, and incidentals necessary to complete the Work as required by the Contract Documents for this Construction Contract. Each contractor shall coordinate, through the Owner/Engineer, the work of their contract with the work by others.
- B. This following abbreviated summary is provided in order to briefly describe the work covered by the Contract Documents for this Construction Contract. It is not all inclusive of the work under the Contract.
- C. The work includes, but is not limited to, the following:
 - 1. Tree removal, site clearing, sheeting, bracing, excavation, soil erosion protection, slope protection, earth movement, subgrade preparation, removal of excess and/or unsuitable excavated material, and import of suitable material, as necessary to install and construct all the work defined within the Contract Documents.
 - 2. New site piping and valving.
 - 3. Excavation, removal of excess and/or unsuitable excavated material, sheeting reinforcement, import of suitable material, soil compaction and testing.
 - 4. Installation of new prefabricated building, including: all concrete footings/foundations/walls, concrete reinforcement, penetrations.
 - 5. Site restoration including final grading and placement of topsoil and seeding.
 - 6. Asphalt removal and new paving of driveway areas.
 - 7. Fence replacement
 - 8. New sidewalks and concrete curbing.
 - 9. Project closeout submittals.
- D. All other work shown and specified within the Contract Documents for Contract G.

1.04 ABBREVIATED SUMMARY OF CONTRACT E WORK

- A. Furnish all labor, equipment, materials, tools, means, methods, and incidentals necessary to complete the Work as required by the Contract Documents for this Construction Contract. Each Contractor shall coordinate, through the Owner/Engineer, the work of their contract with the work by others.
- B. This following abbreviated summary is provided in order to briefly describe the work covered by the Contract Documents for this Construction Contract. It is not all inclusive of the work under the Contract.
- C. The work includes, but is not limited to, the following:
 - 1. Run site conduit
 - 2. Provide power and control wiring
 - 3. Project closeout submittals.
- D. All other work shown and specified in the Contract Documents for Contract E.

1.05 ABBREVIATED SUMMARY OF CONTRACT T WORK

- A. Furnish all labor, equipment, materials, tools, means, methods, and incidentals necessary to complete the Work as required by the Contract Documents for this Construction Contract. The contractor shall coordinate, through the Owner/Engineer, the work of their contract with any work by others.
- B. This following abbreviated summary is provided in order to briefly describe the work covered by the Contract Documents for this Construction Contract. It is not all inclusive of the work under the Contract.
- C. The work includes, but is not limited to, the following:
 - 1. Tree removal, site clearing, grubbing, sheeting, bracing, excavation, soil erosion protection, slope protection, earth movement, subgrade preparation, removal of excess and/or unsuitable excavated material, and import of suitable material, as necessary to install and construct all the work defined within the Contract Documents.
 - 2. Design and construction of the 2.0 MG tank, foundation, walls, domed roof, and accessories.
 - 3. Exfiltration testing of tank and piping.
 - 4. Disinfection and testing of of new tank and all associated potable water piping.
 - 5. Project closeout submittals.
- D. All other work shown and specified in the Contract Documents for Contract T.

1.06 PARTIAL LISTING OF SPECIFIC CONTRACT REQUIREMENTS

- A. The Contract Documents detail the work included in the Contract. Related requirements and conditions covered by the Contract Documents include, but are not limited to, the following:
 - 1. Guidelines and requirements of the Occupational Safety and Health Administration.
 - 2. Guidelines and requirements of the New York State Department of Environmental Conservation (NYSDEC).
 - 3. Guidelines and requirements of the Suffolk County Department of Health Services.
 - 4. Guidelines and requirements of the Town of Riverhead.
 - 5. Local gas utility requirements for new services, connections, alterations and related work.

1.07 PARTIAL LISTING OF OVERALL CONTRACT REQUIREMENTS

- A. The Contract Documents detail the work included in the Contract. Related requirements and conditions covered by the Contract Documents include, but is not limited to, the following:
 - 1. Debris removal and daily and final cleaning up.
 - 2. Coordination with the Owner and other contractors who have been awarded work by the Owner.
 - 3. Site utilization and management so as not to disrupt the Owner's ability to operate the existing facilities in a safe and efficient manner.
 - 4. Facilities to be used during the contract period that are to be used by the Owner or his representatives and others involved with constructing the project.
 - 5. Product and equipment storage and handling requirements.
 - 6. Starting and adjusting of the equipment and systems required under the project.
 - 7. Site safety in accordance with all applicable federal, state, and local regulations.
 - 8. Project submittals, meetings, testing services, schedules, shop drawings, closeout procedures and documents, manuals, as-built drawings, and final commissioning of the work shall be provided as required by the Contract.
 - 9. Site utilization and management so as to allow other prime contractors to perform work in conjunction with this project and to afford them equal opportunity and space to complete their contractual obligations with the Owner as solely defined by the Engineer.
 - 10. To not hinder the Owner's ability to deliver a safe and potable water supply.
- B. The Owner has or will award other construction contracts associated with this project.
- C. It is anticipated that work of all the contracts will coincide with work of this Contract.

1.08 OWNER SUPPLIED PRODUCTS AND UTILITIES

- A. The Owner will not be supplying equipment, labor, or tools for the project.
- B. The Owner will pay for electricity usage. The restrictions on electrical usage shall be as follows:
 - 1. Power tool usage during specified working hours will only be permitted.
 - 2. Dewatering and trash pumps and portable heaters will not be permitted.
 - 3. Sump pumps, if less than 1/3 horsepower will be allowed. Only two (2) sump pumps will be permitted to operate at the same time.
 - 4. Power to the Owner/Engineer's trailer, if applicable.
 - 5. Power to help cure concrete or painting systems will not be permitted.
 - 6. Power to the Contractor's trailer will be permitted.
- C. The Owner reserves the right to stop paying for electrical usage at any time if, in the opinion of the Owner/Engineer, the Contractor causes excessive electrical charges or does not conserve electricity to the maximum extent possible in the opinion of the Engineer. All Contractors shall conserve electricity during the course of construction.

1.09 EXISTING CONDITIONS

- A. The Drawings show certain information that has been obtained by the Owner regarding various pipelines, structures, and utilities that exist at the location of the project both below and at grade.
- B. The Owner and the Engineer expressly disclaims all responsibility for the accuracy or completeness of the information given on the Drawings with regard to existing facilities.

- C. In the case where the Contractor discovers an obstruction not indicated on the Drawings or not described via specification reference, then the Contractor shall immediately notify the Engineer of the obstructions' existence.
- D. The Engineer will determine if the obstruction is to be relocated or removed.
- E. Compensation for this extra work will be paid for in accordance with the provisions in the Contract for "Extra Work".

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 011100

SECTION 011400 - WORK RESTRICTIONS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Site access and control of areas outside of site.
- B. Contractor use of the premises.
- C. Contractor storage, parking and deliveries.
- D. Work hours, employee conduct and miscellaneous employee requirements.
- E. Contract requirements related to maintaining Owner's current operations and excess inspection required.
- F. Suggested construction sequence.

1.02 SITE ACCESS AND CONTROL

- A. Contractors shall use the designated entrance to the site as shown on the drawings. If no site entrance is designated, Contractors shall use an entrance designated by the Owner's Construction Representative.
 - 1. The Owner may permit, solely at the Owner's discretion, the temporary use of another entrance for site access.
 - 2. The Owner will only review requests made by the Contractors for an exception to the designated site entrance if made in writing at least 72 hours in advance of each of the times desired for use.
- B. All contractors to maintain the entrance area clear of materials, vehicles and any other obstacle or debris. Failure to do so will result in a minimum back charge of \$750 per occurrence.
- C. All Contractors are responsible to employ methods to prevent construction materials and/or debris from leaving the site. All Contractors are responsible to routinely monitor the areas surrounding the site during the day as well as at the end of the work-day and to immediately clean up any area to its previous condition.
- D. The Contractors shall employ methods to prevent the transmission of dirt from vehicles driving on exposed areas of the site from reaching the surrounding roadways. The Contractors will be responsible to immediately clean the roadway, should the measures being taken by the Contractors not satisfactorily control the transmission of any dirt to the roadway.
- E. Any damages to areas outside the site, spills of soil, liquid, or any other material shall immediately be repaired, cleaned and restored to its previous condition.
- F. The Contractors shall comply with all state and local requirements for allowable weight limits of vehicles on all roads.
- G. The Owner reserves the right to back charge the Contractors for all costs associated with maintaining the grounds as well as maintaining areas outside the site, which may be disturbed by the Contractors should the Contractors fail to maintain or repair the aforementioned in a condition acceptable to the Owner.
- H. The Contractor shall maintain the premises in a safe condition throughout the construction period. Compliance with OSHA regulations and site safety shall be the responsibility of the

Contractor as it relates to work of the Contract. The posting of all applicable OSHA safety signs shall be the responsibility of the Contractor.

1.03 CONTRACTOR USE OF THE PREMISES

- A. Premises, for the purpose of this Contract, shall mean the site, buildings and other structures located within the property line or in any temporary or permanent construction easements identified on the plans.
- B. The Contractors shall use and manage the premises and the associated construction activities as follows:
 - 1. To not hinder the Owner's ability to operate their facilities.
 - 2. To allow other Contractors to install their work and complete their contractual obligations in the time period specified.
 - 3. To allow for stockpiling of construction material and debris without any significant hardship, as defined by the Owner's Construction Representative, on the Owner or other contractors.
 - 4. To allow for the stockpiling of excavated soil and imported fill, when called for, without any significant hardship, as defined by the Owner's Construction Representative, on the Owner or other contractors.
 - 5. To allow utility companies to install their work.
 - 6. To allow for the delivery of equipment and materials by independent trucking companies by leaving enough space for backing in and out of areas.
 - 7. To allow for the safe, unimpeded travel way of the Owners vehicles, Owner's Construction Representative's vehicles, Engineer's vehicles, construction vehicles and heavy construction equipment about the entire site.
- C. Contractors shall maintain the premises in a safe condition throughout the construction period. Compliance with OSHA regulations and site safety shall be the responsibility of the Contractor as it relates to work of the Contract. The posting of all applicable OSHA safety signs shall be the responsibility of the Contractors.
- D. Contractors shall provide temporary handrails, as required, for their work or for work put in place by their Contract that will require temporary handrails. Construction of temporary handrails shall be as specified in Section 015000.
- E. Contractors shall be responsible for protecting Owner's property. All existing buildings, structures, shrubs, trees, lawn fixtures, sculptures and misc. equipment shall be protected at all times. Any removals or relocation of said objects, if allowed shall be as directed by Owner's Construction Representative.
- F. Contractors shall protect all of the physical structures, property and improvements upon the site from damage by their Work and shall immediately repair or replace damage caused by construction operations, employees or equipment employed by the Contractor. All labor, materials and equipment and outside contractors that are employed by the Owner to repair damage caused by the Contractor shall be billed to the Contractor directly or withheld from money due the Contractor for work already completed.
- G. Limit use of the site to the areas shown on the Contract Drawings and the adopted Site Utilization Plan. Confine operations to permit others working on the site easy access to all areas of Work.
- H. Keep all existing operations areas, driveways, roads, and parking areas free and clear of materials and equipment. Do not unreasonably encumber the site with materials and equipment. Confine stockpiling of excess excavated material, materials and equipment to areas selected under the Site Utilization Plan or as designated by the Owner's construction

representative. Locate storage sheds and trailers to areas designated in the plan or by the Owner's Construction Representative.

- I. Immediately remove excess excavated material or relocate to areas on the site requiring placement of fill. Do not stockpile excess material on the site.
- J. The construction site space is limited and it shall be the General Contractor's responsibility to manage the site during the entire construction period with input from all concerned parties as to meeting their needs. Equal consideration of the needs of others with that of the Contractor's shall be provided as judged by the Owner.
- K. Due to the limited site area available for construction, staging areas shall be relocated several times during the various stages of construction. Additional compensation for relocating staging areas, equipment and material storage, and trailers are not to be considered an extra cost to the Contractor as this is an anticipated expense that shall be considered at the time of the bid.
- L. Contractors are responsible for cleaning up their own materials and debris. Failure to maintain a clean work site daily, will result in other performing the work and Contractors being back charged for the cleaning cost plus construction administration fees.
- M. Should it become necessary to access the existing building during construction hours for measurements or other non-disruptive work, the contractor shall be escorted by an Owner's Construction Representative.
- N. Refer to Section 015000 - Temporary Facilities and Controls for minimum rubbish removal requirements.
- O. Do not discard or dispose of any waste on-site.
- P. Open fires will not be permitted on the site.
- Q. Install erosion control measures as indicated in the Contract. The Contractor shall confine stormwater runoff to the site.
- R. The General Contractor shall be responsible for managing dust as specified in Section 015719.

1.04 CONTRACTOR STORAGE, PARKING AND DELIVERIES

- A. Contractors must provide exterior storage containers when required. Final location of storage container shall be determined by the Owner.
- B. Do not unreasonably encumber the premises with materials and equipment. Do not store material in existing buildings. Store all equipment and materials to allow the Owner's employees to operate and conduct their business safely.
- C. Confine premise storage areas to locations designated by the Owner. Immediately repair or replace damaged facilities to the satisfaction of the Owner and to a condition that existed before the damage occurred as determined by preconstruction photographs, or if photographs are unavailable, to that deemed by the Owner.
- D. No storage materials will be permitted within the buildings at any time during construction.
- E. Storage of chemicals and painting shall be outside the existing or new structures and shall follow manufacturer's guidelines.

- F. Compressed gas containers shall be properly stored and secured per OSHA, to the satisfaction of the Owner. Failure to do so will result in a **[\$250]** back charge, per occurrence.
- G. Contractors shall provide minimum of 48 hours advance written notice to the Owner's Construction Representative for deliveries of materials, site visits by inspectors, manufacturer's representatives or any other occasion that impacts the use of the site. Contractors shall be responsible for any costs that are incurred by the owner, for failure to meet previously agreed upon appointments or work schedules.
- H. Deliveries sent to the Owner will not be signed for or unloaded by the Owner. They will be directed to the construction site and if no employee is on site, the delivery will be rejected, at the contractor's expense.
- I. Night deliveries of equipment (past the designated quitting time) will not be permitted. Do not schedule trucking companies to deliver equipment or wait for the job site to open. Delivery trucks shall not obstruct the site entrance, shall not sit within the neighborhood causing an obstruction or perceived nuisance, nor be left idling on or off the site for any period of time.
- J. Parking shall be in the designated areas of the site only. All automotive type vehicles are to be locked when parked or unattended to prevent unauthorized use. Do not leave vehicles or equipment unattended with the motor running or the ignition key in place. Any vehicles or trucks in non-designated areas may be towed at contractor's expense.

1.05 WORK HOURS, EMPLOYEE CONDUCT AND MISCELLANEOUS EMPLOYEE REQUIREMENTS

- A. The Contractors will be permitted to schedule working days and hours as specified in the General Terms and Conditions, if no times are specified therein then the work hours shall be Monday - Saturday 7:00 am - 5:00 pm.
- B. Employees are to act in a professional manner. Any employee using inappropriate language or who is disruptive to the work environment will be banned from the site.
- C. Proper work attire is required. Shirts are to be worn at all times and no short pants are permitted.
- D. Employees shall not converse with local residents or Owner's employees.
- E. Any employee found under the influence of any drug or alcohol will be banned from the site.

1.06 CONTRACT REQUIREMENTS RELATED TO MAINTAINING OWNER'S CURRENT OPERATIONS AND EXCESS INSPECTION REQUIRED

- A. The Contractors shall schedule working days and hours as specified. The Contractors shall pay all excess costs for inspection services provided by the Owner/Engineer for working beyond the times specified.
- B. The hourly rate paid for inspection services beyond normal working hours shall be at a maximum billing rate of **[\$180]** per hour, which shall be used to compute the overtime hourly charge.
- C. It is the Contractor's responsibility to determine the dollar amount to be included in the bid to pay for the services of one (1) inspector to be present during the entire time work is being performed during low flow periods or beyond a normal 8-hour day. If the Owner elects to have more than one representative present, then the cost of the additional inspector will not be paid for by the Contractor. The maximum hourly billing rate applies for all instances where excess

engineering is performed beyond a normal 8-hour work day, not just work to be performed during low flow periods.

1.07 SUGGESTED CONSTRUCTION SEQUENCE

- A. The following is one suggested general, not all-inclusive, sequence of construction that may be used to complete all the work under the Contract within the time specified.
- B. Work restrictions may be noted throughout the suggested sequence provided below. The Contractor shall comply with all noted work restrictions that appear.
- C. The following suggested sequence is provided for information only:
 - 1. Submit shop drawings, construction schedule, schedule of values, etc.
 - 2. Establish storage areas as required.
 - 3. Perform site clearing and removals, excavate unsuitable material, and perform soil compaction and testing.
 - 4. Construct tank foundation.
 - 5. Install yard piping and fittings.
 - 6. Construct tank floor.
 - 7. Construct tank walls.
 - 8. Construct tank dome.
 - 9. Install tank accessories.
 - 10. Leak test tank and piping.
 - 11. Disinfect and test samples.
 - 12. Rough grade and clean up.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 011400

SECTION 011419 - SITE UTILIZATION PLAN

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Site Utilization Plan requirements

1.02 SITE UTILIZATION PLAN REQUIREMENTS

- A. The General Contractor shall prepare a Site Utilization Plan (SUP) showing staging areas, parking areas, stockpile areas, debris container areas, unloading areas, and trailer areas for review by the Engineer, Owner's Construction Representative, and other Prime Contractors. The length and number of meetings necessary to develop and adopt a SUP shall be as required.
- B. Meetings will be held at the site with all concerned parties to assist the General Contractor in developing the criteria for the plan. During these meetings, all parties will present their needs and requirements for site utilization. As a minimum, each Prime Contractor shall be allocated the same amount of staging/parking/material storage area regardless of the dollar amount of their construction contract. Representatives from the local municipality or utility companies may be attending. The requirements of the local municipality and utility companies shall be incorporated into the SUP.
- C. The General Contractor shall then prepare a draft site plan that attempts to incorporate the needs of all concerned parties. Another meeting will then be held at the site to review and present the plan. The plan shall then be revised at that meeting and adopted for use if it is acceptable to all relevant parties. If all parties cannot agree on an acceptable plan, then the Owner's Construction Representative will establish the Site Utilization Plan without any claims from any contractor.
- D. Each Contractor, by submitting a bid, understands the importance of a workable Site Utilization Plan and also understands that the Owner's Construction Representative may be required to select a plan for each contractor to adopt that is not ideal to the planned construction activities anticipated before the bid was submitted. There shall be no claims for damages associated with site utilization.
- E. If the General Contractor fails to prepare the Site Utilization Plan as stipulated above, then the Owner reserves the right to back charge the General Contractor for the costs associated with having a Site Utilization Plan developed.
- F. If a Prime Contractor fails to participate or attend the meetings scheduled to develop the Site Utilization Plan then the Prime Contractor will forfeit any right to comment on the plan that is developed.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 011419

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Allowance pricing for the following items:
 - 1. Quality Control Testing Allowance
 - 2. Additional Work / Unforeseen Conditions
- B. This Section covers the requirements for use of the cash allowances listed above contained in the proposal (Bid Forms, Price Schedule) and included in the Contract Price bid by the Contractor and defines and stipulates the charges that will be paid for out of the stipulated allowances.
- C. The Contractor shall include the cash allowances stipulated in this Section in the amount bid.
- D. Eligible costs described in this Section, and Sections referenced herein, will be the only costs paid for out of the stipulated allowances.
- E. All other costs associated with the project as specified and/or shown, including but not limited to the delivery, installation and all Contractor overhead and/or collateral expenses are to be distributed among the other portions of the work and shall be included in other bid items.

1.02 SUBMITTALS

- A. Make all submissions under the provisions of Section 013300.
- B. For each type of product/material specified to be furnished under allowance pricing provide documentation of the unit pricing on manufacturer's letterhead certifying pricing of the product/material.
- C. Submit additional backup information to substantiate the invoiced amount(s) as the Engineer may require for review and approval, prior to order or payment of item.
- D. Provide written breakdowns for extra work as the Owner may require.

1.03 CHANGES TO STIPULATED (CASH) ALLOWANCE

- A. If the actual cost of services differs from the cash allowance, then the Contract Price will be adjusted accordingly.

1.04 PAYMENTS TO BE MADE OUT OF QUALITY CONTROL TESTING ALLOWANCE

- A. Include the cash allowance of \$25,000.00 (Twenty Five Thousand Dollars and Zero Cents) in the amount bid for independent testing laboratory services specified in Section 014500.
- B. Include the cash allowance amount indicated in the proposal for independent testing laboratory services specified in Section 014500.
- C. The actual invoiced charges of the testing laboratory, including toning companies where called for, incurred for field and laboratory tests, as specified only in Section 014500 - Quality Control, shall be paid for out of the cash allowance.
 - 1. Any other requirement specified herein throughout these specifications for providing the services of an independent testing laboratory, underground utility location company, or similar outside independent service are to be borne by the Contractor.

2. All costs for quality control services are to be included as part of the Contract Price (as-bid).
- D. One (1) week prior to each partial payment, submit a certified invoice from each company listing and detailing the total costs incurred since the last invoice.
 1. The invoice shall be on company letterhead signed by an authorized representative of the company and shall include man-hours, tests conducted, date of tests and associated costs and fees.
 2. Payment for costs will not be made unless the information is provided and certified. Payment for costs will not be made unless the typed test data reports have been received by the Engineer.
 3. In the case of pipe toning, flags must be set to delineate the route of underground pipes and utilities prior to submission of partial payment request.
- E. If in the event test results (provided by the independent testing laboratory) show non-compliance with these specifications, then at the option of the Contractor and only with the approval of the Owner, he may re-test samples to verify the original test results at his/her own expense.
- F. Costs for re-testing failed components of the work, when ordered by the Engineer, will not be paid for out of the cash allowance and will be directly borne by the Contractor.
- G. Show as separate line in the Schedule of Values.

1.05 PAYMENTS TO BE MADE OUT OF ADDITIONAL WORK ALLOWANCE

- A. Eligible costs described in this Section will be the only costs paid for out of the stipulated allowance.
- B. Include the cash allowance of \$25,000.00 (Twenty - Five Thousand Dollars and Zero Cents) in the amount bid for additional improvements beyond those identified in the plans and specifications. Include allowance in lump sum amount in proposal statement. Show as separate line item in Schedule of Values.
- C. Should any additional work be required due to unforeseen conditions or owner requests, the cost shall be negotiated by the engineer and paid for out of the allowance.
- D. One (1) week prior to each partial payment, submit a certified invoice listing and detailing the total costs incurred since the last invoice. The invoice shall be on company letterhead signed by an authorized representative of the company and shall include man-hours, work conducted, date of work and associated costs and fees.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 012100

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Submission procedures.
- B. Documentation of changes to Contract Sum/Price and Contract Time.

1.02 RELATED SECTIONS

- A. Proposal Form.
- B. Other sections referencing this section.
- C. All contractual requirements outlined in the documents.

1.03 SUBMISSION REQUIREMENTS

- A. Submit Alternates on Proposal Forms identifying the effect on adjacent or related components.
- B. Alternates will be reviewed and accepted or rejected at the Owner's option.
- C. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.04 SELECTION AND AWARD OF ALTERNATES

- A. Indicate variation of Bid Price for Alternates listed on the PROPOSAL FORM. This form requests a "difference" in Bid Price by adding to or deducting from the base Bid Price.
- B. Alternates quoted on PROPOSAL FORM will be reviewed and accepted or rejected at Owner's option.
- C. Accepted alternates will be identified in Owner-Contractor Agreement.
- D. Bids will be evaluated on the base bid price, plus any combination of alternate items.

1.05 WORK FOR ALTERNATES

- A. Work for alternate items selected shall include all related materials, labor, equipment and operations necessary to conduct and complete the alternate work and all other affected work or adjacent areas.
- B. There shall be no change in time or completion date for the selected alternates, unless specified herein or approved in writing by the Engineer and Owner.
- C. Alternates and associated work shall meet all standards and specifications delineated in the Contract Documents.
- D. Contractor shall coordinate pertinent related Work and modify surrounding Work as required to complete the project under each alternate selected by the Owner.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.01 PROCEDURES

- A. Work for each alternate, related items and collateral work shall be completed in their entirety.
- B. If alternate items are not selected, work for the base bid and collateral work shall be completed in their entirety.

END OF SECTION 012300

SECTION 012500 - PRODUCT SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section includes the requirements for substitution of specified products during construction.
- B. *The Engineer will consider requests for substitutions only within **thirty (30)** days from the date of the Notice to Proceed.*
- C. Only products not specifically named in the bid are eligible for substitution in accordance with the requirements contained herein these specifications.
- D. Products named by the Bidder, at the time of bid, shall be furnished and installed and substitutions will not be considered by the Owner/Engineer for those products named in the bid.

1.02 CONTRACTOR'S OPTIONS

- A. For products specified only by reference standard, select any product meeting that standard.
- B. For products specified by naming several products or manufacturers, select any one of the products or manufacturers named which complies with the Specifications.
- C. Where products are not named, then submit products that meet the specifications.

PART 2 - PRODUCTS

2.01 SUBSTITUTIONS

- A. Name - The Drawings and Specifications list acceptable manufacturers, commercial names, trademarks, brands and other product, material and equipment designations. Such names are provided to establish the required type, quality and other salient requirements of procurement.
- B. Equals - An item equal to that named or described on the Drawings or in the Specifications may be provided by Contractor if accepted by the Engineer.
- C. A request for product substitution 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. Shall provide the same warranty for the Substitution as for the specified Product.
 - 3. Shall coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner, including extra charges by other Prime Contractors, material suppliers, and vendors.
 - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
 - 5. Shall reimburse the Owner and the Engineer for review or redesign services associated with re-approval by authorities.
 - 6. Shall reimburse the Owner for all additional engineering services claimed by the Engineer for extra services associated with the review of the Contractor's substituted item since it could not have been originally included in the Engineer's professional engineering services agreement. Reimbursement shall be based on the man-hours expended, at current billing rates.

- D. 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.
- E. Substitution Submittal Procedure:
1. The Contractor shall submit the REQUEST FOR SUBSTITUTION FORM for consideration including all required information.
 2. The Contractor shall use the form included within this Section.
 3. All forms shall be type written.
 4. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence.
- F. The burden to prove product equivalence rests on the Contractor.
- G. The Engineer will notify Contractor in writing of decision to accept or reject request and at that time the Contractor can make a formal submittal in accordance with the requirements contained in Section 013300.
- H. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.

PART 3 - EXECUTION

NOT USED

This space left intentionally blank.

REQUEST FOR SUBSTITUTION FORM

Project: Construction of Pre-Stressed Ground Storage Tank at Plant No. 15 Substitution Request Number: _____

Contractor: _____

Address: _____

To: _____ Date: _____

H2M Project Number: RDWD 1702 Owner: Town of Riverhead

Contract Name: _____ Contract No.: _____

Specification Title: _____

Section: _____ Page: _____ Article/Paragraph: _____

Drawing No(s): _____

Proposed Substitution: _____

Manufacturer: _____ Address: _____

Trade Name: _____ Phone #: (____) _____

Installer: _____ Address: _____

-

Phone #: (____) _____

History: ___New product ___2-5 years old ___5-10 years old ___More than 10 years old

Differences between proposed substitution and specified product:

___Point-by-point comparative data attached

Reason for not providing specified item (Attach separate sheet if necessary):

Typical Similar Installation:

Project: _____

Engineer / Architect: _____

Address: _____

Owner: _____

Date Installed: _____

Submit complete installation list on separate sheets.

Proposed substitution affects other parts of Work: No Yes

Explain: _____

Gross Savings to Owner for accepting substitution: \$ _____

Proposed substitution changes Contract Time: No Yes

Add / deduct (circle): _____ days

Supporting data attached for evaluation of the proposed substitution:

Product Data Photos Drawings Tests Reports Samples

Other (explain): _____

Attached data includes description, specifications, drawings, photographs, performance and test data adequate for evaluation of request; applicable portions of data are clearly identified.

Attached data also includes a description of changes to Contract Documents that proposed substitution will require for its proper installation.

The undersigned certifies that the following paragraphs, unless modified by attachments, are correct:

1. Proposed Substitution has been fully checked and coordinated with Contract Documents.
2. Proposed Substitution does not affect dimensions shown on Drawings.
3. Proposed Substitution does not require revisions to any other Prime Contractor's work.
4. The undersigned will pay for changes to building design, including Architectural and Engineering design, detailing, and construction costs caused by requested Substitution.
5. Proposed Substitution will have no adverse affect on other trades, construction schedule, or specified warranty requirements.
6. Maintenance and service parts will be locally available for proposed substitution.
7. The undersigned further states that the function, appearance, and quality of proposed Substitution are equivalent or superior to specified item.

This request for product substitution also constitutes a representation that I, as the Contractor:

1. Has investigated proposed Product and determined that it meets or exceeds the quality of the specified Product.
2. Shall provide the same warranty for the Substitution as for the specified Product.
3. Shall coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner, including extra charges by other Prime Contractors, material suppliers, and vendors.
4. Waives claims for additional costs or time extension that may subsequently become apparent.
5. Shall reimburse the Owner and the Engineer for review or redesign services associated with re-approval by authorities.
6. Shall reimburse the Owner for all additional engineering services claimed by the Engineer for extra services associated with the review of the Contractor's substituted item since it could not have been originally included in the Engineer's professional engineering services agreement. Reimbursement shall be based on the man-hours expended, at current billing rates.

Contractor's Authorized Representative (Typewritten): _____

Authorized Signature: _____

Date: _____

END OF SECTION 012500

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Work under this Section specifies the procedures used to process partial payments and the Final Payment Request.

1.02 TIME FOR COMPLETION

- A. In as much as the provisions of the Contract relating to the time for performance and completion of the Work are for the purposes of enabling the Owner to proceed with the construction of a public improvement in accordance with a predetermined program, and inasmuch as failure to complete the Work within the period herein specified may result in damage or loss to the Owner, time is of the essence of the Contract.
- B. Time for completion of the Work shall be in accordance with that stipulated in the Contract Documents.
- C. The date for completion will be calculated from the date shown on the Notice to Proceed. The Contractor shall execute the Work with diligence from day to day, and complete it within the time fixed.
- D. For the purpose of defining the date of substantial completion, the Project will be considered complete when all Work covered by the Contract has been performed and all installations and equipment have been tested and are ready for permanent use. Removal of the Contractor's equipment and other minor adjustments which do not prevent use of the Project will not be a factor in establishing the date of substantial completion.
- E. Notwithstanding the foregoing, the Engineer will establish the date of substantial completion when the project is accepted and ready for operation, and no large or major items of work are as yet outstanding. At such time, the Engineer will issue a punch list, itemizing the items of work remaining. The punch list will include "minor" items only, as defined solely by the Engineer. Any prior punch lists, which include "major" or significant items, as defined by the Engineer, shall not be a criterion in establishing the date of substantial completion.

1.03 PARTIAL COMPENSATION

- A. At the Owner's discretion, the Contractor may receive compensation for materials and products delivered to the site yet not installed providing:
 - 1. A canceled check or paid bill from the supplier is submitted to the Engineer indicating that the Contractor has paid the supplier for the material or equipment.
 - 2. The material or piece of equipment is properly stored and protected from the elements and/or vandalism in accordance with the manufacturer's written requirements for long term storage.
 - 3. A certificate of insurance is provided for the material or piece of equipment in the event of a fire, vandalism, theft, etc.
 - 4. A bill of material is delivered to the Engineer at the time of delivery itemizing the subject material or equipment. Payment will be made for on-site material and/or equipment in the amount of 80% of the gross amount of the paid invoice. This payment will be subject to the normal retainage of the partial estimate.
 - 5. The Engineer has agreed to the pre-purchasing of the materials.
- B. The Contractor may not receive compensation for materials and products stored in the Contractor's yard or shop unless permitted by the Owner.

1.04 APPLICATIONS FOR PAYMENT

- A. The Contractor shall review the percentage of work completed during the payment period with the Engineer, based on the bid items in the proposal. The Engineer shall make the final decision on the percentage of work completed.
- B. The form of application for payment shall be AIA Document G702, application and certificate for payment supported by AIA Document G703, Continuation Sheet.
- C. Submit one (1) copy of each payment application, completed, signed and notarized.
- D. Provide Riverhead Town Voucher for each request submitted.
- E. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- F. The payment application shall include a Contractor Invoice and an Owner Claim Voucher.
- G. Provide completed Labor Affidavit Form for each pay period included in the certified payroll reports for each payment application for both the contractor and any subcontractor(s).
- H. Submit payment application to Engineer no later than the first day of each month. Payments received after the first day of each month shall be reviewed and processed after the first day of the following month. Only one application for payment will be reviewed and processed each month.
- I. Submit certified payroll receipts for all workers and subcontractors. Payroll receipts shall be submitted with every application for payment. All payroll receipts shall be certified correct and notarized by a Notary in the State of New York. Application for Payment will not be processed unless all payroll receipts are received.
- J. Contractor shall pay all workers and have all subcontractors pay all workers the prevailing New York State Wage Rates.
- K. Owner may conduct on-site interviews with all workers to verify payments of prevailing wage rates are enforced.
- L. The Engineer shall submit the documentation along with an Engineer's Payment Report to the Owner for payment.
- M. Retainage in the amount of 5% will be held from each partial payment. Retainage will only be released upon full completion of the project and will be included in the final payment.

1.05 ACCEPTANCE OF FINAL PAYMENT REQUEST

- A. The Contractor shall be conclusively deemed to have accepted the Final Payment Request as a correct statement of the total liability of the Owner and of the compensation paid and to be paid to the Contractor by the Owner unless within seven (7) days after delivery of his copy of the Final Payment Request to him, the Contractor shall return such copy to the Owner together with a statement of his objections to such request and of any claim for damages or compensation in excess of the amounts shown on the Request. The acceptance by the Contractor of the Final Payment Request approved by the Owner shall constitute a release and shall discharge the Owner from all further claims by the Contractor arising out of or relating to the Contract, including but not limited to, a release from all impact costs.

1.06 SCOPE OF PAYMENTS

- A. The Contractor shall receive and accept the compensation as herein provided, in full payment for furnishing all materials, labor, tools, and equipment and for performing all work contemplated and embraced under the Contract, also for all loss or damage arising out of the nature of the Work or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered during the prosecution of the Work, and for all risks of every description connected with the prosecution of the Work, until its final acceptance by the Owner, also for all expenses incurred by, or in consequence of, the suspension or discontinuance of the said prosecution of the Work as herein specified, and for all actual or alleged infringements of patent, trademark, or copyright, and for completing the Work and the whole hereof, in an acceptable manner, according to the Plans, Specifications, and other Contract Documents. The payment of any partial or final estimate shall in no way or in no degree prejudice or affect the obligation of the Contractor, at his own cost and expense, to renew or replace all defects and imperfections, or damages. The Engineer shall be the judge, and the said Contractor shall be liable to the Owner for failure so to do.

PART 2 - PRODUCTS

NOT USED.

PART 3 - EXECUTION

NOT USED.

END OF SECTION 012900

SECTION 012973 - SCHEDULE OF VALUES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Schedule of Values

1.02 SCHEDULE OF VALUES

- A. Submit for approval prior to the start of the work a Schedule of Values that indicates a breakdown of the labor, materials and equipment and other costs used in the preparation of the bid. This schedule shall be in sufficient detail to indicate separate figures for such items as excavation, concrete, equipment and all other items making up the lump sum price. The cost breakdown shall be separately itemized for each lump sum bid item in the project.
- B. Where the cost breakdown includes items for bond payment, insurance payment, job set-up, or job mobilization, these items will be paid based on paid invoices and copies of cancelled checks.
- C. Submit a Schedule of Values to the Engineer for review and approval within fifteen (15) calendar days from the date shown on the Notice to Proceed.

1.03 FORM OF SUBMITTAL

- A. Submit typewritten Contract Cost Breakdown on AIA Form G703 - Application and Certificate for Payment Continuation Sheet or EJCDC 1910-8-E. The Engineer reserves the right to revise the form or provide a form prepared by the Engineer.
- B. Use the Table of Contents of the Contract Specifications as a basis for format for listing costs of work for Sections under Divisions 1-48 as sections apply to work. Not all Sections need be assigned a breakout price as determined by the Engineer.
- C. Identify each line item with number and title as listed in Table of Contents.
- D. Provide dollar values for each line item for labor, overhead, profit, material, and equipment components for each category of work if requested by the Engineer.
- E. List quantities of materials specified under unit price allowances.
- F. The Schedule of Values, after approval by the Engineer, shall be the basis for the Contractor's Application for Payment.
- G. The first Application for Payment will not be reviewed prior to an approved breakdown.

1.04 PREPARATION OF SCHEDULE OF VALUES

- A. Breakdown schedule of values based on bid items in proposals with further breakdown below each item. In addition to the above, provide a separate line item cost below each bid item, as applicable, for each of the following items which shall be supported by proof where requested by Engineer:
 - 1. Performance and payment bonds.
 - 2. Insurance (submit proof of this amount)
 - 3. Mobilization and Demobilization (Amounts shall be equal in value).
 - 4. Temporary facilities and measures as specified in Section 015000.

5. Preparation of the Project Construction Schedule, and updates, as specified in Section 013216.
6. Rubbish removal and daily cleaning up. (Provide a total dollar amount and a daily rate for each calendar day during the contract period.)
7. Surveyor used for layout (submit proof of this amount)
8. A total dollar amount for furnishing all the Operations and Maintenance Manuals specified throughout the specifications.
9. Record Drawing retainage amount specified in Section 017839.
10. Final cleaning.

B. Show total costs including overhead and profit.

C. Provide additional details and data to substantiate the cost breakdown as requested by the Engineer.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 012973

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Work of this Section includes:
 - 1. Requests for Interpretation or for information
 - 2. Coordination between contractors, if applicable
 - 3. Administration of subcontracts
 - 4. Coordination of work with other Contractors, utility companies, and the Owner/Engineer
 - 5. Communication and coordination requirements
 - 6. Qualifications of Contractor's job site superintendent
- B. Site staffing requirements for the Contractor's superintendent are also specified herein, the costs for which shall be included in the Contract price.

1.02 REQUEST FOR INTERPRETATION OR INFORMATION

- A. The Contractor shall use the Request for Interpretation/Information Form included within this Section when the Contractor feels that additional information is needed to perform the work of the Contract.
- B. The Engineer may not respond to any requests unless the form is used.
- C. The Engineer's verbal response(s) to the Contractor's formal requests, if provided, shall not constitute an official response and if acted upon by the Contractor are done so at the Contractor's own risk and liability and shall not be subject to claims for additional compensation.
- D. A signed facsimile or emailed image of the form will be accepted.
- E. The Engineer will respond in writing to the request as soon as possible.

1.03 COORDINATION BETWEEN CONTRACTORS

- A. During the progress of the Work, other Contractors may be engaged in performing other work or may be awarded other contracts for other work on this Project. Each Contractor shall coordinate all the work to be done with the work of each Contractor(s) through the Owner.
- B. Each Contractor shall fully cooperate with each other Contractor(s) and carefully fit its own work to that provided under other contracts as shown or specified in the Contract Documents and as may be coordinated by the Owner/Engineer.
- C. Each Contractor shall not commit or permit any act that will interfere with the timely performance of work by any other Contractor.
- D. The Contractor shall conduct his/her own operations, and to cooperate with such other parties, so as to cause as little interference as possible with the work by others.
- E. The Contractor agrees to make no claim against the Owner/Engineer for additional payment due to delays or other conditions created by the operation of others.
- F. If there is a difference of opinion as to the respective project rights of each Contractor doing the work, within the limits of or adjacent to the Project, the Owner/Engineer shall decide as to the respective rights of the various parties involved in order to secure completion of the work in a

satisfactory manner. The Owner/Engineer's decision shall be final and binding on each Contractor.

- G. If any portion of the work of the Contractor, or any of his/her subcontractors, depends upon the proper execution of the work by others, the Contractor shall promptly give written notice to the Engineer of all purported defects in the installed work as renders it unsuitable for proper execution and completion of his own work. The Contractor shall further notify the Engineer of all supposed delays, in the performance of his/her work, as will affect the timely performance of his own work or the project.
- H. The Contractor's lack of notice shall constitute an acceptance by him/her that the work of others is fit and proper for the reception of the Contractor's own work, except as to defects developing in the work that could not have been reasonably foreseen.
- I. The Contractor's lack of notice shall also constitute an acceptance by him/her and an acknowledgement of the timely performance of work by other Contractors or the Owner and that no claims for additional compensation may result.
- J. If the Owner/Engineer determines that the Contractor is failing to coordinate his own work with the work of others, then the Owner shall have the right to enforce the provisions of the Contract as related to non-performance.
- K. The Owner/Engineer shall not be liable for any damages suffered by this Contractor by reason of any other Contractor's failure to comply with the directions so issued by the Owner/Engineer, or by reason of another Contractor's default in performance; it being understood that the Owner does not guarantee the continued efficiency or work production of any Contractor and by execution of the Contract, the Contractor fully understood the potential coordination problems associated with projects involving multiple prime construction contracts.
- L. The Contractor's attention is specifically directed to the fact that he may not have exclusive occupancy of the work area within the limits of the Contract. Each Contractor shall afford the Owner, other Contractors, and utilities reasonable opportunity for the storage of their materials and equipment, and the execution of their work, and shall connect and coordinate his work with theirs as required by the Contract Documents.

1.04 SUBCONTRACTOR ADMINISTRATION AND COORDINATION

- A. Terms and conditions of the Contract shall be binding upon each subcontractor.
- B. Furnish each subcontractor and major equipment vendor at least one (1) copy of the Plans and Technical Specifications.
- C. Provide at least one (1) copy of each approved shop drawing to each subcontractor whose work may depend upon the contents of the shop drawing submittal. The Owner reserves the right to stop all work, without claims for delay, until such time as appropriate subcontractors are furnished with appropriate shop drawings.
- D. Each Contractor shall sequence and schedule the work of subcontractors. Coordinate construction and administration activities of subcontractors. The Engineer and Owner will not accept telephone calls, facsimiles or office visits from any subcontractors on the project. Subcontractor and vendor questions and clarifications shall be directed to the Engineer by the Contractor.
- E. The Contractor's on-site project superintendent shall inspect all the work of all of his/her subcontractors, as it is being constructed. The Contractor's subcontractor shall not be

permitted to do any work on the site without the Contractor's job site superintendent also being there to inspect the work as it is being performed.

1.05 UTILITY COORDINATION

- A. Comply with the requirements of 16 NYCRR Part 753 - Protection of Underground Facilities. Submit a letter stating the case number.
- B. Comply with the utility coordination requirements contained in the General Conditions.

1.06 PUBLIC/PRIVATE UTILITIES

- A. Notify all public and private utilities in accordance with Article 20, Section 322-a of the New York State General Business Law for location and markout of existing utilities in the vicinity of the work.
- B. Repair all utilities damaged during the Work to the standards and approval of the respective utility at no cost to the Owner.

1.07 SPECIFIC COORDINATION REQUIREMENTS

- A. The Contractor shall sequence and schedule work so as not to interfere with the work by others and to afford each Contractor the time to complete their contractual obligations with the Owner. Coordinate the work of this Contract with the work by others. Coordination includes, but is not limited to, the following:
 - 1. Schedule work with all trades throughout the project to prevent interference.
 - 2. Accomplish work in coordination with the other Contractors in a manner that will allow each Contractor adequate time (at the proper stage of construction as determined by the Owner/Engineer) to perform and complete the work of their contract.
 - 3. The Contractor shall annotate on each of his own shop drawings and submittals, information that is relevant to the work of others or where potential conflicts in the installed work may occur. The Contractor shall "bubble" in green ink the area of potential conflict so as to alert the reviewer.
 - 4. Each prime Contractor shall provide the Engineer with a list of shop drawings that they may require to properly coordinate the work. If a list is not provided to the Engineer within fifteen (15) calendar days from the date of the Notice to Proceed, then it shall be taken that shop drawings of other prime Contractors are not required. Each prime Contractor shall be responsible for providing the list within the time specified.
 - 5. In case of conflicts due to improper coordination by any Contractor, the Owner/Engineer's resolution will be final. No compensation will be awarded for extra work required to resolve conflicts or to coordinate the work of all contracts.
 - 6. Coordinate space requirements, supports, and installation of mechanical, electrical and plumbing work which may be indicated diagrammatically on the Drawings. Follow routing shown for pipes, ducts, and conduit as closely as practicable. Place runs parallel with building lines. Utilize spaces efficiently to maximize accessibility for other installations, maintenance, and to facilitate repairs.
 - 7. In finished areas, except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of all fixtures and outlets with finish elements and work by all other trades.
- B. Shop Drawings and Submittals Coordination Procedure:
 - 1. The Engineer will forward copies of relevant shop drawings to all prime Contractors, whose work may be subject to that of others, as solely determined by the Engineer.

2. The Contractor shall then, within five (5) calendar days of receipt, review said shop drawings provided by the Engineer for the purposes of resolving field and fabrication problems and as a way to coordinate the work.
 3. Immediately notify the Engineer should a purported conflict in the work be discovered so that the Engineer can investigate and take appropriate action.
 4. If a shop drawing was so provided by the Engineer and a conflict in the work was not brought to the attention of the Engineer, then the conflict shall be immediately corrected by the Contractor submitting the shop drawing.
- C. Each Contractor shall also coordinate the work by complying with the following:
1. Construction Schedule: Each Contractor shall provide a construction schedule as specified in Section 013216 - Construction Schedules.
 2. Weekly Schedule: By 3:00 PM of each Friday during the construction period, each Contractor shall email a typed memo addressed to the Engineer/Owner's resident field engineer/inspector and designated office project manager summarizing the work for the following week. The memo shall also be faxed or emailed to the Owner. The memo shall briefly itemize the planned activities for the coming week. The memo shall also include a summary of expected material/equipment deliveries, concrete pours, utility tie-ins, excavated material removals and other heavy construction traffic that may impact the work activities for the coming week.
 3. Email Account: Each Contractor shall maintain an email account that shall be used to improve communication. An email shall not constitute a formal advisement regarding the terms and conditions of the contract. Email shall only be considered an informal way of notifying relevant parties of project related activities.
 4. Email List: Each Contractor, within five (5) calendar days from the Notice To Proceed, shall provide a list of email addresses for each major equipment supplier and local representative, if such exists. A contact person shall be provided for each email address.
- D. Project Coordination Meetings: All Contractors shall participate in and attend the Project Coordination Meetings as specified below:
1. Up to three (3) project coordination meetings will be held at the Engineer's or Owner's office as specified herein and in Section 013216.
 2. The meetings will be held when so called for by the Engineer.
 3. Each meeting may last up to eight (8) hours with one hour for lunch.
 4. The Engineer will prepare the final agreed version of the schedule and distribute it to all Contractors.
 5. The Engineer reserves the right not to hold these meetings if in his/her opinion they are not needed.
 6. All Prime Contractors shall be required to attend the meetings.

1.08 CONTRACTOR'S JOB SITE SUPERINTENDENT

- A. Each Contractor shall employ an on-site superintendent as specified herein below. He/She shall be a full-time employee of the Contractor.
- B. Each Contractor shall name the job site superintendent within five (5) days of the Notice To Proceed. A letter to the Engineer shall be provided.
- C. He/She shall have the authority to sequence and schedule the work, and to staff the project, so as not to interfere with the work by others and to complete the work daily within the time so required.
- D. Each Superintendent shall have a minimum of five (5) years of experience as a job site superintendent for projects of equal size and complexity.

- E. Contract T superintendent shall not be a foreman or crew supervisor and shall be qualified and experienced person who shall act to schedule and sequence the work on a daily basis.
- F. Contract G superintendent may be a foreman or crew supervisor.
- G. Contract E superintendent may be a foreman or crew supervisor.
- H. Each superintendent shall be qualified to perform the duties so required to successfully complete the work in accordance with the Contract Documents.
- I. The superintendent for Contract T shall be on the site for each work day, full time, starting within twenty one (21) calendar days from the date of the Notice To Proceed through the date of Final Completion, including all punch list items.
- J. All other construction superintendents shall be on the project site while work under his/her contract is being performed, either by direct forces or by subcontractors as stipulated above for subcontractor coordination.
- K. Each superintendent shall also visit the site daily when work is not being performed under their Contract for coordination purposes, through the Owner/Engineer. He/She shall remain on the site for a minimum of one (1) hour, if work is being performed by others. He shall telephone the Engineer/Architect's designated field representative to advise him/her that they are on the site to discuss matters related to coordination.
- L. Each superintendent shall speak English. If required by the Engineer, provide a resume for the proposed superintendent that shall be typed and shall list the qualifications of the superintendent. Prior to the Contractor assigning a superintendent to the project, he may wish to arrange an interview with the Engineer to determine the proposed superintendent's ability to properly coordinate the work through the Owner/Engineer. The Contractor shall employ a superintendent acceptable to the Owner.

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REQUEST FOR INTERPRETATION/INFORMATION (RFI)

OWNER'S NAME: Town of Riverhead

PROJECT NAME & CONTRACT DESIGNATION: Construction of Pre-Stressed Ground Storage
Tank at Plant No. 15

CONSTRUCTION CONTRACT NO.: RDWD 1702

Product, Item, or System:	
Request Date:	RFI No.:
Specification Section:	Paragraph Ref:
Contract Drawing Reference(s):	
Describe Request:	
Signed:	See Contractor's Attachments for Additional Description for Information
Owner/Engineer Response:	
Engineer (Printed):	See Engineer's Attachments for Additional Information
Engineer's Signature & Date	<i>Response Accepted By Contractor Contractor's Signature & Date</i>
The Work shall be carried out in accordance with these supplemental instructions without change in Contract amount or Contract time for completion. Prior to proceeding with these instructions, indicate your acceptance of these instructions by signing where indicated and returning this form to the Engineer.	

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 013100

SECTION 013119 - PROGRESS MEETINGS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Work of this Section includes the requirements for progress meetings.

1.02 PRE-CONSTRUCTION CONFERENCE

- A. Each Contractor is required to attend the pre-construction conference at a location, date, and time selected by the Owner.
- B. The owner, a partner, or a corporate officer representing each Contractor shall attend the conference. The job site superintendent and office project manager for each Contractor shall also attend.
- C. The Engineer will prepare an agenda for the conference.

1.03 PROGRESS MEETINGS

- A. Progress meetings will be held approximately once every two (2) weeks during the project. The Owner may elect to hold meetings more or less frequently.
- B. At least seven (7) calendar days advance notice will be given by the Engineer or the date for the upcoming meeting will be set during the progress meeting.
- C. Attendance at progress meetings shall be mandatory. An amount of \$1,000 shall be deducted from the Contract Amount for each announced meeting not attended by the Contractor.
- D. The owner, a partner, or a corporate officer representing the Contractor shall attend each announced progress meeting. The job site superintendent and office project manager for each Contractor shall also attend.
- E. Subcontractors shall attend when requested by the Owner or Engineer at no cost to the Owner.
- F. Meetings will be conducted by Engineer at a location selected by the Owner, normally at or adjacent to the project site.
- G. The minimum agenda will cover:
 - 1. Review minutes of previous meetings.
 - 2. Identify present problems and resolve them.
 - 3. Plan work progress during next work period.
 - 4. Review the status of off-site fabrication and delivery schedule.
 - 5. Review shop drawings and submittal schedules.
 - 6. Review change order status.
 - 7. Review status of construction progress schedule.
 - 8. Coordinate access requirements.
 - 9. Other business related to the work.

1.04 OTHER MEETINGS

- A. Attend special meetings which may be required or called for by Federal, State or Local authorities, utility companies, Owner, Engineer or any other firm, person or organization related to the project.

1.05 CONDUCTING MEETINGS

- A. General - This paragraph covers Owner and/or Engineer meetings with Contractor and/or his subcontractors. Neither Owner nor Engineer wishes to meet solely with a subcontractor and requests for such meetings will be discouraged. If a meeting is deemed necessary, every effort will be made to have Contractor attend. If, for some reason, circumstances do not allow such, the meeting may be held, minutes of the meeting will be sent to contractor and decisions on any major questions will be reserved until contractor has been consulted. Subcontractors may accompany contractor to meetings provided contractor notifies Engineer in advance.
- B. Chairman - When Engineer/Owner attend meetings, Engineer, or his duly authorized representative, will act as chairman. Should Owner-Contractor meetings be necessary, Owner will chair such meetings.
- C. Notices - Engineer or Owner will issue notices of meetings to all parties concerned and will note, thereof, who must attend and who may attend if they so desire. When a Contractor desires a formal meeting, make a request through Engineer. Except when Engineer determines that a prompt meeting is essential, all notices will be issued at least one week in advance of the meeting date.
- D. Agenda - All parties shall inform Engineer of items desired to be discussed and Engineer will notify all parties of all items to be considered. This is to allow each party to fully prepare for the meeting. This shall not be construed to mean that other items cannot be brought up at the meetings.
- E. Time Limits - It is the intent to hold productive and efficient meetings and to keep them as short as is reasonably possible. The Chairman will be the sole judge as to whether or not further discussion on any matter is warranted and all discussions shall cease when he so orders.
- F. Minutes - Minutes of meetings will be kept, written and distributed by the Chairman or his duly authorized representative. Minutes of all meetings will be available upon request to the Chairman.
- G. Conduct - It is the intent to conduct all meetings in an orderly manner, to reasonably discuss all items and to hear and observe the rights and opinions of all parties. The Chairman will allow each party to speak, however, he reserves the right to order any individual to leave the meeting at any time for any reason.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 013119

SECTION 013216 - CONSTRUCTION SCHEDULE

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section specifies the requirements for preparing construction schedules and for keeping them up to date.
- B. Prepare a Gantt Chart type schedule and keep it up to date as specified hereinafter.
- C. All schedules shall be submitted in accordance with the requirements contained herein in Section 013300.
- D. Refer to Section 013100 regarding the requirements for attendance at Project Coordination Meetings and additional requirements concerning the submission of other project coordination and sequencing information.

1.02 PRIME CONTRACTORS SCHEDULE TYPES

- A. Gantt Chart Type: The General Contractor shall prepare a Gantt Chart type schedule as specified hereinafter.
 - 1. Contractor E shall prepare a Gantt Chart type schedule as specified hereinafter.
 - 2. Contractor T shall prepare a Gantt Chart type schedule as specified hereinafter.
 - 3. Contractor P shall prepare a Gantt Chart type schedule as specified hereinafter.

1.03 CONSTRUCTION SCHEDULE - GENERAL

- A. Coordinate the work and maintain the construction schedule. In the event actual progress begins to lag the schedule, promptly employ additional means and methods of construction to make up the lost time.
- B. Keep the construction schedule current and revise and resubmit as often as necessary to accurately reflect the conditions of the work, past progress and anticipated future progress.
- C. The construction schedule shall be completed, submitted, and deemed received by the Engineer prior to the first payment application.
- D. The schedule, when approved by the Engineer and the Owner, shall establish the dates for starting and completing work for the various portions of the Contract. It shall be the duty of the Contractor to conform to his/her own schedule and to perform the work within the time limits indicated. Failure to adhere to the approved schedule shall expose the Contractor to disputes, claims and additional costs incurred by others.
- E. Coordinate letting of subcontracts, material purchases, shop drawing submissions, delivery of materials, and sequence of operations, to conform to the schedule.
- F. Coordinate the construction schedule with the proposed schedules of the equipment suppliers and subcontractors.
- G. The schedule shall show the critical sequence items where new units must come online before existing facilities go offline, if applicable to the project. The schedule shall also show, in detail, the proposed sequence of the work and the estimated date of starting and completing each stage of the work in order to complete the project within the contract time.

1.04 CONSTRUCTION SCHEDULE - GANTT CHART TYPE

- A. The schedule shall show, in detail, the proposed sequence of the work and the estimated date of starting and completing each stage of the work in order to complete the project within the contract time.
- B. Prepare the schedule in a manner so that the actual progress of the work can be recorded and compared with the expected progress.
- C. Coordinate the construction schedule with the proposed schedules of the equipment suppliers and subcontractors.
- D. The schedule shall be plotted out in color and shall be 11-inch by 17-inch. It shall contain as many sheets as are necessary to show all rolled down tasks. Partially printed schedules will not be accepted. Each Contractor shall arrange to have it plotted on a color plotter suitable for the intended application.
- E. The schedule shall show the following:
 - 1. Task links/task dependency in blue ink.
 - 2. Work under the Contract in green ink.
 - 3. Work by others in blue ink.
 - 4. Milestone dates (zero duration) by a red diamond.
 - 5. The end date for each task and subtask at the end of a bar.
 - 6. The description of all major tasks within the bar. The bar shall be red.
 - 7. Critical path.

1.05 REVISION OF PROJECT PROGRESS SCHEDULE

- A. Each Prime Contractor shall evaluate and provide updated construction schedules monthly in accordance with job requirements. Each update shall be submitted to the Engineer for information purposes and be provided by the last Friday of every month
- B. Each Contractor shall modify his construction schedule to accommodate coordination of the construction contracts by the Owner/Engineer without claims for additional compensation or delay.
- C. Provide editable schedule to Engineer for inclusion of other trades.
- D. The Engineer will provide an electronic version of the Final Combined Construction Schedule for use in keeping the schedule up to date.
- E. From time to time, and at stages deemed appropriate by the Engineer, the Engineer may request an updated schedule from the Contractor to reflect the project's status. The percent complete for each task may be shown, as determined by the Contractor and Engineer.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 013216

SECTION 013223 - SURVEYING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Project record documents shall be prepared as specified herein.
- B. Tank foundation locations and elevations shall be staked, verified, etc by the Tank Contractor's surveyor in accordance with the requirements of this specification section.

1.02 QUALITY ASSURANCE

- A. The Contractor shall employ a land surveyor licensed in the State where the project is located. The surveyor shall be acceptable to the Engineer in terms of experience and qualifications.
 - 1. Submit evidence of the surveyor's errors and omissions (professional liability) insurance coverage in the form of an insurance certificate.
 - 2. The surveyor shall maintain a minimum coverage of \$1,000,000 for professional liability.
 - 3. The Owner, Engineer, and Contractor shall be named as insurance certificate holders.
 - 4. A thirty-day cancellation notice shall be provided.
 - 5. Physical work shall not be performed until the certificate is provided and approved by the Owner.
- B. All instruments used on the project shall be of professional quality and in first class condition.
 - 1. All instruments shall have been calibrated by a manufacturer's service station within the last twelve (12) months.
 - 2. Submit certificate of calibration or paid invoice showing that the unit has been calibrated, if so required by the Engineer.

1.03 SUBMITTALS FOR REVIEW

- A. Submit name, address, and telephone number of Surveyor before starting survey work.
- B. Surveyor's professional liability insurance certificate.
- C. On request, submit documentation verifying accuracy of survey work.
- D. Submit a copy of the site drawing signed by the land surveyor showing locations of other benchmarks set by the surveyor, baseline location and offset hubs. If requested, the Engineer will provide a reproducible drawing or a drawing in digital format for use by the surveyor.

1.04 EXAMINATION

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Engineer of any discrepancies discovered.

1.05 SURVEY REFERENCE POINTS

- A. The Contractor's surveyor shall locate and protect survey control and reference points located throughout the project site.
- B. Control datum for survey is that indicated on the Drawings or will be provided by the Engineer.
- C. The Contractor shall protect survey control points prior to starting any site work. Preserve permanent reference points during construction.

- D. Promptly report to the Engineer the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
 - 1. The surveyor shall replace dislocated survey control points based on original survey control when directed by the Engineer.
 - 2. Make no changes without prior written notice to Engineer.
- E. The surveyor shall set control lath for rough and final grading purposes. Lath shall be placed at sufficient intervals to control grade or as directed by the Engineer.
- F. All new structures, pits, chambers, drainage pools, curbs, roads, swales, and other physical elements shall be located by survey control.
- G. Underground pipelines need not be located using survey control but shall be located using standard survey equipment operated by persons experienced in their operation.

1.06 SURVEY REQUIREMENTS

- A. The Engineer will provide one (1) benchmark.
- B. The Contractor shall, with his own forces, obtain working or construction lines or grades as needed subject to the check of the surveyor. The surveyor shall set offsets.
- C. Establish elevations, lines, offsets and levels. Locate and lay out by instrumentation and similar appropriate means:
 - 1. Site improvements including pavements, stakes for grading, curbs, fill and topsoil placement, utility locations, slopes and invert elevations.
 - 2. Grid or axis for structures.
 - 3. Building foundation, column locations, ground floor elevations, and equipment foundations.
- D. Provide tie distances on record drawings to all underground structures, valves, pipes, and utilities installed as work of this Contract.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 013223

SECTION 013300 - SUBMITTALS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section specifies the requirements for making submissions for the project. Electronic submissions will be required unless expressly noted otherwise.
- B. Refer to Section 013216 - Construction Schedule for the requirements concerning the submission of construction schedules and for making updates thereto.

1.02 IDENTIFICATION OF SUBMITTALS

- A. Each and every submission shall be provided by the Contractor and shall be accompanied by a SUBMISSION TRANSMITTAL FORM. The Contractor shall use the specimen form made a part of this Section. *Submittals not containing the form will be returned to the Contractor un-reviewed.* The Engineer will not review project submissions until such time as the form is completed in its entirety. Identify each submittal and resubmittal using the form.
- B. Each individual submittal shall be identified with a 'submission log number' as specified here in this example: 033000.01-1
 - 1. The Section number for which the submittal applies, followed by a period, shall be indicated, "033000."
 - 2. The submittal within the Section shall be indicated by the next grouping "01". For instance and in this example, the concrete design mix may be submission "01", the waterstop catalog cut may be "02", and so on. Submittals shall be sequentially numbered within the Specification Section, i.e. 01, 02, etc.
 - 3. The number of times the submission was made shall be preceded by a dash and a numerical suffix as follows: "-1". In this example, the concrete design mix is being submitted for the first time. Use the number "1" for the first time it is being submitted.
 - 4. Subsequent submissions of the concrete design mix shall utilize the original number and a sequential numeric suffix, i.e. "2" for a resubmission, "3" for the second resubmission, and so on. Substitute the new number for the original "1".
- C. Where a layout drawing, containing different elements of the project, is being submitted and there is a question as to what the log number might be, then the Contractor shall contact the Engineer so that an agreed upon log number can be assigned.
- D. It is incumbent on the Contractor to initially assign the submission log number designation to each submission. Submissions not containing a log number, as specified above, will be returned to the Contractor un-reviewed by the Engineer.
- E. Every submittal shall also be accompanied by a Transmittal Letter (or "Speed Form") addressed to the Engineer's Project Manager as hereinafter defined.

1.03 COORDINATION OF SUBMITTALS

- A. Prior to submitting to the Engineer, fully coordinate all interrelated work. As a minimum, do the following:
 - 1. Determine and verify all field dimensions and conditions by field measuring existing conditions and the installed work of this Contract and work by others.
 - 2. Coordinate with all trades, subcontractors, vendors, system and equipment suppliers and manufacturers, public agencies, and utility companies and secure all necessary approvals, in writing.

- B. Make submittals in groups containing all associated items that in some way depend upon each other.
 - 1. This also applies to color charts, as one color may not be able to be selected without the selection of other colors so as to form a color-coordinated group.
 - 2. The Engineer may elect not to review partial or incomplete submissions, whereupon he will notify the Contractor of the additional submissions that are required before a review can be made.

1.04 TIMING OF SUBMITTALS

- A. Make submittals far enough in advance of scheduled dates of installation to provide time for reviews, for securing necessary approvals, for possible revisions and re-submittals, and for placing orders and securing delivery. The Engineer will review submittals in a manner as expedient as possible, and will generally send a written response to the Contractor within seven (7) calendar days of receipt of submittals.
- B. Submissions may be returned reviewed, unreviewed, rejected, returned conditioned upon submission of related items, or for other reasons set forth in the Contract Documents.
- C. Make submissions well in advance as the returning, rejecting or disapproval of submissions or other similar circumstances are possible and are deemed "avoidable delays". Costs for these delays or those attributed to Contractor's tardiness in making submittals shall be borne by the Contractor.
- D. **All** submittals requiring Engineer's review (except operations manuals) as required under the technical specifications of these documents shall be submitted within **FORTY FIVE (45)** consecutive calendar days after the date of the Notice to Proceed. An amount of **\$250** per calendar day shall be deducted from payment due the Contractor for **each** day that an outstanding submittal exists, said amount being the cost associated with the Engineer's review.
- E. Operation and maintenance manuals shall be submitted at least **FORTY FIVE (45)** consecutive calendar days prior to scheduled startup of the unit or system.
- F. If material or equipment is installed before it has been deemed to be in general compliance with the Contract Documents, as determined by the Engineer, the Contractor shall be liable for its removal and replacement at no extra charge and without an increase in contract time.

1.05 DESTINATION OF SUBMITTALS

- A. Each submission of documents shall be accompanied by a transmittal form containing the name of the project, the contract name, the Engineer's project manager, a submittal ID number, and a description of content for the submitted items.
- B. A copy of the TRANSMITTAL FORM shall also be provided to the Engineer's inspector at the job site.
- C. Electronic submittals shall be transmitted through the Newforma® Project Center website or by email, pending instruction by the Engineer. H2M architects + engineers is using a project information application called Newforma® Project Center. One of its components is Newforma Info Exchange, a web application that facilitates sending and sharing transmittals, and file sharing.
- D. As an external team member on this project the Contractor will be required to access the H2M architects + engineers/Newforma Info Exchange website for information related to the project, including file transfers, RFI, Submittals, Action Items, and project Calendar information. The

Contractor will have access to this website using any internet-capable computer running Internet Explorer or Firefox. All data transmitted through the H2M architects + engineers/Newforma Info Exchange website is encrypted and logged. Further instructions will be provided to the Contractor after the contract is awarded.

- E. Other submissions, such as material samples or other items as instructed by the Engineer, shall be sent to the Engineer's office as follows:

H2M architects + engineers

538 Broad Hollow Road - 4th Floor East

Melville, New York 11747

Attention: H2M Project Manager (Named at Pre-Construction Conference or in the Notice to Proceed)

1.06 CLARITY OF SUBMITTALS

- A. All printed materials shall be neat, clean, professionally drafted by hand or by computer, clear, legible, and of such quality that they can be easily reproduced by normal photocopying.
- B. All electronic submittals shall be produced with a minimum resolution of 300 dpi.
- C. Binders of information shall be separated into groups, subsystems, or similar equipment/function. Copies not conforming to this paragraph will be returned to the Contractor without the Engineer's review.

1.07 CONTRACTOR'S REPRESENTATION

- A. By making a submission, the Contractor represents that he has determined and verified all field measurements and dimensions, field construction criteria, site and building constraints in terms of limitations in moving equipment into an enclosed space, materials, catalog and model numbers and similar data and that he has checked and coordinated each submission with other work at or adjacent to the project site in accordance with the requirements contained in Section 013100 - Project Management and Coordination and the Contract Documents.
- B. Every SUBMISSION TRANSMITTAL FORM shall contain the Contractor's approval stamp and date showing that the submittal has been approved by the Contractor. The Engineer will not review submittals that have not yet been reviewed and approved by the Contractor.

1.08 ENGINEER/ARCHITECT'S REVIEW

- A. Engineer will review and comment on each submission conforming to the requirements of this Section.
1. Engineer's review will be for conformance with the design concept of the project and will be confined to general arrangement and compliance with the Contract Documents only, and will not be for the purpose of checking dimensions, weights, clearances, fittings, laying lengths, tolerances, interference's, for coordinating the work by others or subcontractors.
 2. The Engineer's review of a separate item, or portion of a system, does not represent a review of an assembly or system in which the item functions.
- B. The Engineer will mark submittals as follows:
1. **NO EXCEPTION TAKEN (A)** - No corrections, no marks. The content of this submittal has been reviewed by the Engineer and been found to be in general compliance with the Contract Documents. No further submission of this submittal is required and the information contained in the submittal may be built into the work in accordance with the Contract Documents.

2. MAKE CORRECTIONS NOTED (B) - Minor amount of corrections. The content of this submittal has been reviewed by the Engineer and has been found in general to be in compliance with the Contract Documents. The notations made on the submittal by the Engineer shall be incorporated into the work in accordance with the terms and conditions of the Contract Documents. No further submission of this submittal is required.
 3. AMEND AND RESUBMIT (C) - The content of this submittal has been reviewed by the Engineer and this review has determined that additional data and/or modification to the submitted data or other changes are required to bring the work represented in this submittal into compliance with the Contract Documents. This submittal shall be reviewed and revised in accordance with the Engineer's comments and resubmitted to the Engineer for review. The information contained on the resubmittal shall not be incorporated into the work until the submittal is returned to the Contractor marked "NO EXCEPTION TAKEN" or "MAKE CORRECTIONS NOTED".
 4. REJECTED (D) - The content of this submittal has been reviewed by the Engineer and has been determined not to be in accordance with the requirements contained in the Contract Document and requires too many corrections or other justifiable reason. The submittal shall be corrected and resubmitted or a submittal of an alternate shall be provided. No items are to be fabricated under this mark.
 5. SUBMIT SPECIFIED ITEM (E) - The content of this submittal has been reviewed by the Engineer and this review has indicated that the work displayed in the submittal is not in compliance with the Contract Documents. The Contractor shall submit another submittal for this portion of the work, which complies with the Contract Documents.
 6. RECEIVED (R) - This submittal is accepted on the project and filed for record purposes only, in accordance with the terms and conditions of the Contract Documents. Documents marked "RECEIVED" will not be returned.
- C. No payment will be made on any item for which a submission is required if such submission:
1. has not been made,
 2. has been made but was not stamped "No Exceptions Taken" by Engineer,
 3. has been made and stamped "Make Corrections Noted", but contractor has not complied with Engineer's notes marked on the submittal,
 4. has been made and stamped "No Exceptions Taken", but item provided does not conform to the shop drawing nor to the Contract Documents.
- D. Submittals not required by these specifications will not be recognized or processed.
- E. Provide an 8-inch by 10-inch space for the Engineer's review stamp.

1.09 RESUBMISSIONS

- A. Prepare new and additional submissions, make required corrections, and resubmit corrected copies until found in compliance with the Contract Documents.
- B. On, or with, re-submittals, clearly describe revisions and changes made, other than the corrections requested by Engineer, which did not appear on the previous submissions.

1.10 CONTRACTOR'S RESPONSIBILITIES

- A. Engineer's review of submittals shall not relieve the Contractor of his/her responsibility for any deviation from the requirements of the Contract Documents nor relieve the Contractor from responsibility for errors or omissions in the submittals.
- B. No portion of the work requiring a submission shall be commenced until the Engineer has found the submission in general compliance with the Contract Documents.

- C. The Contractor shall provide written notification of any specification or drawing deviation.

1.11 EXCESS COSTS FOR ENGINEERING/ARCHITECTURAL SERVICES

- A. The Owner will charge to the Contractor, and will deduct from the partial and final payments due the Contractor, all excess engineering and architectural expenses incurred by the Owner for extra services (work) conducted or undertaken by the Engineer as stipulated below:
 1. Services and other similar charges because of the Contractor's errors, omissions, or failures to conform to the requirements of the Contract Documents as related to administrative charges associated with non-compliance with the requirements for making project submissions.
 2. Services and other similar charges required to examine and evaluate any changes or alternates proposed by the Contractor and which may vary from the Contract Documents.
 3. Services and other similar charges as a result of the Contractor's proposed substitution of materials, equipment or products which require a redesign of any portion of the project, as contained in the Contract Documents at the time of bid.
 4. Services and other similar charges as a result of the Contractor's proposed substitution of products which require an engineering and/or architectural evaluation, beyond the time stipulated in Section 012500, to determine if the substituted product is equal to that specified.
 5. Services and other similar charges as a result of changes by the Contractor to dimensions, weights, sizes, voltages, phase, horsepower, materials of construction, and similar physical or operating characteristics of the product furnished which require redesign of the project in any way.
 6. Services and other similar charges for the review of resubmissions of shop drawings that have been marked as "No Exceptions Taken" or "Make Corrections Noted".
 7. Services and other similar charges for the review of shop drawings submitted more than two (2) times for the same product or portion of the work.

1.12 MISCELLANEOUS SUBMITTALS

- A. Provide a Submittal Schedule within seven (7) calendar days from the date of the Notice to Proceed. The Submittal Schedule shall list all submittals for the project referenced by draft log number. Provide the estimated date that the submittal will be transmitted to the Engineer for review.
- B. Within seven (7) calendar days from the date of the Pre-Construction Meeting, submit a Proposed Products List. This list shall be a complete listing of all products proposed for use, with name of manufacturer, service headquarters, trade name and model number of each product. Partial listings will not be accepted.
- C. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.13 SUBCONTRACTOR LIST

- A. The Contractor shall submit, on AIA Form G705, within THIRTY (30) calendar days after the date of the Notice to Proceed, a list of all subcontractors, including the names of the major subcontractors that were submitted at the time of the bid.

1.14 MATERIAL SAFETY DATA SHEETS (MSDS)

- A. Comply with "Right to Know" requirements of Chapter 551 of Laws of New York, 1980, concerning notification of the use of toxic substances.

- B. Any product or substance used by the Contractor or its subcontractors which is listed in Subpart Z of OSHA Part 1910 Title 29 of the Code of Federal Regulations entitled "Toxic and Hazardous Substances" shall be identified to the Owner/Engineer by the Contractor's submission of a standard Material Safety Data Sheet (MSDS) in accordance with "Right To Know" requirements.
- C. Products will not be permitted to be kept on site without a MSDS.

1.15 SHOP DRAWINGS

- A. Submit shop drawings for all fabricated work, for all manufactured items and for items specifically required by the specifications.
- B. Submit one (1) electronic copy of each standard drawing, catalog cut, or other material. All shop drawings or submittals that are not in the standard 8-1/2" x 11" format shall be submitted both electronically and in paper. Samples shall be delivered directly to the office of the Engineer. The Engineer will return an electronic copy of each submittal once reviewed.
- C. Subcontractors shall submit shop drawings directly to the Contractor for checking. Thoroughly check subcontractors' shop drawings for measurements, sizes of members, details, materials, and conformance with the Contract Documents.
 - 1. Return submittals which are found to be inaccurate or in error.
 - 2. Do not submit to the Engineer until all corrections have been made.
- D. Clearly show the relationship of the various parts of the project and where the information provided on the submission depends upon field measurements and existing conditions.
- E. The Contractor shall make all measurements, confirm existing conditions, and include them on the shop drawings before making a submission to the Engineer.
- F. Submissions for a single item, or group of related items shall be complete.
- G. When submitting manufacturers' catalogs, pamphlets or other data sheets, in lieu of prepared shop drawings, clearly mark the items being submitted for review.
- H. If the shop drawings contain any departures from the contract requirements, specifically describe them in the letter of transmittal.
 - 1. Where such departures require revisions to layouts, structural, architectural, electrical, HVAC or any other changes to the work as shown, Contractor shall, at his own expense, prepare and submit revised drawings accordingly.
 - 2. Make drawings the same size as the Contract Drawings and to the same scale.

1.16 SAMPLES

- A. Where required, or where requested by the Engineer, submit sample or test specimens of materials to be used or offered for use.
 - 1. Samples shall be representative, in all respects, of the material offered or intended, shall be supplied in such quantities and sizes as may be required for proper examination and tests, and shall be delivered to Engineer, prepaid, along with identification as to their sources and types of grades.
 - 2. Submit samples well in advance of anticipated use to permit the making of tests or examinations.
- B. Samples will be checked for conformance with the design and for compliance with the Contract Documents.

- C. Work shall be in accordance with the approved sample. The use of materials or equipment for which samples are requested or required to be submitted is not permitted until such time that the Engineer has completed his review.

1.17 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, to Engineer.
- B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation. Provide manufacturer's instructions with shop drawings.

1.18 CERTIFICATIONS

- A. Submit certifications of compliance indicated in the Contract Documents.
- B. Certifications shall be complete and exact, they shall be properly authenticated by the written signature, in ink, of an owner, officer or duly authorized representative of the person, firm or organization issuing such certification and they shall guarantee that the materials or equipment are in complete conformance with the requirements of these specifications.

1.19 COLORS AND PATTERNS

- A. Unless the precise color and pattern are specified, whenever a choice of color or pattern is available in a specified product, submit accurate color and pattern charts for Engineer's and Owner's review and selection.

1.20 MANUFACTURER'S SERVICE CENTER

- A. The product of a manufacturer who does not maintain an adequate nearby service center and a sufficient stock of spare parts are subject to rejection by Engineer solely on that basis.
- B. With each submission, submit information on manufacturer's facilities and give complete details of his service policies and capabilities, and a general idea of the stock of spare parts available. Submit this information in the form of a certification. Also include names, addresses and telephone numbers of at least three of the service center's present customers who are in the area of the project.

1.21 TEST RESULTS AND INSTALLATION

- A. Whenever field startup services are specified, the Contractor shall obtain from the manufacturer and submit to the Engineer Manufacturer Startup Reports (MSR's). The report shall detail the results of the field visit and all special conditions resulting from the startup.
- B. Whenever field or factory tests are required on materials, equipment and systems, such tests shall be performed and the test results submitted to Engineer in the form of a MSR.
- C. Do not deliver to the project or incorporate into the work any materials or equipment for which Engineer has not completed his review and found same to be in general conformance with the Contract Documents.
- D. Submit MSR's within thirty (30) calendar days after the date of the startup or factory test.

1.22 SPARE PARTS LIST

- A. Prepare a list of all spare parts specified to be provided in other Sections. Compile the total list for the purposes of reviewing actual spare parts delivered versus spare parts specified to be provided. The list shall reference the Section, model number, and quantity to be provided.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

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CONTRACTOR'S COMPANY NAME
ADDRESS

SUBMISSION TRANSMITTAL FORM**CLIENT NAME:** Town of Riverhead**PROJECT TITLE:** Construction of Pre-Stressed Ground Storage Tank at Plant No. 15**H2M PROJECT NO.:** RDWD 1702

Product, Item, or System Submitted:			
Submission Date:		Submission Log No.:	
Specification Section:		Paragraph Reference:	
Contract Drawing Reference(s):			
Manufacturer's Name:			
Manufacturer's Mailing Address:			
Manufacturer's Contact Information:	<i>Name</i>	() <i>Tel. no.</i>	<i>Email</i>
Supplier's Name:			
Supplier's Mailing Address:			
Supplier's Contact Information:	<i>Name</i>	() <i>Tel. no.</i>	<i>Email</i>
This item is a substitution for the specified item:	<input type="checkbox"/> No	<input type="checkbox"/> Yes	
Contractor's Approval Stamp with Signature & Date	<u>Contractor's Brief Comments or Remarks</u> (attach separate letter as needed):		
	By making this submission, we represent that we have determined and verified all field measurements and dimensions, field construction criteria, site and building constraints in terms of limitations in moving the item into the enclosed space, materials, catalog and model numbers and similar data and that we have checked and coordinated this submission with other work at or adjacent to the installed location in accordance with the requirements contained in the Contract Documents.		

END OF SECTION 013300

SECTION 014100 - REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Codes
- B. Governing agencies
- C. Permits

1.02 CODES

- A. Comply with the requirements of the various codes referred to in these Specifications. Such codes shall be the date of the latest revision in effect at the time of receiving bids.
- B. If there is a conflict between local, state, and/or Federal regulatory requirements, seek a consultation with the State Department of Labor. Resolve conflicts to the satisfaction of the State Department of Labor prior to commencing work.

1.03 GOVERNING AGENCIES

- A. All work shall conform to and be performed in strict accordance with all governing agencies such as, but not limited to:
 - 1. Occupational Safety and Health Act - OSHA
 - 2. State Department of Environmental Conservation
 - 3. State Building Code
 - 4. State Fire Code
 - 5. National Fire Protection Association - NFPA
 - 6. National Electrical Code
 - 7. State Plumbing Code
 - 8. New York State Energy Code
 - 9. County Department of Health
 - 10. Town Codes, Rules, Laws and Ordinances
 - 11. Sewer District Sewer Use Code
 - 12. Local Water District
 - 13. Electric Utility
 - 14. Gas Utility
 - 15. Village Codes

1.04 PERMITS AND INSPECTIONS

- A. Representatives of the Owner shall have access to the work for inspection purposes. The Contractor shall provide facilities suitable to the Owner to facilitate inspections of the installed work.
- B. Obtain and pay for all permits, fees, licenses, certificates, inspections and other use charges required in connection with the work.
- C. The following permits and/or certifications will be obtained by the Owner from the appropriate permitting agencies:
 - 1. Suffolk County Department of Health Services 348 – Public Water Supply Improvement.

1.05 LISTINGS

- A. Equipment and materials for which Underwriters' Laboratories, Inc. (UL) provides product listing service, shall be listed and bear the listing mark. Alternately, ETL Testing Laboratories, Inc. Product Safety Testing Listing is acceptable if the listed product has been tested to the applicable UL Standard.

1.06 FIRE RESISTANT CONSTRUCTION MATERIALS AND ASSEMBLIES

- A. Conform to the fire rating classifications based upon the test methods and acceptance criteria in the Standard, Fire Tests of Building Construction and Materials for which Underwriters' Laboratories, Inc. (UL) provides listings.
- B. Materials and assemblies shall comply with the acceptance criteria, detailed description of the assembly, its performance in the fire test and other pertinent details such as specification of materials, Classification coverage, and alternate assembly details.
- C. Alternatively, fire resistance rating classifications by other issuing organizations listed in the Fire and Building Codes are acceptable.

1.07 COORDINATION WITH WATER UTILITY

- A. Comply with the water utility requirements for water and fire service connections. Obtain and pay for all necessary permits from the water utility. Obtain authority to connect to the existing water mains.
 - 1. Make necessary connections to existing public water mains under supervision of the water utility representative.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 014100

SECTION 014223 - SPECIFICATION FORMAT

PART 1 - GENERAL

1.01 ABBREVIATED SUMMARY

- A. This Section explains the format of the specifications.

1.02 SPECIFICATION FORMAT

- A. The Specifications are generally arranged according to the Construction Specifications Institute (CSI) format. Most of the technical requirements are specified in the technical specifications of the document, which are grouped into forty-eight (48) major divisions. Most of the legal and administrative requirements are included in Division 1, General Conditions, Information For Bidders, and the Contract (agreement).
- B. Technical sections are arranged in numerical order, however section numbers may not be consecutive from section to section.
- C. Page numbering is subordinate to each section.
- D. Most sections are generally broken down into three (3) parts:
1. PART 1 - GENERAL
 2. PART 2 - PRODUCTS
 3. PART 3 - EXECUTION
- E. Not all these parts may be used and in some cases, the title of some of the parts may be different than listed above. Paragraph numbers are subordinate to each part.
- F. The Contractor is advised that the format described here is flexible in nature.
1. There is some overlapping of specified information between various portions of the Specifications.
 2. In all cases, the entire requirements of the Contract Documents for the project shall apply.
- G. Explanations:
1. Many technical sections begin with a paragraph titled "SECTION INCLUDES", "DESCRIPTION", or similar wording.
 - a. In these paragraphs, a brief listing of the specified products may appear or a brief description of the work generally specified in that section is presented.
 - b. These descriptions or listings are not all inclusive, but merely are provided as an aid in locating subject matter.
 - c. In some cases special cost related items of work are called to the attention of the Contractor in these opening paragraphs.
 2. "RELATED SECTIONS" or "RELATED WORK" or similar wording paragraphs list or reference related work specified elsewhere in the Contract Documents. Such listing is not all inclusive, rather, they are merely an aid to the Contractor in locating some of the other Specification Sections wherein work is specified which has a particularly close interrelationship with the work specified in that section.

- a. It shall be understood that all of the Work, and all of the Specifications and other portions of the Contract Documents, are interrelated, and that the total of all requirements set forth in all of the Contract Documents shall be met.
 - b. Equipment suppliers and manufacturers shall be advised of the requirements for making submittals and delivering products, as specified in Division 1 sections, even if said sections are not referenced therein that section.
3. "REGULATORY REQUIREMENTS" or "REFERENCES" or similar wording paragraphs describe standards, laws, guidelines, regulations, and standards related to workmanship and installation of the products specified which shall be followed by the Contractor in completing the work specified therein that section as if it was written there in that section. All such requirements and references shall be latest issue in effect at the time of the bid opening.
 4. When a "GUARANTEE" or "WARRANTY" paragraph appears in the section it is calling attention to a guarantee which extends beyond the period of the Contractor's Guarantee called for in the administrative portion of the Contract Documents or it states special requirements specific to the equipment, systems or products specified in that section.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 014223

SECTION 014500 - QUALITY CONTROL

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Requirements for monitoring the quality of the constructed project.
- B. Work of this Section also includes services of an independent testing laboratory for quality assurance testing.
- C. The services of the testing laboratory will be paid for out of the cash allowance included by the Contractor in the price as bid in accordance with the requirements contained herein and in Section 012100 - Allowances.

1.02 REFERENCES

- A. ASTM C1077 - Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation.
- B. ASTM D3740 - Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
- C. ASTM D4561 - Practice for Quality Control Systems for an Inspection and Testing Agency for Bituminous Paving Materials.
- D. ASTM E699 - Practice for Criteria for Evaluation of Agencies Involved in Testing, Quality Assurance, and Evaluating Building Components in Accordance with Test Methods Promulgated by ASTM Committee E6.

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 with specified standards as a minimum quality for the work except when more stringent tolerances, codes, or specified requirements indicate higher standards or workmanship that is more precise.
- C. Perform work by persons qualified to produce workmanship of specified quality.
- D. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.
- E. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.

1.04 QUALITY ASSURANCE - TESTING LABORATORY

- A. In order to establish compliance with the Contract Documents, materials shall be tested, examined and evaluated before they are incorporated into the work. During and after installations, additional tests, examinations, and evaluations shall be made to determine continued compliance throughout the course of the work.
- B. Testing laboratory shall be a reputable, experienced firm that is capable of performing all of the required testing and authorized to operate in the state in which the project is located.

- C. Perform all sampling and testing in accordance with specified procedures and use the materials, instruments, apparatus, and equipment required by the codes, regulations and standards. Where specific testing requirements or procedures are not described, perform the testing in accordance with all pertinent codes and regulations and with recognized standards for testing.
- D. In the event that samples and test specimens are not properly taken, handled, stored or delivered or if other requirements of this Section are not complied with, Engineer reserves the right to delegate any or all of this work to others, or to take whatever action deemed necessary to ensure that sampling and testing are properly accomplished, for which all costs shall be borne by Contractor.
- E. Engineer reserves the right to disapprove the use of a specific testing laboratory, even after prior approval, if the laboratory fails to meet or comply with the requirements of this Section. If this should occur, immediately discharge the testing laboratory and retain the services of a different laboratory acceptable to Engineer.
- F. The testing laboratory shall meet the following criteria:
 - 1. Be capable of performing all of the required tests.
 - 2. Be regularly engaged in performing the types of services required.
 - 3. Have adequate facilities, materials, equipment, and personnel to perform the services.
 - 4. Have an adequately trained, experienced and qualified staff.
 - 5. Have at least one registered professional engineer licensed in the state in which the project is located who shall be capable of performing field tests, supervising laboratory testing and interpreting test results. The professional engineer shall be thoroughly knowledgeable in materials, soils, asphalt paving and concrete.
 - 6. Shall be able to be on the Project site within two hours after being notified.
 - 7. Comply with the requirements of ASTM C1077, ASTM D3740, ASTM D4561, ASTM E548 and ASTM E699.
 - 8. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to either National Bureau of Standards or accepted values of natural physical constants.

1.05 REFERENCE STANDARDS

- A. Conform to reference standards by date that the project was last bid.
- B. Obtain copies of standards when required by Contract Documents.
- C. Should specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.06 SUBMITTALS

- A. Within fifteen (15) calendar days from the date of the Notice to Proceed, submit documentation from three (3) testing laboratories that clearly indicates experience, location, qualifications of staff, and descriptions of any limitations or restrictions of the firm.
 - 1. Include a price schedule for standard tests and a billing rate schedule for technician classifications.
 - 2. Based upon this information, the Engineer will select one firm to be the primary testing laboratory and one firm to act as a standby.

- B. Certified copies of each test report shall be mailed directly to the Engineer. The Contractor shall arrange with the laboratory to secure copies.
- C. Each report shall be in writing and shall include the testing method used, the test results, the specified results, the exact location of where the test specimens were taken, the date taken, Project identification, Contractor's name and other pertinent information required for a complete and meaningful test report.
- D. Each report shall be signed and certified by a responsible officer of the testing laboratory.
- E. E-mail reports directly to Engineer within 24 hours after the sample is taken, except in those instances when tests cannot be immediately performed because of required curing, incubation periods, or lengthy testing procedures.
- F. The laboratory shall verbally communicate test results when requested by the Engineer. This does not eliminate nor replace the requirements for a written report.

1.07 TESTING REQUIREMENTS

- A. Compaction Testing - Soil:
 - 1. Perform compaction testing in accordance with ASTM D2922, Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth) or ASTM D1556 Density and Unit Weight of Soil In Place by the Sand Cone Method.
 - 2. Perform tests and analysis of fill material in accordance with ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5-lb. Rammer and 12-inch Drop.
- B. Concrete Testing:
 - 1. Collect samples in accordance with ASTM C172, Practice for Sampling Freshly Mixed Concrete.
 - 2. Make test cylinders in accordance with ASTM C31, Standard Practice for Making and Curing Concrete Test Specimens in the Field.
 - 3. Test concrete cylinders in accordance with ASTM C39, Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
 - 4. Test slump and air entrainment.

1.08 TESTING SCHEDULE

- A. Compaction Testing of Soil:
 - 1. Pipe Installation: As directed by the Engineer.
 - 2. Concrete flatwork: As directed by the Engineer.
 - 3. Pavement subgrade: As directed by the Engineer.
- B. Concrete Testing: Make six (6) concrete test cylinders for each 50 c.y. or fraction thereof.
 - 1. Test two (2) cylinders at 7 days.
 - 2. Test two (2) cylinders at 28 days.
 - 3. The remaining cylinders shall be tested at a time to be determined by the Engineer. This requirement shall be subject to change as required by the Engineer.

1.09 FIELD OBSERVATION OF CONTRACTOR'S WORK

- A. The Engineer will provide periodic observation of the Contractor's work.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions. Verify that the existing substrate is capable of structural support or attachment of new Work being applied or attached. Examine and verify specific conditions described in individual specification sections. Verify that utility services are available, of the correct characteristics, and in the correct locations.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance. Seal cracks or openings of substrate prior to applying next material or substance.
- B. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 FIELD QUALITY CONTROL

- A. Allow representatives of the testing laboratory access to the work at all time. Provide all equipment, labor, materials, and facilities required by the laboratory to properly perform its functions. Cooperate with and assist laboratory personnel during the performance of their work.
- B. Test specimens and samples shall be taken by the person(s) designated in other Sections, or as directed by Engineer. Conduct field sampling and testing in the presence of Engineer. Provide all materials, equipment, facilities and labor for securing samples and test specimens and for performing all field-testing.

END OF SECTION 014500

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section supplements the General Conditions.
- B. The Work of this Section includes temporary facilities, utilities, and controls to be furnished by the Contractors for this project as it is specified herein.
- C. This Section is made a part of all Construction Contracts associated with the project. It contains specific references to the particular Contractor supplying said product or service. If no reference is provided then the requirement applies to all Prime Construction Contractors.
- D. Temporary electric shall be provided by the Prime Electrical Contractor as specified in Section 015113 located in the Contract Documents for Contract E except as required herein.

1.02 CARE AND PLACEMENT

- A. All temporary and permanent facilities and controls and all other elements on the project site shall meet all standards of the Occupational Safety and Health Act of 1970 and subsequent revisions. Each Contractor shall comply with all requirements of the Act.
- B. Each Contractor shall take every precaution and shall provide such equipment and facilities as are necessary or required for the safety of its employees and persons at the site.
- C. In the event of damage to existing and/or temporary facilities then immediately make all repairs and replacements to an equal condition prior to the event.

1.03 QUALITY PERFORMANCE

- A. Comply with and perform all work in accordance with the requirements of local authorities and utility companies having jurisdiction, and all applicable codes, regulations and ordinances.
- B. Secure approvals from the appropriate jurisdictions and utility companies on all repairs, relocations, connections, disconnections and the Work.
- C. All barricades, warning signs, lights, temporary signals and other protective devices shall conform with "Manual on Uniform Traffic Control Devices for Streets and Highways", US Government Printing Office.

1.04 SUBMITTALS

- A. Each Contractor shall provide a list of contact numbers as follows:
 - 1. Contractor's superintendent and office project manager (home, beeper, cellular, office, fax, trailer, and email address).
 - 2. All subcontractors.
 - 3. All utility companies.
 - 4. Emergency services such as fire department, police, and ambulance.
 - 5. Contractor shall also submit the following:
 - a. Name and qualifications of person or persons who shall be available to render first aid.
 - b. Names, addresses and telephone numbers of personnel who can be telephoned and act on behalf of Contractor in the event of emergencies or other problems requiring

prompt attention during winter shutdown, holidays, nights and other periods when the Contractor's superintendent may be absent from the project site.

- B. The General Contractor shall provide a sketch showing routing of temporary water service for construction purposes and for exfiltration tank testing. Provide cuts and plumber's certification for backflow device(s).

1.05 CONTRACTOR'S RESPONSIBILITY

- A. Each Contractor shall be responsible for the installation, performance, maintenance, and repair of all temporary facilities and controls specified herein this Section as originally provided.
- B. The Owner reserves the right to immediately correct a Contractor caused action, if in the opinion of the Owner, the situation may result in the immediate loss of life, property, and degradation of the environment. The costs for actions taken by the Owner shall be deducted from money due or to become due the Contractor. Amounts in excess shall be paid by the Contractor.
- C. If the Contractor caused situation is not deemed immediate, then the Contractor shall, within 24 hours of receipt of written and/or verbal notice, correct the defect or unsatisfactory condition.
- D. The Owner may repair, correct, replace, or install temporary facilities to correct the situation if the Contractor fails to perform within the allowed time. The costs to make the corrections shall be deducted from money due or to become due the Contractor. Amounts in excess shall be paid by the Contractor.

PART 2 - PRODUCTS

2.01 GENERAL

- A. The Owner may use temporary power lines, pipes, roadways or other facilities that each Contractor furnishes, installs, and maintains (then removes at the completion of the work), during the period of construction.
- B. The location of all temporary power lines, roadways, and other necessary temporary facilities shall be subject to the approval of the Engineer, and these shall be located and operated so as not to interfere with the operation of the facilities.

2.02 WATER FOR CONSTRUCTION PURPOSES

- A. Each Contractor shall obtain water from the nearest potable water source as designated by the Owner.
- B. The Owner will pay for water usage for general construction activities such as dust control and for sanitary purposes, like hand washing.
- C. Each Contractor shall install his or her own backflow prevention device at the supply point where it is connected to the Owner's system.
 - 1. The water purveyor shall approve the device.
 - 2. The device shall be tested and certified as functioning properly.
 - 3. Post the certification in a location acceptable to the water purveyor.
- D. Each Contractor shall exercise measures to conserve water.
- E. Provide insulation and heat tracing to prevent freezing of temporary piping. Drain hoses at the end of each use.

- F. All Contractors, subcontractors, and personnel involved in the project shall be permitted to use water for construction purposes as provided under this paragraph.

2.03 SANITARY FACILITIES

- A. Each Contractor shall provide and maintain his or her own temporary toilet facilities and enclosures.
- B. These facilities shall be maintained in a strictly sanitary manner and be screened from the general public.
- C. All facilities shall be in accordance with the Occupational Safety and Health Act (OSHA) standards and all other applicable local codes.
- D. The locations of such facilities shall be determined by the Engineer or the Owner and be shown on the General Contractor's Site Utilization Plan.
- E. All applicable codes and regulations regarding the maintenance and method of waste disposal for these facilities will be strictly enforced. These facilities shall be of the portable type.
- F. The Owners sanitary facility will not be available for use by any contractor.

2.04 HEAT

- A. Each Contractor shall provide and pay for heating devices and fuel as required to maintain adequate heat for specific construction operations; i.e. painting, application of coatings, etc. where so specified elsewhere in these specifications.
- B. Maintain minimum ambient temperature of 40 degrees F in areas where construction is in progress, unless otherwise indicated in specifications or as required by proposed working conditions and manufacturer's installation/application instructions.

2.05 VENTILATION

- A. Each Contractor shall ventilate enclosed areas to assist in the curing of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors or gases.
- B. The General Contractor shall ventilate buildings to safely apply paint in accordance with Section 099100 requirements.

2.06 BARRIERS AND PROTECTION

- A. Each Contractor shall provide railings, barricades, signs, fences and other protective devices to prevent unauthorized entry to construction areas, to allow for the Owner's safe use of the site and to protect existing facilities and adjacent structures from damage from the work.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing buildings.
- C. Provide protection for plant life designated to remain.
- D. Protect vehicular traffic, stored materials, public utilities, site and structures from damage.

- E. Provide warning signs, detour signs and other traffic control devices to insure the safety of plant operators and to adequately direct traffic around the work. Illuminate barricades, obstructions, and warning signs from sunset to sunrise.

2.07 TEMPORARY FENCING

- A. The Contractor is responsible for performance compliance with OSHA standards.
- B. Each Contractor shall provide temporary safety fence around all open excavations or other dangerous conditions on the construction site.
 - 1. All temporary safety fencing shall be designed and erected in compliance with OSHA standards, but in no case less stringent than these specifications for fencing.
 - 2. Fence is to be bright orange in color, a minimum of 4 feet high, and properly secured using 1" diameter steel pipe at 4'-0" on-center as support posts.
 - 3. Stake each support post to a depth of 18" and tamp securely into place.
 - 4. Each post shall be plumb.
 - 5. Secure fencing to posts using heavy-duty 12" long cable ties or tie wire.
 - 6. The fence and supports shall remain the property of the Contractor and be promptly removed at the appropriate time.

2.08 TEMPORARY HANDRAILS AND SCAFFOLDS

- A. All temporary handrailing and scaffolds shall be designed and erected in compliance with OSHA standards. Each Contractor is responsible for performance compliance with OSHA standards.
- B. Handrails shall be securely installed and maintained in accordance with OSHA regulations until the permanent railing or grating has been permanently installed and approved by the Engineer.
- C. All scaffolding and platforms shall be erected in a safe and substantial manner complying with OSHA requirements.
- D. All temporary handrails and scaffolds shall be designed by a professional engineer licensed in the state where the project is being constructed.
 - 1. The design drawings and details shall be stamped by the licensed engineer and submitted for record purposes.
 - 2. The Contractor's design engineer shall visit the site to certify that the handrailing and/or scaffolds have been erected pursuant to the stamped design.

2.09 EROSION CONTROL

- A. Each Contractor shall provide measures to keep the ground surface well drained, but avoid erosion of embankments, excavations, the project site, and adjacent areas.
- B. Each Contractor shall comply with all local codes, rules, and regulations concerning soil erosion.
 - 1. Use hay bales or silt fences to control erosion to the satisfaction of the Engineer and regulatory agencies. Use hay bales or silt fences to stop silt and sediment from reaching surface waters, parking lots and roads.
 - 2. Leave erosion control methods in place until ground cover is established or until date of substantial completion.
- C. The General Contractor shall install erosion control measures as shown on the Drawings.

2.10 DUST CONTROL

- A. Each Contractor shall provide measures to control dust resulting from the work.
- B. Control dust at locations and in such quantities and frequencies as required to prevent dust from becoming a nuisance to the surrounding area.
- C. In the event the Contractor does not adequately provide for dust control, or should insufficient quantities of dust control agents be placed and Contractor fails to place additional quantities within 4 hours after Engineer's direction, Owner will perform the required work by whatever means deemed expedient and all expenses incurred by Owner will be charged to and paid by Contractor.
- D. Take care in selecting and applying dust control agents so as not to make roadways or walkways slippery, muddy or hazardous. Dust control agents shall be acceptable to the Engineer.
- E. The General Contractor shall provide all roadways with dust control.

2.11 RUBBISH REMOVAL

- A. The General Contractor shall be responsible for overall rubbish removal.
- B. Burning of rubbish and trash will not be permitted.
- C. The General Contractor shall clean up trash as specified in Section 011400 - Work Restrictions or more often if the trash interferes with the work of others, presents a hazard or if directed by the Engineer.
- D. Dispose of rubbish and waste materials in accordance with state regulations and local ordinances.
- E. The General Contractor shall also place rubbish containers at locations selected by the Engineer.
 - 1. Furnish adequately sized rubbish containers from the date of initial mobilization to the date of final payment.
 - 2. As a minimum, the Contractor shall furnish two (2) 55-gallon general trash containers. Secure the top of each container to the container.
 - 3. Secure the container itself so that it does not get blown about the site.
- F. The General Contractor shall be responsible for maintaining the site free of trash.
- G. Each Contractor shall assist the General Contractor in maintaining the site free of trash and debris.
 - 1. It shall be the sole responsibility of the General Contractor to prevent trash from being blown about the site.
 - 2. Provide a worker to police the site at least for 1 hour at the end of each day that work is being undertaken by the General Contractor.

2.12 SNOW REMOVAL

- A. The General Contractor shall be responsible for maintaining roads, walkways, sidewalks, and parking areas/lots free of snow. Provide snow plowing during and after each snow fall equal to or greater than 1.0 inch as reported by the local weather service.

- B. Any damage resulting from the Contractor's snow clearing operations shall be immediately repaired at no additional cost to the Owner.

2.13 ENCLOSURES

- A. Each Contractor shall provide and maintain temporary enclosures, sheds, or fenced-in areas to accommodate protection for products, material and equipment.
- B. Store equipment that cannot be exposed to outdoors in accordance with Section 016500 - Product Delivery, Storage and Handling.

2.14 SECURITY

- A. Each Contractor shall provide security and facilities to protect work from unauthorized entry, vandalism and theft.
- B. Coordinate with Owner's security program, if applicable.
- C. Each Contractor has full responsibility for the working area until final acceptance and payment.
- D. The General Contractor shall maintain the perimeter fence that pre-existed prior to the start of construction. A temporary perimeter fence shall be required at all times during the construction and until the new perimeter fence is installed, or until the project is accepted by the Owner.
- E. It shall be the General Contractor's responsibility to lock all gates to the site, and on the access road, at the end of each work day.
- F. All on-site employees shall bear, at all times, an identification badge, conspicuously worn, which shall include, at a minimum, a passport or similar size photograph, the name of the employee and the name of the company.
- G. Any employee working on site without a photo identification badge will be instructed to leave the site.
- H. All company vehicles shall be conspicuously identified, through sufficiently sized lettering on both the passenger and driver sides, with the company name, address and telephone number.
 - 1. All employee owned vehicles shall have an 8-1/2 inch by 11 inch sign with the company name, address and telephone number placed on the dashboard on the driver side.
 - 2. Vehicles may be subject to search by the Owner or owner's representatives.
 - 3. Any vehicle that does not have the company name, address and telephone number will not be permitted on the Owners' property.
- I. Submit to the Owner a complete listing of all employees that will or might be performing work at the project site.
 - 1. Furthermore, provide sufficient information as may be required for the Owner to conduct background checks, in accordance with the Fair Credit Reporting Act.
 - 2. Background checks may be performed at the discretion of the Owner due to the sensitive nature of the work and the extensive, and sometimes unsupervised, access to Owner property and buildings.
 - 3. The Contractor shall be required, on request from the Owner, at any time prior to or during the work, to provide releases from its employees and officers to the Owner, H2M, and a background search firm, hired by either the Owner or H2M, to conduct background checks in accordance with the Fair Credit Reporting Act and applicable state law.

2.15 PARKING

- A. Do not allow heavy construction vehicle parking on existing pavement, if existing pavement is not scheduled for replacement or restoration.
- B. Provide and maintain access to fire hydrants, building entrances, process tanks, doors and the work in general.
- C. Each Contractor shall have his or her employees and subcontractors park in areas designated by the Owner/Engineer.
- D. If designated on the Contract Drawings, then only use those areas for parking.
- E. Where trades work from their trucks, then coordinate the parking of trucks with other prime contractors.
- F. If a Site Utilization Plan has been specified, then parking shall be as sited in the plan.

2.16 DAMAGES

- A. Each Contractor, with the prior approval of the Owner/Engineer, shall promptly repair any damage, directly or indirectly caused by the Contractor's operations.
- B. All repairs shall be to the complete satisfaction of the Owner and equal in quality to that which pre-existed.

2.17 FIRST AID FACILITIES & EMERGENCY TELEPHONE NUMBERS

- A. Each Contractor shall provide and maintain adequately equipped first aid facilities in a location or at locations that are readily accessible to workmen, Engineer and visitors to the site.
- B. Provide at least one on-site employee who is properly trained in first aid and who shall be available to render first aid whenever construction is in progress.
- C. Provide a list of emergency telephone numbers as specified above.
- D. Post the list of emergency telephone numbers as directed by the Engineer.

2.18 POLLUTION CONTROL

- A. Do not permit pollutants, such as chemicals, fuels, lubricants, calcium chloride, sewage, water containing sediments and other deleterious, poisonous, toxic or oxygen demanding substances to enter or leach into streams, lakes, wetlands, other surface waters, into groundwater, or into the air.
- B. In waters used for public water supply or used for trout, salmon or other game or forage fish spawning or nursery, control measures must be adequate to assure that turbidity in the receiving water will be increased not more than 10 standard turbidity units (s.t.u.) in the absence of other more restrictive locally established limitations, unless otherwise permitted by the State.
- C. In no case shall the classification for the surface water be violated, unless otherwise permitted by the State.
- D. In water used for other purposes, the turbidity shall not exceed State limits.

2.19 REMOVALS

- A. Remove all items provided under this Section except as otherwise specified.

PART 3 - EXECUTION

3.01 PROTECTION OF EXISTING UTILITIES AND PUBLIC WORKS

- A. Maintain and protect existing utilities and public works including, but not limited to, conduits, sewers, water mains, electric and telephone conductors or conduits, and gas mains encountered during the construction.
- B. In the event that it is not possible to cross over, under, around or otherwise avoid the existing utility, the owner of the utility shall be notified that the utility must be altered or moved.
- C. In the event that damage shall result to any service pipe for water or gas, or any private or public sewer or conduit, the Contractor shall immediately, and at its own expense, repair same to the satisfaction of the Engineer.
- D. Any contents from the pipes, sewers or conduits shall be immediately removed and disposed in accordance with applicable laws.

3.02 REMOVAL OF UTILITIES, FACILITIES AND CONTROLS

- A. Remove temporary above grade or buried utilities, equipment, facilities and materials, immediately following substantial completion and prior to release of retainage.
- B. Remove underground installations to a minimum depth of 2 feet.
- C. Regrade site to restore to existing slope and elevation, and restore the surface.
- 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.
- F. Remove temporary parking and access roads.
- G. Regrade area to existing slope and elevation and restore the surface to its existing condition.
- H. Final payment will not be processed until all removals have been completed to the satisfaction of the Owner/Engineer.

3.03 PROTECTION OF EXISTING PROPERTY

- A. Protect existing structures and finishes during performance of the work.
- B. Protect existing trees and plants during performance of the work.
- C. Do not deposit excavated materials or store materials around trees or plants or attach guy wires to trees.

END OF SECTION 015000

SECTION 016100 - BASIC PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section includes the general requirements for products that are to be furnished, installed, or otherwise incorporated into the project.

1.02 QUALITY ASSURANCE APPLIES TO ALL PRODUCTS

- A. In addition to the Contractor's warranties and guarantees on materials and equipment required under the General Conditions of the Contract and the Technical Specifications contained hereinafter, the Contractor shall also be responsible for all materials, equipment, and products that have or is planned to be incorporated into the work.
 - 1. The Contractor shall be responsible for the finished work and that it accurately and completely complies with these Contract Documents.
 - 2. The Contractor shall be responsible for work performed by subcontractors, equipment suppliers, and material vendors.
 - 3. The Contractor shall be satisfied as to the product's performance before it is ordered for installation. At the Contractor's option, he/she shall have tested each product to determine compliance with these specifications.
- B. The Engineer may check all or any portion of the work and the Contractor shall afford all necessary assistance to the Engineer in carrying out such checks.
 - 1. Such checking by the Engineer shall not relieve the Contractor of any responsibilities for the accuracy or completeness of the work.
 - 2. Such checking is a courtesy service being provided by the Owner and does not relieve the Contractor of his/her responsibilities under this Construction Contract.
- C. If witnessed shop tests or inspections are required at the point of manufacture, the Contractor shall keep the Engineer advised as to the progress of the work to allow inspection at the proper time and place. Provide at least two (2) weeks advance notice before scheduled shop tests.
- D. Should a dispute arise as to the quality of workmanship, equipment or material performance, then the final decision regarding acceptability with these Contract Documents shall be that of the Owner.
- E. At the request of the Engineer, the Contractor shall promptly provide the services of a competent representative of the manufacturer at the project site, fully equipped and prepared to answer questions, perform tests, make adjustments and to prove compliance with the Contract Documents free of all additional charges. Proof of compliance shall be the responsibility of the Contractor, and such special visits to the project site by the manufacturer shall not be eligible under any cash allowances or stipulated man-hours necessary to startup the system and/or train the Owner as may be specified in the Technical Specifications.

1.03 QUALITY ASSURANCE - EQUIPMENT

- A. Erect and install products under the supervision of a competent and experienced superintendent. The method of installation, including anchorage, clearances, and tolerances for rotating assemblies, methods of support for equipment and adjacent piping, shall be as recommended by the equipment manufacturer unless detailed on the Drawings or specified.
- B. All material furnished shall be new, and guaranteed free from defects in workmanship, installation, and design.

- C. Design and fabricate equipment in conformance with ANSI, ASTM, ASME, ASHRAE, IEEE, NEC and NEMA Standards.
 - 1. Equipment shall withstand the stresses that may occur during fabrication, testing, transportation, installation and conditions of operation.
 - 2. Pumps shall conform to the requirements of the Hydraulic Institute.
 - 3. Equipment shall comply with the latest OSHA regulations and the ANSI Safety Standards.
- D. Equipment shall be products of manufacturers who produce evidence of their ability to promptly furnish any and all interchangeable replacement parts as may be needed at any time within the expected life of the equipment.
- E. Manufacturers shall also have readily available access to suitable and accurate testing facilities for performing the required shop tests.

PART 2 - PRODUCTS

2.01 MATERIALS AND EQUIPMENT

- A. Equipment shall have been in successful regular operation under comparable conditions for a period of at least five (5) years.
 - 1. This time requirement does not apply when the manufacturer posts an Owner/Engineer acceptable Performance Bond or Letter of Credit for the duration of the time period that will guarantee replacement of the equipment in the event of failure.
 - 2. The bond shall be in a form that is acceptable to the Owner's legal council.
- B. The Owner reserves the right to reject any material or equipment manufacturer who, although he appears to be qualified and meets the technical requirements, does not provide satisfactory evidence indicating adequate and prompt post-installation repair and maintenance service, as required to suit the operational requirements of the Owner.
- C. Whenever it is required that the Contractor furnish materials or manufactured articles or shall do work for which no detailed specifications are set forth, the materials or manufactured articles shall be of the best grade in quality and workmanship obtainable on the market from firms of established good reputation, or, if not ordinarily carried in stock, shall conform to the usual standards for first-class materials or articles of the kind required.
- D. Perform work in full conformity and harmony with the intent to secure the best standard of construction and equipment of the work as a whole or in part.
- E. Items of any one type of material or equipment shall be the product of a single manufacturer.
 - 1. For ease of the Owner in maintaining and obtaining service for equipment and for obtaining spare parts from as few places as possible, to the maximum extent possible, use equipment of a single manufacturer.
 - 2. The Engineer reserves the right to reject any equipment from various manufacturers if suitable equipment can be secured from fewer manufacturers and to require that source of materials be unified to the maximum extent possible.
- F. Substitute equipment shall not be fabricated nor installed until after written decision to accept request is received from the Engineer.

2.02 FABRICATIONS

- A. Insofar as possible, shop prefabricate all items complete and ready for installation.

- B. Accurately fabricate all items to the details shown on the Drawings and on the shop drawings found in compliance with the Contract Documents.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Prior to work under any Section, carefully inspect the work of all other prime trades and verify that all such work is in conformance with the Contract Documents and is complete to the point where the work under that Section may properly commence.
- B. Avoid the need to remove and replace work and to avoid unnecessary cutting and patching.
- C. Inspect all surfaces to be sure that they have been properly prepared before applying new work to such surfaces.
- D. Verify that all work can be installed in strict accordance with the drawings and the approved shop drawings. Immediately report discrepancies to Engineer.
- E. Do not proceed with the work under any Section until these conditions are obtained.

3.02 INSTALLATION

- A. Furnish and install materials and equipment in accordance with the instructions of the applicable manufacturer, fabricator or processors, except as otherwise provided in the Contract Documents.
- B. All work shall be done in a workmanlike manner and set to proper lines and grades. The work shall be square, plumb and/or level as the case may be.
- C. Where performance criteria are specified, do all work necessary to attain the required end results.

3.03 FIELD QUALITY CONTROL

- A. Neither observations by Engineer nor inspections, tests or approvals by other persons shall relieve the Contractor from his obligations to perform the work in accordance with the requirements of the Contract Documents.
- B. If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to specifically be inspected, tested or approved by some public body, the Contractor shall assume full responsibility therefore, pay all costs in connection therewith, and furnish the Engineer with the required certificates of inspection, testing or approval.
- C. The Owner reserves the right to independently perform laboratory tests on random samples of material or performance tests on equipment delivered to the site.
 1. These tests, if made, will be conducted in accordance with the appropriate referenced standards or specification requirements.
 2. The entire shipment represented by a given sample, samples or piece of equipment may be rejected on the basis of the failure of samples or pieces of equipment to meet specified test requirements.
 3. All rejected materials or equipment shall be removed from the site, whether stored or installed in the work, and the required replacements shall be made, all at no additional cost to Owner.

3.04 ADJUST AND CLEAN

- A. Upon the completion of installations, and as a condition of its acceptance, visually inspect all work, adjust all components for proper alignment and touch-up abrasions and scratches to make them completely invisible.
- B. Thoroughly examine all materials and equipment with protective or decorative finishes for defects and damage prior to being covered.
 - 1. In the case of buried items of work, restore protective surface covers so as to conform to the Contract Documents prior to being backfilled, buried or embedded, as the case may be.
 - 2. In the case of exposed items of work, for which a decorative finish is required, all scratches, discoloration's, unmatched colors, disfigurements and damages shall be repaired and touched-up so as to provide a neat, clean finish, and be uniform in color.

3.05 UNCOVERING WORK

- A. Unless otherwise specified or directed by Engineer, no work shall be covered until it has been observed, tested, photographed, measured, and authorized to be covered by Engineer.
- B. Tie distances to above ground physical structures as reference points to all underground utilities, conduits, pits, manholes, valves, and pipelines shall be obtained by the Contractor prior to covering the work. Immediately comply with the Engineer's direction to uncover the work if tie distances were not obtained.
- C. If any work has been covered with Engineer's consent and Engineer considers it necessary or advisable that covered work be observed or tested, the Contractor, at Engineer's request, shall uncover, expose or otherwise make available for observation, or testing as Engineer may require, that portion of the work in question, furnishing all necessary labor, material and equipment.
 - 1. If it is found that such work is defective, the Contractor shall bear all the expenses of such uncovering, exposure, observation, and testing of satisfactory reconstruction, including compensation for additional engineering services and an appropriate deductive change order shall be issued.
 - 2. If, however, such work is not found to be defective, the Contractor shall be allowed an increase in the contract price or an extension of the contract time, or both, directly attributable to such uncovering, exposure, observation, testing and reconstruction if he makes a claim therefore as provided in the General Conditions.

3.06 DEFECTIVE WORK

- A. The repair, removal, replacement and correction of defective work is a part of this Contract and shall be promptly performed in accordance with the requirements set forth in the General Conditions or other portions of the Contract Documents. All costs in connection with the correction of defective work shall be borne by the Contractor.
- B. Products that fail to maintain the performance or other salient requirements of the Contract Documents, shows undue wear, or other deleterious effects during the maintenance period, shall be considered defective.

END OF SECTION 016100

SECTION 016500 - PRODUCT DELIVERY, STORAGE AND HANDLING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. The Section includes the transportation, handling, storage and protection of products that are to be incorporated into the work.
- B. The procedures for turning equipment over to the Owner for installation by others is also included herein.

1.02 GENERAL

- A. Items shall be delivered as complete assemblies direct from the manufacturer with all internal wiring, piping, valving, and control devices intact except where partial disassembly is required by transportation regulations, protection of components, or where physical constraints may exist or be created for the setting of the item.
- B. Coordinate the disassembly and reassembly requirements with the manufacturer. Determine the need and extent of reassembly prior to bid.
 - 1. All labor, material and equipment costs associated with the disassembly and reassembly of the product shall be included in the Contract Price.
 - 2. Where reassembly of equipment is necessary, then the manufacturer shall provide reassembly instruction at the project site.
 - 3. A technician shall be present during the entire reassembly procedure and the manufacturer shall certify, in writing, that the unit was reassembled properly in accordance with instructions provided by the manufacturer and that all as-specified warranties remain in effect.
 - 4. The manufacturer's reassembly inspection time shall be in addition to the field service time specified and shall be included in the Contract Price. This time shall not be eligible for payment under any cash allowance item.
- C. In the case where equipment is to be installed by others, then the supplying contractor shall be responsible for its reassembly. If reassembly is necessary and the unit(s) are to be set inside an enclosure or building, reassemble the equipment inside said enclosure. The equipment once reassembled shall be turned over to the installing contractor as specified below.

1.03 PACKING

- A. Transport products in containers, crates, boxes or similar means such that the products are protected against damage that may occur during transportation.
- B. All parts shall be packaged separately or in container where parts of similar systems are grouped.
- C. Part numbers shall be indicated on the individual part. Use indelible ink to mark part numbers.
- D. All equipment shipments shall be included with a parts list showing a description (name) of the part and the manufacturer's part number.
 - 1. The parts list shall be shipped in a plastic zippered envelope with the words "Parts List" lettered on it in indelible ink.
 - 2. The parts list shall be placed inside the shipping container so that it is on the top of the contents.
- E. Equipment shall be shipped with storage, handling and installation instructions.

1. The Engineer reserves the right to withhold payment for equipment delivered to the site until such time as the storage, handling and installation instructions are supplied by the manufacturer.
 2. In the case where operation and maintenance manuals have been provided by the manufacturer, which includes the installation instructions, then the installation instructions shall also be included with the equipment shipment.
- F. All control panels shall be wood crated.
1. All sides of the control panel shall be covered with 3/4" plywood.
 2. The control panel number or name shall be printed on all sides of the crate in 1' high black lettering.
 3. The manufacturer's name, Contractor's name and project name shall also be printed on the front of the crate.
 4. All control panels and centers shall be packaged with three (3) copies of the approved wiring diagram inside the control panel enclosure in a separate plan holder attached to the inside door. The words "APPROVED FOR CONSTRUCTION" shall be indicated on each page of the wiring diagram.
- G. Delicate instruments and devices, reagents, chemicals, and glassware shall be shipped in packaging normally provided by the manufacturer.
- H. The Contractor shall require the manufacturer to be responsible for the proper packing of all products.

1.04 SHIPPING AND DELIVERY

- A. Product deliveries shall be accompanied with a bill of lading indicating the place of origination and the Contractor's purchase order number.
- B. Inspect shipments immediately upon delivery, to assure compliance with requirements of the Contract Documents and those products are undamaged.
- C. Promptly remove damaged material and unsuitable items from the job site.
- D. Provide equipment and personnel to handle products by methods to prevent soiling; disfigurement or damage.

1.05 STORAGE

- A. Store sensitive products and all spare parts in weather tight, climate controlled enclosures in an environment favorable to product.
- B. Store and protect products in accordance with the manufacturer's instructions.
- C. All other products that are to be installed underground or products such as pipe, valves, and fittings shall be stored outdoors but shall be blocked off the ground and covered with impervious sheet coverings.
- D. Store fabricated products above the ground on blocking or skids.
- E. Store loose granular materials in well-drained areas on solid surfaces to prevent mixing with foreign matter.
- F. Provide adequate ventilation to avoid condensation.

- G. In accordance with manufacturer's instructions protect bearings, couplings, shafts, rotating components, and assemblies. Protection of said equipment shall be continuous until the time the equipment is placed into permanent service.
- H. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to assure that products are maintained under specified conditions, and free from damage or deterioration.
- I. Do not store volatile liquids in any building on site.
- J. Storage of products shall be the responsibility of the supplying contractor. The installing contractor shall take all necessary precautions to protect the equipment being furnished by others.
- K. Store with seals and labels intact and legible.

1.06 EQUIPMENT INSTALLED BY OTHERS

- A. All products, except products noted on the Drawings or specified, shall be furnished and installed under this Contract.
 - 1. Only noted or specified products shall be furnished under this Contract for installation by others.
 - 2. If it is not noted on the Drawings or specified, then the product shall be furnished and installed under the Contract.
- B. The Contractor shall furnish these products to the Owner. These products shall be stored as specified above.
- C. The Owner will then advise the installing contractor that the product(s) are ready for installation.
 - 1. In the case where the product is stored in a proper enclosure, but not stored inside the building to be constructed under this project, then the installing contractor shall move the product into the building to a location adjacent to the final location shown on the Drawings.
 - 2. In all cases, the installing contractor shall be responsible for moving from storage, uncrating, anchoring, mounting and installing the product as required by the Contract Documents.
- D. The Contractor and installing contractor(s) shall be present at the time the equipment is turned over to the Owner. Immediately thereafter, the Owner will turn the product over to the installing contractor for installation.
- E. The Owner, Contractor, Engineer and the installing contractor shall inspect the condition of the product at this time.
 - 1. Any defects in the product will be noted and the Contractor will be advised to make all repairs immediately.
 - 2. The installing contractor shall still be required to install the product if the damage is deemed cosmetic by the Engineer.
 - 3. The manufacturer's installation instructions or wiring diagram shall be turned over to the installing contractor at this time by the Contractor.
 - 4. Any damage occurring to the product during moving, setting and mounting the unit(s) shall be the responsibility of the installing contractor.
 - 5. The Contractor is advised to take photographs to document the condition prior to it being turned over to the installing contractor.

6. The installing contractor is advised to take photographs to document the condition prior to its acceptance.
- F. The supplied unit(s) remain the property of the Contractor until final acceptance of the work.
- G. Any damage caused to the unit(s) due to improper installation, workmanship, and non-compliance with the manufacturer's written installation instructions shall be the responsibility of the contractor who caused said damage. The burden of proof shall rest with the supplying Contractor.
- H. In the event the Contractor discovers misuse, abuse or improper installation of the unit(s) by the installing contractor, then he shall immediately notify the Engineer in writing. The Engineer will investigate the accusations and make a determination. The Engineer's determination shall be binding and agreed to by both parties.
- I. If the Engineer's determination substantiates the accusations of the Contractor, then the Contractor shall install the unit(s), the costs for which will be paid for as extra work. All costs associated with the extra work change order, including engineering and attorney fees of the Owner and Contractor will be deducted from money due the installing contractor.

1.07 PROTECTION OF WORK

- A. The Contractor shall protect the installed work. All costs for protection shall be borne by the Contractor. Provide coverings as necessary to protect installed products from damage, from traffic and subsequent construction operations. Remove when no longer needed.
- B. Cover and protect equipment from dust, moisture or physical damage. Protect finished floor surfaces prior to allowing equipment or materials to be moved over such surfaces. Maintain finished surfaces clean, unmarred and suitably protected until accepted by the Owner.
- C. Additional time required to secure replacements and to make repairs will not be considered by the Engineer to justify any extension in the Contract Time of Completion. In the event of the damage, promptly make replacement and repairs to the approval of the Engineer at no additional costs.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 016500

SECTION 017423 - CLEANING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Cleaning during the progress of the work
- B. Cleaning prior to final payment

1.02 SCHEDULING

- A. Sequence, schedule, and coordinate final cleaning work with the final cleaning work to be performed by other prime contractors.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Cleaning materials shall be appropriate to the surface and materials being cleaned.
- B. Provide pads to protect finished surfaces from cleaning materials.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Post signs to advise building occupants if wet and/or slippery floor conditions exist during cleaning operations.

3.02 PROGRESS CLEANING

- A. Keep all buildings, enclosures, and confined areas where work is being performed under the Contract free from unattended combustible materials.
- B. Remove rust spots as they develop.

3.03 FINAL CLEANING

- A. Remove dust, dirt, grease, stains, paint drips and runs, plastic, labels, tape, glue, rope, and other foreign materials from visible interior and exterior surfaces.
- B. Do not move dust from spot to spot. Remove directly from the surface on which it lies by the most effective mean such as appropriately treated dusting cloths or vacuum tools. When doing high cleaning, do not allow dust to fall from high areas onto furniture and equipment below.
- C. Dismantle and remove all temporary structures, scaffolding, fencing, and equipment. Remove waste materials, rubbish, lumber, block, tools, machinery, and surplus materials.
- D. Perform the following prior to final payment:
 - 1. Broom clean all exterior concrete surfaces and vacuum clean all interior concrete surfaces.
 - 2. Repair, patch, and touch-up marred surfaces to specified finish and to match adjacent surfaces.
 - 3. Replace all damaged insect screens.

4. Polish bright metal by damp wiping and drying with a suitable cloth. If a polished appearance is not thereby produced, apply appropriate metal polish.
5. Clean and polish all stainless steel surfaces, including control panels supplied under this Contract.
6. Clean all paved roads, lots and drives which were paved as work under this Contract and all existing paved surfaces using a mechanical street cleaner.
7. Remove all rust spots and stains from new and pre-existing concrete, painted surfaces, and all other surfaces.
8. Wash all existing floors that were in any way impacted by the construction operations.
9. Inspect interior and exterior surfaces, and all work areas, to verify that the entire work is clean and ready for use by the Owner. The project will not be considered substantially complete until all final cleaning has been performed.
10. Polish all new handrail installed as work of this contract with a commercially available aluminum cleaner recommended by the railing manufacturer.
11. Fill in all holes in concrete that remain after temporary handrail is removed. Non-shrink grout shall be used.
12. Thoroughly clean all pits, galleries, manholes, pipes, channels, tanks, wells and all structures entered upon.

END OF SECTION 017423

SECTION 017500 - STARTING AND ADJUSTING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Work of this Section includes the following:
 - 1. Testing, adjusting, and balancing

1.02 STARTING SYSTEMS

- A. The Contractor shall coordinate, schedule, and sequence the start-up of various equipment and systems.
- B. Where the start-up of a system or piece of equipment is dependent upon the start-up of other system(s) or equipment, then the Contractor shall schedule and sequence the start-ups to coincide.
- C. Notify the Engineer at least 14 calendar days prior to the start-up of each item or system so that he can schedule the startup with the Owner, utilities, and other Prime Contractors.
- D. Where applicable, verify that each piece of equipment or system has been checked for proper:
 - 1. lubrication,
 - 2. drive rotation,
 - 3. belt tension,
 - 4. motor starter heater size,
 - 5. fuse size,
 - 6. water pressures,
 - 7. terminal connections,
 - 8. control sequence,
 - 9. for conditions which may cause damage or delay the start-up procedure.
- E. Verify that the equipment has been installed in accordance with the manufacturer's requirements.
- F. Complete all pre-startup checklists that may be required by the system vendor.
 - 1. In the event that start-up activities are delayed as a result of the Contractor's failure to properly check the completed installation and a manufacturer's representative is on the job site waiting for corrections to be made, then the Engineer may, at his/her sole discretion, postpone start-up until such time as the corrections have been made without any extra costs.
 - 2. The Owner may deduct from money due the Contractor the excess cost of engineering associated with having the Engineer present during the start-up.
 - 3. The deduction shall be equal to the Engineer's effective billing rate times the total number of hours delayed during the start-up activities.
- G. Verify that tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- H. Verify that wiring and support components for equipment are complete and tested.
- I. Execute start-up under supervision of applicable Contractor's personnel in accordance with manufacturer's instructions.
- J. The Contractor shall have the job site superintendent present during all start-up activities.

- K. Provide manufacturer's authorized technician at the site when specified and in accordance with the requirements contained in Section 014500 - Quality Control.
- L. Submit manufacturer's start-up reports (MSR's) in accordance with Section 013300.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 017500

SECTION 017550 - PROCESS PIPE AND TANK TESTING

PART 1 - GENERAL

1.01 SUMMARY

- A. Testing of piping.
- B. Testing of tanks vented to atmosphere.
- C. Pipe leakage testing shall comply with the conditions noted in the Schedule.

1.02 DEFINITIONS

- A. Leakage (or exfiltration) - The quantity of water to be supplied into the newly laid pipe, any valved section thereof, manhole, or other appurtenance, necessary to maintain the specified leakage test pressure after the pipe has been filled with water and the air expelled.
- B. Infiltration - The quantity of water that enters into any pipe, manhole, or other appurtenance when the static groundwater elevation is at the maximum elevation above the pipe or appurtenance as specified hereinafter.

1.03 QUALITY ASSURANCE

- A. Prior to Substantial Completion, pressure pipes and non-pressure pipes shall meet specific leakage requirements. These leakage requirements shall be satisfied by the basic materials alone. Where joint fillers and the like have been specified, primarily to protect jointing materials, and secondarily to provide a factor of safety, they shall not be applied until after leakage tests have been completed and have been accepted by Engineer.
- B. Engineer will witness tests. Tests not witnessed will be considered as not having been performed.
- C. Do not close or cover up work until it has been observed for proper and satisfactory construction and installation in compliance with the Contract Documents. Should incomplete or unacceptable work be covered, the Contractor shall, at his/her own expense, uncover all work so that it may be properly observed. After such observations, repair and replace the work that was found defective, unsatisfactory, and not in accordance with the Contract Documents. After such repair and replacement, bring all work to completeness and status as it was before it was closed and covered, all at the Contractor's own expense. Submit for review and approval proposed corrective action to correct failed systems.
- D. Successful completion of required tests shall be in no way interpreted as relieving the Contractor of responsibility for defects that become apparent subsequent to the time of testing. It shall be the sole right of the Engineer to determine whether defects exist. Retest all portions of the work deemed necessary by the Engineer prior to Substantial Completion.

1.04 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Provide details and specifications on testing apparatus.
- C. Provide certified test results on forms approved by the Engineer.

1.05 SEQUENCING AND SCHEDULING

- A. Notify Engineer and governing agencies, if necessary, at least 48 hours in advance of a scheduled test so that the test may be witnessed.
- B. Test underground pipe and ground storage tank after backfilling.
- C. At Engineer's discretion, additional sections of pipelines may be required to be tested as soon as pipe is laid and prior to backfilling when working conditions or the standard of workmanship have been altered.

PART 2 - PRODUCTS

2.01 TESTING APPARATUS

- A. Provide labor, plugs, measuring equipment, and other apparatus, complete, to perform testing.
- B. Provide clean water, air, nitrogen, and other materials as required to accomplish testing.
- C. Provide plugs and caps capable of withstanding test pressures.
- D. Provide temporary flanges, plugs, bulkheads, thrust blocks, weighing, bracing and other items necessary to prevent joints from separating, and to prevent injuries or damage.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Plug open ends, adequately block bends, tees, ends, and other fittings, and do whatever is necessary to brace piping system so that it will safely withstand the pressures developed under the tests and so that no damage or injury shall occur to the pipeline, people or property.
- B. Before tests are conducted, isolate, or remove any regulator, gauge, trap, or other apparatus or equipment that may be damaged by test pressures.

3.02 GENERAL

- A. Trapped Air: Trapped air may cause a false indication of the rate of leakage. Points of concern include ends of lines, stubs, house connections and high points in pipelines. No credit will be made for this condition and no adjustment will be made to the allowable leakage. When trapped air is suspected of causing a test failure, do whatever is necessary to evacuate the air and repeat tests until the actual leakage is equal to or less than allowable rate of leakage.
- B. Water Absorption: No credit will be given for absorption of water in pipe and manhole walls. If necessary, fill pipes and manholes with water well in advance of testing and allow them to soak in order to eliminate or minimize the effects of absorption.

3.03 TESTS FOR PRESSURE PIPES

- A. Leakage testing shall include the main exiting pipe, service connections, and other appurtenances on the section of pipeline being tested.
- B. Test pipes prior to applying insulation and before they are concealed or furred-in.

- C. Provide all necessary gauges. Gauges shall be standard pressure type with a minimum 4-1/2 inch diameter dial and a pressure range not in excess of 150% of the maximum required test pressure. Gauges shall be liquid-filled.
- D. Provide and maintain at the site a gauge stand with an approved laboratory calibrated test gauge. Periodically check test gauge used for testing against the test gauge, and whenever requested by Engineer.
- E. Where it is necessary for testing, tap pipes and insert approved plugs after testing is completed.
- F. Provide a hand or motor driven compressor to maintain the required test pressure constant throughout the duration of the test. If a water pump is used, pump water from a container with a known volume of water. If an air or inert gas pump is used, leakage shall be determined and calculated by the cycling of the pump.
- G. Provide test gauges at each end of the line being tested.
- H. Conduct leakage test in accordance with the requirements contained in the Schedule.

3.04 ALLOWABLE LEAKAGE

- A. The maximum allowable leakage for the various piping systems is presented in the schedule.
- B. It is the intent of this Contract to secure piping systems without leakage.
 - 1. Each section of pipe and within each structure shall not exceed the allowable leakage.
 - 2. It is also the intent to secure a piping system free from visible drips, streams and leaks. Therefore, even if a portion of the system meets the requirements for allowable leakage, visible leaks are not permitted and shall be repaired.
- C. Leakage tests will be considered satisfactorily passed when the rate of leakage is equal to or less than the stipulated allowances, there is no evidence of visible leaks, and there is no evidence of other system defects.

3.05 TEST FOR TANKS VENTED TO ATMOSPHERE

- A. Prior to testing all piping and equipment within the tank that might affect the watertightness of the tank shall be completely installed and operable.
- B. Refer to Section 331613 - Prestressed Concrete Aboveground Water Utility Storage Tanks for concrete ground storage tank leak testing requirements.
- C. Perform all tank testing in accordance with AWWA D-110.

3.06 RETESTING

- A. Pipes, tanks and manholes not passing the tests shall have all defects corrected with methods approved by the Engineer to the inspection and satisfaction of Engineer, and shall be retested and re-corrected as often as is necessary until the test requirements have been met.
- B. It is the intent of this Contract to obtain work meeting test requirements on their own and solely through the use of the normal integral sealing components.
 - 1. Joint leaks shall not be stopped using concrete, caulking, mortar, or other patching materials.

2. Leaking pipe joints shall be re-jointed and leaking manhole joints shall have joints reset, or replaced if necessary.
- C. Methods other than rejoining, resetting or replacing joint seals shall require the written approval of Engineer.

3.07 SCHEDULE

LEAKAGE TESTING REQUIREMENTS

SERVICE	FLUID	PRESSURE	DURATION (HRS.)	ALLOWABLE LEAKAGE (NOTE 1)		
				UNDERGROUND		EXPOSED
				INFIL.	EXFIL.	
NON-PRESSURE PIPING	WATER	4FT.	6	100	100	NONE
PRESSURE PIPING	WATER	(NOTE 2)	2	0	0	0

SCHEDULE NOTES:

1. Maximum allowable leakage in gallons/day/inch diameter/mile of pipe, or gallons/day/inch diameter/mile for manholes. Where a percentage is shown, the loss shall not exceed the percentage of the starting test pressure.
2. Maintain 150 psi or one and a half times operating pressure, whichever is greater, for 2 hours.

END OF SECTION 017550

SECTION 017800 - CLOSEOUT SUBMITTALS

PART 1 - GENERAL

1.01 SUBMITTALS

- A. Submit the following documents to the Engineer before Substantial Completion:
1. Project Record Documents as specified in Section 017839.
 2. Operations and Maintenance Manuals prepared in accordance with Section 017823 and be updated as a result of start-up activities.
 3. Manufacturer's Start-up Reports (MSR's) for all equipment and systems where manufacturer field time is specified.
 - a. Each MSR shall be signed by the field technician(s) who attended the start-up.
 - b. If the manufacturer is taking exception to the installation or if the warranty is voided, he shall provide a statement to that effect and provide reasons and justification to explain the company's position.
 4. One binder containing original counterparts of all warranties, guarantees, bonds, or affidavits as specified in the Technical Specification Sections. These documents shall contain the original signatures and be placed in a plastic sheet protector, one document per protector.
 5. Spare parts checklist itemizing all spare parts furnished under the Contract summarized by Section.
 6. Electrical Underwriter's Certificate where the prime construction contract includes electrical construction or where this Contract is for a Prime Electrical Construction Contract.
- B. Submit the following items to the Engineer with the final application for payment:
1. Final Application for Payment prepared by the Engineer for Contractor's execution showing final amount of Contract including change orders.
 2. Maintenance Bond prepared in accordance with the Contract or General Conditions.
 3. Utility company signoffs and inspection approvals, if applicable.
 4. Federal, state, county, town and local signoffs and inspection approvals, where applicable.
- C. All documents shall be complete, signed, dated, and notarized (where applicable) and be subject to the Engineer's acknowledgment of receipt or approval.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 017800

SECTION 017823 - OPERATING AND MAINTENANCE DATA

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section specifies the requirements for Operations and Maintenance Manuals required to be prepared by system suppliers and equipment manufacturers.
- B. The Contractor shall submit Operations and Maintenance Manuals for all equipment.
- C. Where the technical specifications call for the submission of manuals, said manuals shall be prepared in accordance with the requirements contained herein. It being understood that manuals shall be submitted for all equipment even if it is not specifically called out in the specifications.

1.02 MANUAL CONTENTS AND FORMAT

- A. All paper Operations and Maintenance Manuals shall be as specified hereinafter.
- B. The binder shall be 8 1/2" x 11", metal hinge, vinyl, large capacity by National or Equal. It shall show the name of the manufacturer or supplier and project name on the spine of the binder.
- C. A cover shall be provided showing the names of the Owner, Engineer, Contractor, and Manufacturer.
 - 1. It shall show the Contractor's order number and manufacturer's project number.
 - 2. The address of the manufacturer, service station telephone number, project title, contract number, and year shall also be shown.
- D. Provide tabbed color dividers for each separate product and system.
 - 1. The name of the product shall be typed on the tab.
 - 2. A separate tab shall also be provided for information such as troubleshooting instructions, spare parts list, etc.
- E. An index shall be provided in the back of the binder, with a separate tab, providing a quick way for the operator to find key and important topics contained in the manual.
- F. A separate listing for all charts, graphs, tables, figures and shop drawings shall be provided directly following the table of contents.
- G. Each manual shall contain one (1) copy of all shop drawings deemed in compliance with the Contract Documents by the Engineer submitted for the equipment or system for which the manual is prepared.
 - 1. Only these shop drawings shall be included in the manual.
 - 2. All shop drawings larger than 8 1/2" x 11" shall be folded and placed in a heavy duty, top loading plastic sheet protector with the title of the drawing showing; one (1) drawing per protector page.
- H. For systems being furnished with control panels, each manual shall contain a catalog cut for every electrical device installed inside the control panel or motor control center.
- I. Each manual shall contain the following as a minimum:
 - 1. Table of contents
 - 2. Final version of the warranty statement approved by the Engineer
 - 3. Nameplate data of each component, year of installation, contract number and specification number

4. Name, address and telephone number of the manufacturer and the manufacturer's local representative(s)
 5. Installation instructions
 6. Operation instructions including adjustments, the interrelation of components and the control sequence describing break-in, start-up, operation and shutdown
 7. Emergency operating instructions and capabilities
 8. Maintenance requirements include routine procedures and guide for preventative maintenance and troubleshooting; disassembly, repair and reassembly instructions; and alignment, adjusting, balancing, and checking instructions
 9. Troubleshooting guide and corrective maintenance (repair) procedures for all electrical and mechanical equipment. These guides shall list the most frequent and common problems, together with the symptoms, possible causes of the trouble, and remedies
 10. Drawings (pictures or exploded views) which clearly depict and identify each part, suitable for assembly and disassembly of entire system and each component
 11. Wiring and control diagrams, if applicable
 12. Panelboard circuit directories including electrical service characteristics, if applicable
 13. Part list with current prices; ordering information; and recommended quantities of spare parts to be maintained in storage
 14. Charts of valve tag numbers, with location and function of each valve, keyed to the process and instrumentation diagram prepared as part of the Contract Documents
 15. Name, address, and telephone number of nearest parts supply house and nearest authorized repair service center.
 16. List of recommended spare parts and the recommended number of each per unit and per group of units.
- J. All electronic Operations and Maintenance Manuals shall be as specified hereinafter.
1. All files shall be in Adobe PDF format and submitted on compact discs.
 2. Files shall be organized by specification section and then by product.
 3. An electronic index and list of all charts, graphs, tables, figures, and shop drawings shall be included.
 4. All information provided in the paper Operations and Maintenance Manual shall be included in the electronic version.
- K. Submit one (1) copy of a preliminary draft manual at least fourteen (14) calendar days prior to the date set for start-up.
1. The Engineer will review the manual for content and compliance with these specifications.
 2. Written comments will be provided, but the manual will not be returned.
 3. The manual will be used at start-up, to record changes that should be made to the final manual.
 4. The manual will be retained on the site until such time as the final, updated manual is provided.
- L. Two (2) weeks after the date the unit was placed into service and the Owner has gained beneficial use, submit one (1) paper copies and two (2) electronic copies of the final updated Operations and Maintenance Manual. Refer to Section 017500 - Starting and Adjusting for requirements related to updating the manual(s).
- M. Where installation instructions are not included with the manual, they shall be shipped at least ten (10) days prior to the date the equipment is scheduled for installation.

1.03 RETAINAGE

- A. The Engineer will retain from payment due the Contractor, for failure to submit manuals as specified, an amount equal to 2% of the scheduled value for the equipment or system for which

the manual applies. This Contract requirement only applies when a manual is specified to be provided in the Technical Specifications for a particular system or piece of equipment.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 017823

SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. This Section includes:
 - 1. Maintenance of documents
 - 2. Recording of record information
 - 3. Submission of record documents

- B. Work of this section also includes the furnishing of underground pipeline documentation.

1.02 PLANS AND SPECIFICATIONS FURNISHED TO THE CONTRACTOR

- A. One (1) complete set of Contract Documents (plans, specifications and addenda) will be furnished to the Contractor in electronic portable document format (PDF).

1.03 MAINTENANCE OF DOCUMENTS

- A. The Contractor shall maintain at the site one (1) set of the following: drawings, specifications, addenda, change orders, approved shop drawings, test reports, operations and maintenance manuals, and shop drawing log.

- B. The Contractor shall make these documents available for use by the Owner, Engineer, regulatory agencies and other parties designated by the Owner.

- C. Provide a drawing rack for storage of plans.

- D. Maintain these documents in a clean, dry, legible condition throughout the entire contract period.

1.04 RECORDING OF RECORD INFORMATION

- A. Affix a stamp to each Contract Drawing and Shop Drawing reading as follows: "RECORD DOCUMENT" - "NAME OF PROJECT" - "CONTRACTOR NAME" in 2-inch high printed letters. The stamp shall be specifically prepared for this project.

- B. Keep the record documents current as the work progresses. Record information concurrent with construction progress.

- C. Do not permanently conceal any work until required information has been recorded.

- D. Legibly mark the Contract Plans to record actual construction, including, but not limited to the following:
 - 1. All as-built work.
 - 2. All approved field changes and conditions.
 - 3. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
 - 4. Location of underground conduits, boxes, devices. Wire sizes (AWG) and types installed. Number of active and spare wires in each conduit and conduit size (applicable where work involves electrical construction).
 - 5. Tied-down location of all underground process lines and buried valves.

- E. Shop Drawings: Maintain as record documents. Legibly mark-up to show changes made due to field conditions encountered during construction.

1.05 PROJECT RECORD DOCUMENTS

- A. Maintain a complete and accurate log of control and survey work as it progresses.
- B. The Tank Contractor shall on completion of major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction, site work and underground facilities installed as work of Contract T.
- C. The Contractor's surveyor site drawings shall also show the location of property line perimeter fence. The property line of the site shall be indicated on the plans.
- D. If applicable, the primary electric service, gas service, and communication lines installed by the respective utility shall also be located on the record drawings prepared by the Contractor's surveyor.

1.06 SUBMITTAL OF RECORD DOCUMENTS

- A. The Contractor shall deliver to the Engineer three (3) full-size sets of drawings and one (1) PDF electronic copy detailing as-built chemical treatment installations, one (1) month prior to the date of startup of the plant site as outlined in the construction schedule. These shall be submitted to the Health Department by the Engineer for certification of installation and inspection. Drawings shall be submitted by the Contractor to the Engineer in accordance with the requirements of this Section.
- B. At Substantial Completion, the Contractor shall deliver one (1) preliminary record set of as-built documents to the Engineer with all changes conspicuously ballooned or otherwise emphasized.
- C. The work will not be considered substantially complete until such time as the preliminary record documents are delivered and acceptable to the Engineer. Mark this set "Preliminary Record Drawings".
- D. Prior to Final Completion, the Contractor shall conform the preliminary record drawings to the comments made by the Engineer. The Contractor shall provide one (1) set of full-scale paper as-built drawings and one (1) electronic copy in portable document format (PDF).
- E. As-built drawings shall be the same size as the Contract Drawings, with 1/2-inch margins space on three sides and a 2-inch margin on the left side for binding.
- F. Each drawing shall bear in the title box the words "FINAL RECORD DRAWINGS" and the name of the Contractor in heavy black lettering 1/2 inch high and be certified as complete and accurate.
- G. As a convenience, Engineer will make available to the Contractor electronic media of the Contract Drawings for the sole purpose of the Contractor preparing as-built drawings.
- H. Electronic media made available is without guarantee of compatibility with the Contractor's software or hardware.
 - 1. If the Contractor wishes to take advantage of this offer, the Contractor will be required to execute an indemnification and hold harmless agreement with the Engineer.
 - 2. Electronic media will be provided free of charge on disc in a zipped format.
 - 3. Electronic media shall be returned to the Engineer upon acceptance of the as-built drawings by the Owner.

1.07 RELATED DOCUMENTS

- A. Provide certificate of release of liens if requested by the Engineer.

1.08 UNDERGROUND PIPELINE DOCUMENTATION

- A. The installing Contractor shall document the location of all underground pipelines by taking digital photographs of the installed pipelines prior to backfilling. At least 3 digital photographs shall be taken of each pipe section before it has been backfilled.
- B. The Contractor shall provide each pipe installation crew with a digital camera capable of a 3 mega-pixel quality picture using Smart Media, Compact Flash Media, or Memory Stick cards as the media within the camera.
- C. At the end of each day that pipe has been installed, the crew foreman shall hand deliver to the Engineer the removable media.
 - 1. The Engineer will then download the photographs and delete the photographs from the media.
 - 2. The media will be returned to the crew foreman within two working days from the date it was delivered.
 - 3. The Contractor shall have at least three (3) 256 MB media cards available for this purpose to be used on a rotating basis.
- D. Installed work will not be eligible for payment until documentation is provided.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 017839

SECTION 055000 - METAL FABRICATIONS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Shop and field fabricated ferrous metal items.

1.02 RELATED SECTIONS

- A. Section 055133.13 - Fixed Metal Ladders
- B. Section 108900 - Tank Roof Vent

1.03 REFERENCES

- A. AISC - Code of Standard Practice - Manual of Steel Construction - Allowable Stress Design (ASD).
- B. ASTM A36/A36M - Structural Steel.
- C. ASTM A53 - Hot-Dipped, Zinc-coated Welded, and Seamless Steel Pipe.
- D. ASTM A108 - Steel Bars, Carbon, Cold-Finished, Standard Quality.
- E. ASTM A123 - Zinc (Hot Dipped Galvanized) Coatings on Iron and Steel Products.
- F. ASTM A153 - Zinc Coating (Hot Dip) on Iron and Steel Hardware.
- G. ASTM A307 - Carbon Steel Externally Threaded Standard Fasteners.
- H. ASTM A325 - High Strength Bolts for Structural Steel Joints.
- I. ASTM A563 - Carbon and Alloy Steel Nuts.
- J. ASTM A568/A568M - General Requirements for Steel, Carbon and High-Strength Low-Alloy Hot-Rolled Sheet and Cold-Rolled Sheet.
- K. AWS A2.4 - Symbols for Welding, Brazing, and Nondestructive Examination.
- L. ASTM B308 - Aluminum-Alloy 6061-T6 Standard Structural Profiles
- M. AWS D1.1 - Structural Welding Code.
- N. SSPC (Steel Structures Painting Council) - Painting Manual.

1.04 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Shop Drawings:
 - 1. Indicate profiles, sizes, connections, reinforcing, anchorage, size and type of fasteners, and accessories.
 - 2. Include erection drawings, elevations, and details where applicable.

- C. Indicate welded connections using standard AWS A2.0 welding symbols. Indicate net weld lengths.
- D. Welders' Certificates: Certify welders employed on the Work have met AWS qualification within the previous twelve (12) months.
- E. Manufacturer's Mill Certificate: Certify that Products meet or exceed specified requirements.

1.05 QUALIFICATIONS

- A. Prepare Shop Drawings under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State in which the project is located. Shop drawings must be signed and sealed by a Professional Structural Engineer.
- B. Fabricate structural steel members in accordance with AISC Code of Standard Practice.

1.06 FIELD MEASUREMENTS

- A. Verify field measurements.
- B. Replacement fabrications shall be of same dimensions, strength, and gage as original members, unless noted differently on drawings.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Steel Sections: ASTM A36; sizes to match existing where not indicated on drawings.
- B. Plates: ASTM A283; gage to match existing where not indicated on drawings.
- C. Pipe: ASTM A53, Grade B; schedule to match existing where not indicated on drawing.
- D. Steel Tubing: ASTM A501, hot-formed, welded or seamless structural tubing.
- E. Stainless Steel: Type 316, ASTM A666 for plate; sheet and strip ; ASTM A 276 for bars and shapes; ASTM A269 for tubing
- F. Aluminum and alluminum alloy; ASTM B-308; Aluminum-Alloy 6061-T6
- G. Stainless steel fasteners: ASTM A666, Type 316
- H. Bolts, Nuts, and Washers ASTM A325
- I. Welding Materials: AWS D1.1; type required for materials being welded.

2.02 FABRICATION

- A. Fit and shop assemble in largest practical sections, for delivery to site.
- B. Fabricate items with joints tightly fitted and secured.
- C. Continuously seal joined members by continuous welds.

- D. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline.
- E. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise. Components shall be comparable in size and capacity to existing components in similar anchorage situations.
- F. Fabricate support framing for openings and edges where existing supports are inadequate.

2.03 FINISHES

- A. Provide proper isolation between metal surfaces in direct contact with concrete and dis-similar metals.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive work, including the removal of existing metal fabrications that require replacement.
- B. Beginning of installation means erector accepts existing conditions.
- C. Verify that opening sizes and dimensional tolerances are acceptable.
- D. Verify that supports are correctly positioned.

3.02 PREPARATION

- A. Clean and strip primed steel items to bare metal where site welding is required.

3.03 INSTALLATION

- A. Install items plumb and level, accurately fitted, free from distortion or defects.
- B. Allow for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.
- C. Field weld components indicated on shop drawings.
- D. Connections shall be capable of transferring loads identical to capacity of existing connections.
- E. Perform field welding in accordance with AWS D1.1. Provide a fire watch during all hot work operations.
- F. Repair weld seams as directed by the Engineer after initial surface preparation has been performed. Arc-gouge defective areas, perform welding, grind weld smooth, and abrade the surface to the same degree as steel around repair.
- G. Secure to prevent movement and anchor by welding.
- H. Obtain Engineer approval prior to site cutting or making adjustments not scheduled.

END OF SECTION 055000

SECTION 055133.13 - FIXED METAL LADDERS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Aluminum ladder.
- B. Attachment hardware.
- C. Vandal guard.
- D. Safety Gate.

1.02 RELATED SECTIONS

- A. Section 055000 - Metal Fabrications.
- B. Section 108905 - Climbing Safety Device.

1.03 REFERENCES

- A. ANSI A14.3 - Ladders-Fixed-Safety Requirements
- B. ASTM A36 - Structural Steel.
- C. ASTM A108 - Steel Bars, Carbon, Cold Finished, Standard Quality.
- D. AWS A2.0 - Standard Welding Symbols.
- E. ASTM B308 - Aluminum-Alloy 6061-T6 Standard Structural Profiles
- F. AWS D1.0 - Code for Welding in Building Construction.
- G. AWS D1.1 - Structural Welding Code.
- H. OSHA 1910.27 - Fixed Ladders.

1.04 DESIGN REQUIREMENTS

- A. Fabricate ladder assembly to support concentrated live load of 250 lb (1100 N) acting anywhere on the ladder with a maximum deflection of 1/240 of span and without damage or permanent set.
- B. Fabricate ladder assembly to support a concentrated live load of 80 lb (350 N) acting on each rung simultaneously with a maximum deflection of 1/240 of span and without damage or permanent set.

1.05 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, fastener size and type, and accessories. Indicate welded connections using standard AWS A2.0 welding symbols. Indicate net weld lengths.

- C. Manufacturer's Instructions: Indicate special procedures and methods required for proper installation of the safety climbing system and vandal deterrent.

1.06 QUALITY ASSURANCE

- A. Fabricate ladder in accordance with ANSI A14.3, OSHA 1910.27, AWS D1.0, and AWS D1.1.

1.07 QUALIFICATIONS

- A. Prepare shop drawings under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State in which the project is located. The shop drawings shall be signed and sealed by the Professional Structural engineer.
- B. Installer: Company specializing in performing the work of this section with a minimum of three (3) years documented experience.

1.08 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, protect, and handle products to the site under provisions of Section 016500.
- B. Fabricate and deliver products to the site in largest sections practical.
- C. Do not handle products in a manner that will damage or distort ladder.
- D. Do not store materials directly on the ground.

1.09 FIELD MEASUREMENTS

- A. Verify that field measurements are as indicated on approved shop drawings.

1.10 COORDINATION

- A. Coordinate work under provisions of Section 013100.
- B. Coordinate installation of ladder with the installation of equipment of Section 108905 - Climbing Safety Device.
- C. Coordinate installation of ladder with the installation or fabrication of substrate and all other adjacent work.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Rungs: ASTM B308 round aluminum bars; minimum 1 inch (25.4 mm) diameter and minimum 18 inch (457.2 mm) length, finished to provide non-slip surface.
- B. Side Rails: ASTM B308 flat aluminum plate; minimum 3/8 inch (9.5 mm) thick.

2.02 FABRICATION - GENERAL

- A. Fit and assemble in largest practical sections for delivery to site.
- B. Fabricate components with joints tightly fitted and secured.

- C. Continuously seal jointed pieces with continuous welds in accordance with AWS D1.0 and D1.1.
- 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. Exposed Mechanical Fastenings: Flush, countersunk screws or bolts; unobtrusively located; consistent with design of component, except where specifically noted otherwise.
- F. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.
- G. Accurately form components required for anchorage of ladder and accessories to each other and to structure.

2.03 FABRICATION - LADDER

- A. Fabricate ladder with rungs spaced at 12 inches (300 mm) on center. Minimum rung length to be 18 inches (410 mm) (Clearance between siderails).
- B. Install attachment hardware such that the centerline of the rungs is a minimum of 7 inches (180 mm) from any structure, measured perpendicular to the ladder.
- C. Extend side rails a minimum of 42 inches (1,070 mm) above any platforms and landings.

2.04 ACCESSORIES - SAFETY GATE

- A. Material shall be stainless steel.
- B. Manufacturer: Cotterman, Model No. AG2440S.

2.05 ACCESSORIES - VANDAL GUARD

- A. Vandal guard shall be aluminum.
- B. Provide a new 8' high aluminum vandal guard.
- C. Manufacturer: RB Industries, Greensboro, N.C.
- D. Provide "Front Lock" option.

2.06 ACCESSORIES - LADDER SAFETY CLIMB

- A. See Specification Section 108905 - Climbing Safety Device.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions.
- B. Verify that field conditions are acceptable and are ready to receive work.
- C. Beginning of installation means erector accepts existing conditions.

3.02 PREPARATION

- A. Clean and strip primed steel items to bare metal where site welding is required. Refer to Section 099870.
- B. Supply items required to be bolted or welded to steel with setting templates, to appropriate sections.

3.03 INSTALLATION

- A. Install items plumb and level, accurately fitted, free from distortion or defects.
- B. Provide anchors, plates, angles, hangers, and struts required for connecting ladder to structure.
- C. Allow for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.
- D. Field weld components indicated on approved shop drawings. Perform field welding in accordance with AWS D1.1. Provide a fire watch during all welding operations.
- E. Field bolt and weld to match shop bolting and welding. Conceal bolts and screws whenever possible. Where not concealed, use flush countersunk fastenings.
- F. Mechanically fasten joints butted tight, flush, and hairline. Grind welds smooth and flush.
- G. Obtain Engineer approval prior to site cutting or making adjustments not scheduled.
- H. Install safety climbing system in accordance with manufacturer's instructions.
- I. Install vandal deterrent in accordance with manufacturer's instructions.
- J. Install safety gate in accordance with manufacturer's instructions.

3.04 TOLERANCES

- A. Maximum Variation From Plumb: 1/4 inch (6 mm) in 10 feet (3 m), non-cumulative.
- B. Maximum Offset From True Alignment: 1/4 inch (6 mm).

3.05 DEMONSTRATION

- A. Demonstrate operation and use of safety climbing system to Owner's representatives once system is installed.

3.06 PROTECTION

- A. Protect finished work from damage until project is accepted by the Owner.

END OF SECTION 055133.13

SECTION 083100 - ACCESS DOORS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Roof Access Hatch and related items.

1.02 RELATED SECTIONS

- A. Section 331613 - Prestressed Concrete Aboveground Water Utility Storage Tank

1.03 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Indicate on shop drawings plan layout, construction details and required clearances.
- C. Shop Drawing of unit and all accessory installations.

1.04 WARRANTY

- A. Manufacturer's warranty: Materials shall be free of defects in material and workmanship for a period of ten (10) five (5) years from the date of installation. Should a part fail to function in normal use within this period, the manufacturer shall furnish a new part at no charge.

PART 2 - PRODUCTS

2.01 MANUFACTURER

- A. U.S.F. Fabrication, Inc.
- B. Approved equal.

2.02 CLEARWELL ACCESS HATCH

- A. Access Hatch shall be prefabricated ready for installation and use.
- B. Door construction:
 - 1. Doors to open 90 degrees and lock automatically in that position. Provide vinyl grip handle for closing.
 - 2. Cover: Shall be ¼" aluminum diamond pattern plate, reinforced for a minimum of 625 psf (live load), and capable of holding up to 10 ft. head of water.
 - 3. Frame: Shall be 3/8" thick aluminum angle. Angle shall include a horizontal leg and 9/16" diameter mounting holes for bolting to concrete top slab. Frame to include a U-shaped neoprene gasket riveted to the frame to eliminate water intrusion.
 - 4. Locks: Shall be 316 stainless steel nut and bolt pressure locks, with exterior staple for padlock. Locks shall be spaced so as to provide an adequate seal to prevent the intrusion of water up to the rated depth.
 - 5. Hinges: Shall be heavy duty aluminum bolted to underside of door with 316 stainless steel pins.
- C. Accessories & Options:
 - 1. Hatch shall be provided with an anodized finish.
 - 2. Provide standard open vertical compression spring operators for ease of operation.

3. Provide bituminous coating system, applied to frame surface in contact with concrete, as per manufacturer's instructions.
 4. Provide anodized aluminum Hatch Safety Grate as a fall-through prevention system, designed for live loads up to 300 psf. Grating shall not be colored (USF standard is OSHA safety orange). Hardware components of the safety grating shall be stainless steel. Submit grate opening size options to Engineer for review.
 5. Latch: Stainless steel slam lock with fixed interior handle and removable exterior lift handle.
 6. Ladder Safety Post
 - a. Post shall be high strength, type 304 stainless steel tubing, and mill finish, with a pull-up loop at its upper end.
 - b. All hardware, including mounting brackets, hinges, torsion rod, padlock loop, and fasteners, shall be type 316 stainless steel.
 - c. Up and down movement shall be controlled by a stainless steel balancing spring mechanism.
 - d. Post shall lock automatically when extended, and a release lever must be activated to disengage the post to permit the return to the lowered position.
- D. Door Operation:
1. Operation of the cover shall be smooth and easy with controlled operation throughout the entire arc of opening and closing.
 2. Operation of the cover shall not be affected by temperature.
 3. Cover and grating shall be operated separately and shall automatically lock in the full open position.
 4. The access door may not be closed without first closing the safety grate.
 5. The safety grating shall be operated and reinforced independently of the access hatch. If the grating is damaged or removed, the access door shall continue to operate at the specified load and deflection requirements.

2.03 FABRICATION

- A. Fabricate components free of visual distortions and defects. Weld corners and joints.
- B. Provide for removal of condensation occurring within components or assembly.
- C. Fit components for weather-tight assembly.
- D. Apply bituminous paint on surfaces of units to be in contact with cementitious materials or dissimilar metals.

2.04 QUALITY ASSURANCE

- A. Guarantee access doors against defects in material and workmanship for a period of five (5) years.

PART 3 - EXECUTION

3.01 DELIVERY AND STORAGE

- A. Delivery of materials to the site shall be made in unopened cartons with the name of the manufacturer clearly visible on the carton.
- B. Materials shall be stored in a safe, dry place.

3.02 INSTALLATION

- A. Install access doors in accordance at location indicated on the drawings and according to manufacturer's instructions. Set flush in top slab and square and parallel to foundation/vault walls. Set plumb to top slab/floor.
- B. Install hatch in accordance with OSHA regulations.
- C. Installer shall supply and install mechanical fasteners compatible with the roof deck and the hatch.
- D. Manufacturer shall furnish fasteners necessary for ladder safety post installation.
- E. Install ladder safety post in accordance with the manufacturer's installation instructions.

END OF SECTION 083100

SECTION 108900 - TANK ROOF VENT

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Tank vent.

1.02 RELATED SECTIONS

- A. Section 005500 - Metal Fabrications

1.03 REFERENCES

- A. AWS A2.0 - Standard Welding Symbols
- B. AWS D1.0 - Code for Welding in Building Construction
- C. AWS D1.1 - Structural Welding Code

1.04 DESIGN REQUIREMENTS

- A. Minimum capacity: 1,000 CFM

1.05 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Shop drawings: Indicate profiles, sizes, connection attachments, reinforcing, size and type of fasteners, and accessories. Indicate welded connections using AWS A2.0 welding symbols.

1.06 QUALITY ASSURANCE

- A. Fabricate vent in accordance with AWS D1.0 and AWS D1.1.

1.07 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, protect, and handle products to the site under provisions of Sections 016500.
- B. Fabricate and deliver products to the site in largest sections practical.
- C. Do not handle vent in a manner which will damage or distort vent.
- D. Do not store vent directly on the ground.

1.08 FIELD MEASUREMENTS

- A. Verify that field measurements are as indicated on approved shop drawings.

1.09 COORDINATION

- A. Coordinate work under provisions of Section 013100.
- B. Coordinate installation of vent with fabrication of substrate and all other adjacent work.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Vent: Fully weatherproof and freezeproof; aluminum construction; designed to prevent the ingress of birds, animals, insects, dust, and water.

2.02 FABRICATION

- A. Fabricate vent to be freeze proof and to provide sufficient air capacity during maximum rate of inflow or outflow of water to the tank so that dangerous pressures do not develop.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install roof vent in accordance with approved shop drawings.
- B. Install roof vent vertical and plumb.

END OF SECTION 108900

SECTION 108905 - CLIMBING SAFETY DEVICE

PART 1 - GENERAL

1.01 SCOPE

- A. Climbing safety device.

1.02 RELATED SECTIONS

- A. Section 055133.13 - Fixed Metal Ladders.

1.03 REFERENCES

- A. OSHA 1910.27.
- B. ANSI A14.3.

1.04 SYSTEM DESCRIPTION

- A. Fall protection for climbing elevated tank ladders which allows the climber hands-free operation whether ascending or descending.

1.05 SUBMITTALS

- A. Product data.
- B. Manufacturer's installation instructions.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. LAD-SAF System, DBI/SALA.
- B. Harness/Lanyard System, Petzl.
- C. Or approved equal.

2.02 COMPONENTS

- A. 3/8" (9.25mm) diameter stainless steel cables, brackets and hardware.
- B. Two (2) stainless steel fall prevention sleeve's for 3/8" (9.25mm) climbing cable, Model 6160054.
- C. Two (2) full body harnesses, Avao Bod Fast, Model C71AFN U, size as requested by Owner.
- D. Two (2) lanyard's, Absorbica, Model L64YUM 150.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's installation instructions.

3.02 DEMONSTRATION

A. Demonstrate operation of system to Owner.

B. Provide a two (2) hour in-field demonstration of climbing safety device to Owner's personnel.

END OF SECTION 108905

SECTION 311000 - SITE CLEARING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Clearing and protection of vegetation.
- B. Removal and dispose of existing debris.
- C. Clear designated areas of the site of plant life and grass as required
- D. Remove and dispose of trees and shrubs as required.
- E. Remove and dispose of stumps and root system of trees and shrubs as required.
- F. Removal and storage of topsoil.

1.02 RELATED REQUIREMENTS

- A. Section 011000 - Summary of Work: Limitations on Contractor's use of site and premises.
- B. Section 015000 - Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- C. Section 312200 - Grading: Topsoil removal.

1.03 REGULATORY REQUIREMENTS

- A. Conform to applicable local code(s) for disposal of debris.
- B. Burning of materials on site is prohibited.
- C. Coordinate clearing work with utility companies.

PART 2 PRODUCTS -- NOT USED

PART 3 EXECUTION

3.01 SITE CLEARING

- A. Minimize production of dust due to clearing operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
- B. Verify existing conditions.
- C. Verify limits of clearing.

3.02 EXISTING UTILITIES AND BUILT ELEMENTS

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.

- D. Protect existing structures and other elements that are not to be removed.

3.03 VEGETATION

- A. Identify existing plant life designated to be removed. Verify with Owner and Engineer prior to removal.
- B. Scope: Remove trees, shrubs, brush, and stumps in areas to be covered by structures and paving.
- C. Do not remove or damage vegetation beyond the limits indicated on drawings.
- D. Install substantial, highly visible fences at least 3 feet (1 m) high to prevent inadvertent damage to vegetation to remain:
 - 1. At vegetation removal limits.
- E. In areas where vegetation must be removed but no construction will occur other than previous paving, remove vegetation with minimum disturbance of the subsoil.
- F. Vegetation Removed: Do not burn, bury, landfill, or leave on site, except as indicated.
 - 1. Chip, grind, crush, or shred vegetation for mulching, composting, or other purposes; preference should be given to on-site uses.
 - 2. Trees: Sell if marketable; if not, treat as specified for other vegetation removed; remove stumps and roots to depth of 18 inches (450 mm).
 - 3. Sod: Re-use on site if possible; otherwise sell if marketable, and if not, treat as specified for other vegetation removed.
- G. Restoration: If vegetation outside removal limits or within specified protective fences is damaged or destroyed due to subsequent construction operations, replace at no cost to Owner.

3.04 DEBRIS

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION 311000

SECTION 312213 - ROUGH GRADING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Removal and storage of subsoil.
- B. Cutting, grading, filling and rough contouring the site prior to placement of topsoil or pavement base for final grading.

1.02 RELATED SECTIONS

- A. Section 311000 - Site Clearing
- B. Section 312316.13 - Excavation.
- C. Section 312317 - Backfill.

1.03 REFERENCES

- A. ANSI/ASTM D1557 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10 lb (4.54 kg) Rammer and 18 inch (457 mm) Drop.

1.04 SUBMITTALS

- A. Submit under provisions of 013300.
- B. Sieve Analysis: Submit a sieve analysis of all types of fill material to be used.

1.05 PROJECT RECORD DOCUMENTS

- A. Accurately record actual locations of utilities remaining, by horizontal dimensions, elevations or inverts, and slope gradients.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Do not place wet or frozen material.
- B. Do not place material in wet or frozen ground or when precipitation is occurring.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Subsoil: Reused, excavated material, graded, free of lumps, rocks and gravel larger than 3 inches (75 mm) in size, debris, and contaminants.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify site conditions.
- B. Verify that survey benchmark and intended elevations for the work are as indicated.

3.02 PREPARATION

- A. Identify required lines, levels, contours and datum.
- B. Identify known underground, aboveground and aerial utilities. Stake and flag locations.
- C. Coordinate the removal or relocation of utilities with the necessary utility companies.
- D. Protect above and below-grade utilities which are to remain.
- E. Protect plant life, lawns, rock outcroppings and other features remaining as a portion of final landscaping.
- F. Protect benchmarks, existing structures, fences, sidewalks, paving and curbs from excavation equipment and vehicular traffic.

3.03 APPLICATION

- A. Excavate subsoil from areas to be further excavated, relandscaped or regraded. Do not excavate wet subsoil.
- B. Stockpile in area designated on site. Remove excess subsoil not being reused from site.
- C. Stockpile subsoil to a height not exceeding 8 feet (2.4 m). Cover to protect from erosion.
- D. When excavation through roots is necessary, perform work by hand and cut roots with sharp axe.
- E. Fill areas to contours and elevations with unfrozen subsoil material with allowances made for topsoil, aggregate base course or paving.
- F. Place and compact subsoil fill material in continuous layers not exceeding 6 inches (150 mm) compacted depth, compacted to 95 percent maximum dry density in accordance with ANSI/ASTM D1557.
- G. Maintain optimum moisture content of fill materials to attain required compaction density.
- H. Make grade changes gradual. Blend slope into level areas.
- I. Remove surplus fill materials from site.

3.04 TOLERANCES

- A. Maximum Variation From Top Surface of Subgrade: 1 inch (25 mm).

3.05 FIELD QUALITY CONTROL

- A. Perform field testing under provisions of Section 014500.
- B. Perform tests and analysis of fill material in accordance with ANSI/ASTM D1557.
- C. Compaction tests are to be performed at a rate of one for every 10 cubic yards (7.6 cu m) of material placed.

END OF SECTION 312213

SECTION 312316 - EXCAVATION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Excavating for site structure volume below grade, footings and site structures.
- B. Trenching for utilities outside the site structure to utility main connections.

1.02 RELATED REQUIREMENTS

- A. Section 312213 - Rough Grading
- B. Section 312323.13 - Backfill
- C. Section 312333 - Trenching

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that survey bench mark and intended elevations for the work are as indicated.

3.02 PREPARATION

- A. Identify required lines, levels, contours, and datum locations.

3.03 EXCAVATING

- A. Excavate to accommodate new structures and construction operations.
- B. Notify Engineer of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- C. Slope banks of excavations deeper than 4 feet (1.2 meters) to angle of repose or less until shored.
- D. Do not interfere with 45 degree bearing splay of foundations.
- E. Cut utility trenches wide enough to allow inspection of installed utilities.
- F. Hand trim excavations. Remove loose matter.
- G. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- H. Remove excavated material that is unsuitable for re-use from site.
- I. Remove excess excavated material from site.

3.04 FIELD QUALITY CONTROL

- A. Provide for visual inspection of load-bearing excavated surfaces before placement of foundations.

3.05 PROTECTION

- A. Prevent displacement of banks and keep loose soil from falling into excavation; maintain soil stability.
- B. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.

END OF SECTION 312316

SECTION 312316.13 - TRENCHING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Backfilling and compacting for utilities outside the building to utility main connections.

1.02 RELATED REQUIREMENTS

- A. Section 312213 - Rough Grading
- B. Section 312316 - Excavation
- C. Section 312316.13 - Trenching
- D. Section 315000 - Excavation Support & Protection

1.03 DELIVERY, STORAGE, AND HANDLING

- A. When necessary, store materials on site in advance of need.
- B. When fill materials need to be stored on site, locate stockpiles where indicated.
 - 1. Separate differing materials with dividers or stockpile separately to prevent intermixing.
 - 2. Prevent contamination.
 - 3. Protect stockpiles from erosion and deterioration of materials.

PART 2 PRODUCTS

2.01 FILL MATERIALS

- A. General Fill: Subsoil excavated on-site.
 - 1. Graded.
 - 2. Free of lumps larger than 3 inches (75 mm), rocks larger than 2 inches (50 mm), and debris.
 - 3. Conforming to ASTM D2487 Group Symbol CL.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that survey bench marks and intended elevations for the work are as indicated.

3.02 PREPARATION

- A. Identify required lines, levels, contours, and datum locations.

3.03 TRENCHING

- A. Notify Engineer of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- B. Slope banks of excavations deeper than 4 feet (1.2 meters) to angle of repose or less until shored.
- C. Do not interfere with 45 degree bearing splay of foundations.

- D. Cut trenches wide enough to allow inspection of installed utilities.
- E. Hand trim excavations. Remove loose matter.
- F. Remove large stones and other hard matter that could damage piping or impede consistent backfilling or compaction.
- G. Remove excavated material that is unsuitable for re-use from site.
- H. Remove excess excavated material from site.

3.04 PREPARATION FOR UTILITY PLACEMENT

- A. Cut out soft areas of subgrade not capable of compaction in place. Backfill with general fill.
- B. Compact subgrade to density equal to or greater than requirements for subsequent fill material.
- C. Until ready to backfill, maintain excavations and prevent loose soil from falling into excavation.

3.05 BACKFILLING

- A. Backfill to contours and elevations indicated using unfrozen materials.
- B. Fill up to subgrade elevations unless otherwise indicated.
- C. Employ a placement method that does not disturb or damage other work.
- D. Systematically fill to allow maximum time for natural settlement. Do not fill over porous, wet, frozen or spongy subgrade surfaces.
- E. Maintain optimum moisture content of fill materials to attain required compaction density.
- F. Soil Fill: Place and compact material in equal continuous layers not exceeding 8 inches (200 mm) compacted depth.
- G. Slope grade away from building minimum 2 inches in 10 ft (50 mm in 3 m), unless noted otherwise. Make gradual grade changes. Blend slope into level areas.
- H. Correct areas that are over-excavated.
 - 1. Other areas: Use general fill, flush to required elevation, compacted to minimum 97 percent of maximum dry density.
- I. Compaction Density Unless Otherwise Specified or Indicated:
 - 1. Under paving, slabs-on-grade, and similar construction: 92 percent of maximum dry density.
- J. Reshape and re-compact fills subjected to vehicular traffic.

3.06 BEDDING AND FILL AT SPECIFIC LOCATIONS

- A. Use general fill unless otherwise specified or indicated.

3.07 TOLERANCES

- A. Top Surface of General Backfilling: Plus or minus 1 inch (25 mm) from required elevations.

- B. Top Surface of Backfilling Under Paved Areas: Plus or minus 1 inch (25 mm) from required elevations.

3.08 CLEANING

- A. Leave unused materials in a neat, compact stockpile.
- B. Remove unused stockpiled materials, leave area in a clean and neat condition. Grade stockpile area to prevent standing surface water.
- C. Leave borrow areas in a clean and neat condition. Grade to prevent standing surface water.

END OF SECTION 312316.13

SECTION 312317 - BACKFILLING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Site structure backfilling to sub-grade elevations.
- B. Site filling and backfilling.
- C. Consolidation and compaction.
- D. Fill for over-excavation.

1.02 RELATED SECTIONS

- A. Section 014500 - Quality Control
- B. Section 312316.12 - Excavation.
- C. Section 312316.13 - Trenching.

1.03 REFERENCES

- A. ANSI/ASTM C136 - Method for Sieve Analysis of Fine and Coarse Aggregates.
- B. ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb Rammer and 12 inch Drop.
- C. ANSI/ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort.
- D. ANSI/ASTM D1556 - Standard Test Methods for Density and Unit Weight of Soil in Place by the Sand Cone Method.

PART 2 - PRODUCTS

2.01 FILL MATERIALS

- A. Type A - Coarse Stone, Gravel: Angular, washed natural stone; free of shale, clay, friable material, sand, debris; minimum size 2 inches in diameter, maximum size 3 inches in diameter.
- B. Type C - Sand: Natural river or bank sand; washed, free of silt, clay, loam, friable or soluble materials, or organic matter; graded in accordance with ANSI/ASTM C136, within the following limits:

Sieve Size	% Passing
No. 4	100
No. 14	10 to 100
No. 50	5 to 90
No. 100	4 to 30
No. 200	0 to 1

- C. Subsoil: Reused, graded, free of lumps larger than 6 inches, rocks larger than 3 inches, and debris.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions and substrate.
- B. Verify fill materials to be reused are acceptable.
- C. Verify items to be buried during backfilling process have been inspected prior to backfilling.

3.02 PREPARATION

- A. Compact subgrade to density requirements for subsequent backfill materials.
- B. Cut out soft areas of subgrade not capable of in situ compaction. Backfill with Type C fill and compact to density equal to or greater than requirements for subsequent backfill material.
- C. Prior to placement of controlled fill at building areas and base course material at paved areas, compact subsoil to 95% of its maximum dry density in accordance with ANSI/ASTM D698.

3.03 BACKFILLING

- A. Backfill areas to contours and elevations with unfrozen materials.
- B. Systematically backfill to allow maximum time for natural settlement. Do not back-fill over porous, wet, frozen or spongy subgrade surfaces.
- C. Granular Fill: Place and compact materials in continuous layers not exceeding 6 inches compacted depth.
- D. Subsoil Fill: Place and compact material in continuous layers not exceeding 6 inches compacted depth.
- E. Controlled Backfill: Place and compact material in continuous layers, not exceeding 6 inches compacted depth. Contractor shall not proceed with subsequent layer of backfill until compacted layer is tested and backfill is found to be compacted to 95% of its maximum dry density in accordance with ANSI/ASTM D698.
- F. Employ a placement method that does not disturb or damage foundation water-proofing and protective cover, and utilities in trenches.
- G. Maintain optimum moisture content of backfill materials to attain required compaction density.
- H. Backfill against supported foundation walls. Do not backfill against unsupported foundation walls.
- I. Slope grade a minimum of 2% positive pitch away from building and site structures, unless noted other-wise.
- J. Make grade changes gradual. Blend slope into level areas.
- K. Remove surplus backfill materials from site.

- L. Leave fill material stockpile areas completely free of excess fill materials.

3.04 TOLERANCES

- A. Maximum Variation From Top Surface of Backfilling Under Paved Areas: 1/4 inch.
- B. B. Maximum Variation From Top Surface of General Backfilling: 1 inch.

3.05 FIELD QUALITY CONTROL

- A. Field inspection and testing will be performed under provisions of Section 014500.
- B. Tests and analysis of fill material will be performed in accordance with ANSI/ASTM D698.
- C. Compaction testing will be performed in accordance with ANSI/ASTM D1556 or D1557.
- D. If tests indicate work does not meet specified requirements, remove work, replace and retest at no cost to Owner.

3.06 PROTECTION OF FINISHED WORK

- A. Protect finished work from damage due to continuing construction activity.
- B. Recompact fills subjected to vehicular traffic.

END OF SECTION 312317

SECTION 315000 - EXCAVATION SUPPORT & PROTECTION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Wood and steel sheeting.
- B. Sheeting box.

1.02 RELATED SECTIONS

- A. Section 312317 - Backfilling.
- B. Section 312316.13 - Trenching.

1.03 REFERENCES

- A. Occupational Safety and Health Standards - Excavations; Final Rule (29 CFR Part 1926) - OSHA Standards.

1.04 QUALITY ASSURANCE

- A. Perform all work of this section in accordance with OSHA Standards and approved shop drawings.

1.05 COORDINATION

- A. Coordinate work under provisions of Section 013100.
- B. Coordinate work with all other sections requiring temporary sheeting and bracing.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Wood Sheeting: Hardwood species of size and dimensions capable of being driven to the required depths and capable of supporting excavation sides and soil pressures when braced; free from wormholes, wind shakes, loose knots, decayed or unsound portions or defects which would impair its strength or tightness; 2 inches (50 mm) thick minimum.
- B. Steel Sheeting: Corrugated "Z" shape cross-section; of size and dimensions capable of being driven to the required depths and capable of supporting excavation sides and soil pressures when braced; structurally sound; special shapes for corner construction and transition points.
- C. Sheeting Boxes: Steel, of size and dimensions capable of supporting excavation sides and soil pressures; structurally sound.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify existing substrate and site conditions.
- B. Verify elevations and grades are as indicated on the plans.

- C. Verify proposed locations of excavations are as indicated on the plans.

3.02 PREPARATION

- A. Excavate to a depth no greater than 4 feet (1.2 m) from existing grade.
- B. Assemble and drive the sheeting in accordance with approved shop drawings.

3.03 INSTALLATION - SHEETING

- A. Drive sheeting in place to thoroughly support both sides of the excavation using a sheeting hammer. Use a steam or pneumatic hammer for steel sheeting.
- B. Water jetting of sheeting will not be permitted. Do not loosen adjacent ground which might result in collapse.
- C. Install walls and braces or shores tight and in accordance with approved shop drawings.

3.04 INSTALLATION - SHEETING BOX

- A. Place box in trench utilizing a means which will not damage structural integrity of the box.
- B. Excavate ahead of the sheeting box only enough to advance the sheeting box and only immediately prior to moving the sheeting box.
- C. Backfill on both sides of the sheeting box as it is moved.

3.05 REMOVAL OF SHEETING

- A. Remove sheeting only as backfilling progresses.
- B. Carefully remove sheeting such that compacted backfill is not displaced. Add additional backfill to the areas vacated by the sheeting.
- C. All sheeting is to be removed from the site once its use is no longer required.

3.06 CLEANING

- A. Clean site of any debris from work of this section

END OF SECTION 315000

SECTION 331160 - DISINFECTION OF WATER STORAGE FACILITIES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Disinfection of potable water storage facility.

1.02 REFERENCES

- A. ANSI/AWWA B300 - Standard for Hypochlorites.
- B. ANSI/AWWA B301 - Standard for Liquid Chlorine.
- C. ANSI/AWWA C652 - Standard for Disinfection of Water Storage Facilities.

1.03 SUBMITTALS

- A. Test Reports: Indicate results comparative to specified requirements.
- B. Certificate: Certify that cleanliness of water storage facilities system meets or exceeds specified requirements.

1.04 PROJECT RECORD DOCUMENTS

- A. Disinfection Report Record:
 - 1. Type and form of disinfectant used.
 - 2. Date and time of disinfectant injection start and time of completion.
 - 3. Test locations.
 - 4. Initial and 24-hour disinfectant residuals (quantity in treated water) in ppm for each outlet tested.
 - 5. Date and time of flushing start and completion.
 - 6. Disinfectant residual after flushing in ppm for each outlet tested.
- B. Bacteriological, Chemical and Organic Chemical Report Record:
 - 1. Date issued, project name and testing laboratory name, address and telephone number.
 - 2. Time and date of water sample collection.
 - 3. Name of person collecting samples.
 - 4. Test locations.
 - 5. Initial and 24-hour disinfectant residuals in ppm.
 - 6. Coliform bacteria and chemical test results.
 - 7. Certification that water conforms or fails to conform to New York State drinking water standards.
 - 8. Laboratory Director's signature and authority.

1.05 QUALITY ASSURANCE

- A. Perform work in accordance with ANSI/AWWA C652.

1.06 QUALIFICATIONS

- A. Water Treatment Firm: Company specializing in disinfecting potable water systems specified in this Section with minimum three (3) years experience.

- B. Testing Firm: Company specializing in testing potable water systems, approved by the New York State Department of Health.

1.07 REGULATORY REQUIREMENTS

- A. Conform to Recommended Standards for Water Works and applicable codes or regulations for performing the work of this Section.
- B. Water quality to conform to New York State drinking water standards after completion of disinfection.
- C. The Health Department will be notified of the date of water quality testing to allow sampling by the Health Department. Provide Engineer three (3) days advanced notification of proposed sampling date.

PART 2 - PRODUCTS

2.01 DISINFECTION CHEMICALS

- A. ANSI/AWWA B300, Hypochlorite.
- B. ANSI/AWWA B301, Liquid Chlorine.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that tank has been cleaned and inspected.

3.02 EXECUTION

- A. Provide required equipment to perform the work of this Section. The Owner will provide the water required for the initial disinfection and filling of the tank. The Contractor shall pay for the water required for any subsequent filling of the tank based on the retail water rate.
- B. Disinfect water storage facility in accordance with Method 1 or Method 2 of AWWA C652.
- C. Collect samples after retention period and refilling with potable water. Samples shall not be collected if chlorine residual is greater than 0.1 mg/L.
- D. Collect sample from tank sampling point at 2, 30 and 60 for bacteriological analysis, as listed in table 6 of Part 5, Subpart 5-1 Public Water Systems of the New York State Department of Health Water Quality Monitoring. Repeat bacteriological analysis 24 hours after initial collection.
- E. Collect sample from tank sampling point at 30 minutes and have analyzed for Inorganic Chemicals (IOCs), physical characteristics, and Principal Organic Contaminants (POCs) as listed in Tables 9A and 9D of Part 5, Subpart 5-1 Public Water Systems of the New York State Department of Health Water Quality Monitoring
- F. If water quality in tank does not meet the requirements of the Health Department for potable water, the Contractor shall re-chlorinate tank or take other steps necessary to provide acceptable water quality. Samples shall be collected and analyzed after each attempt at the contractors cost.

- G. Neutralize residual chlorine to less than 1 mg/l with a suitable quantity of sodium bisulfite, sodium sulfide or sodium thiosulfate prior to disposal to drainage system.

3.03 QUALITY CONTROL

- A. Provide analysis and testing of treated water in storage facility.
- B. Test samples in accordance with ANSI/AWWA C652 and Health Department requirements.

END OF SECTION 331160

SECTION 331300 - DISINFECTION OF WATER UTILITY DISTRIBUTION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Disinfection of water piping

1.02 REFERENCES

- A. ANSI/AWWA B300 - Standard for Hypochlorites.
- B. ANSI/AWWA B301 - Standard for Liquid Chlorine.
- C. ANSI/AWWA C651 - Disinfecting Water Mains.

1.03 SUBMITTALS

- A. Submit proposed method for introducing disinfectant into water piping.
- B. Test Reports: Indicate results comparative to specified requirements.

1.04 PROJECT RECORD DOCUMENTS

- A. Disinfection Report: Record:
 - 1. Type and form of disinfectant used.
 - 2. Date and time of disinfectant injection start and time of completion.
 - 3. Test and injection locations.
 - 4. Initial and 24-hour disinfectant residuals (quantity in treated water) in ppm for each outlet tested.
 - 5. Date and time of flushing start and completion.
 - 6. Disinfectant residual after flushing in ppm for each outlet tested.
- B. Bacteriological, Chemical and Organic Chemical Report: Record:
 - 1. Date issued, project name and testing laboratory name, address and telephone number.
 - 2. Time and date of water sample collection.
 - 3. Name of person collecting samples.
 - 4. Test locations.
 - 5. 24-hour and 48-hour disinfectant residuals in ppm.
 - 6. Coliform bacteria and chemical test results.
 - 7. Certification that water conforms or fails to conform to New York State drinking water standards.
 - 8. Laboratory Director's signature and authority.

1.05 QUALITY ASSURANCE

- A. Perform work in accordance with ANSI/AWWA C651.

1.06 QUALIFICATIONS

- A. Water Treatment Firm: Company specializing in disinfecting potable water systems specified in this Section with minimum three (3) years experience.
- B. Testing Firm: Laboratory specializing in testing potable water systems, approved by the New York State Department of Health.

1.07 REGULATORY REQUIREMENTS

- A. Conform to Recommended Standards for Water Works and applicable codes or regulations for performing the work of this Section.
- B. Water quality to conform to New York State drinking water standards after completion of disinfection.

PART 2 - MATERIALS

2.01 DISINFECTION CHEMICALS

- A. ANSI/AWWA B300, Hypochlorite.
- B. ANSI/AWWA B301, Liquid Chlorine.

PART 3 - DISINFECTION & TESTING

3.01 EXAMINATION

- A. Verify that all piping systems have been cleaned, inspected and pressure tested.

3.02 EXECUTION

- A. Provide required equipment to perform the work of this Section. The Owner will provide the water required for the initial disinfection and filling of the piping, and valves, etc.
- B. The preferred method of chlorinating is the continuous feed method using calcium hypochlorite granules in accordance with Section 4.4.3 of AWWA C651-05. Granules shall be placed at a minimum in accordance with Table 1 of the applicable Section. The slug method of chlorination is also acceptable and shall be performed in accordance with Section 4.4.4 of AWWA C651-05. The use of tablets for disinfection is prohibited.
- C. The use of calcium hypochlorite granules specifically intended for swimming pool use is prohibited. The contractor shall utilize only those chemicals which are NSF 60/AWWA approved for disinfection.
- D. The newly installed pipe shall be properly chlorinated to at least 200 ppm (mg/l) for a minimum of 24 hours, to ensure the chlorine residual at the pipe extremities and at other representative points after the retention period, is at least 200 ppm (mg/l). Treated water shall be retained in the pipe long enough to destroy all non-spore-forming bacteria.
- E. After completion of retention period, new mains shall be flushed in order to eliminate residual chlorine with a suitable quantity of sodium bisulfite, sodium sulfide or sodium thiosulfate prior to disposal. Bacteria samples may not be collected until a chlorine residual representative of the existing distribution system is achieved. New mains shall be flushed at a velocity of no less than 2.5 ft/sec.
- F. Collect samples 24 & 48-hours after flushing disinfectant and refilling with potable water. Samples shall not be collected if a chlorine residual inconsistent with that of the existing distribution system is present. Any portion of the sample set which tests positive for total coliform and/or e-coli bacteria constitutes failure of the entire set with no exceptions.
- G. Field chlorine residual checks shall be performed for each sample and shall be recorded on the laboratory sampling form for inclusion in the sampling results report.

- H. Two (2) consecutive sets of bacteriological samples, taken 24 hours apart, must be collected from every 1,000 ft of new main, the end of the line and from each branch. Samples should be collected after final flushing and when the chlorine concentration in the water leaving the main is no higher than that generally prevailing in the distribution system (ANSI/AWWA C651 Standard).
- I. Sample tap locations shall be as directed by the Engineer. Taps shall be installed to sample at a frequency as described above.
- J. If water quality in system does not meet the requirements of the Department of Health for potable water, the Contractor shall re-chlorinate or take other steps necessary to provide acceptable water quality. Samples shall be collected and analyzed after each attempt.

3.03 QUALITY CONTROL

- A. Test samples in accordance with ANSI/AWWA C651 and Department of Health requirements.

END OF SECTION 331300

SECTION 331411 - WATER UTILITY DISTRIBUTION PIPING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Water Utility Pipe
- B. Special Castings; Mechanical Joint Fittings
- C. Buried Valves & Valve Boxes

1.02 RELATED SECTIONS

- A. Section 312316.13 - Trenching
- B. Section 312317 - Backfilling
- C. Section 331300 - Disinfection of Water Utility Distribution

1.03 REFERENCES

- A. ANSI/AWWA C104 - Cement-Mortar Lining for Ductile Iron Pipe and Fittings for Water.
- B. ANSI/AWWA C110 - Ductile Iron and Grey Iron Fittings.
- C. ANSI/AWWA C111- Rubber Gasket Joints for Ductile Iron Pressure Pipe and Fittings.
- D. ANSI/AWWA C150 - Thickness Design of Ductile Iron Pipes
- E. ANSI/AWWA C151 - Ductile-Iron Pipe, Centrifugally Cast for Water Service.
- F. ANSI/AWWA C153 - Ductile-Iron Compact Fittings for Water Service.
- G. ANSI/AWWA C600 - Installation of Ductile Iron Water Mains and Their Appurtenances.

1.04 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Product Data: Provide data on pipe materials and accessories.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.05 PROJECT RECORD DOCUMENTS

- A. Accurately record actual locations of water mains, connections, and invert elevations.
- B. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

1.06 QUALITY ASSURANCE

- A. Perform work in accordance with the local water utility company requirements.

- B. The tone-out, mark-out, locating and verification of existing utilities on private property and within public Right-of-Ways are the responsibility of the contractor. All known utilities and facilities shall be verified by test holes or other means prior to commencing water main installation. No compensation will be paid to the contractor for lost time due to improper or inadequate utility investigation.

1.07 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, protect and handle products to ensure they are kept free from damage.
- B. Store piping to ensure that their interiors are kept free of debris, organics or animals.

PART 2 - PRODUCTS

2.01 WATER UTILITY PIPING

- A. Cement-Lined Ductile Iron Pipe
 1. Approved Manufacturers:
 - a. US PIPE
 - b. McWANE DUCTILE
 - c. American Pipe
 2. Cement-Lined Ductile Iron Pipe meeting AWWA C150/C151 :
 - a. Special Class 52 for all pipe 14 inches and smaller.
 - b. Special Class 51 for all pipe 16 inches and larger.
 3. Interior lining shall be double-thick cement with a minimum thickness of 1/8" (125 mils) in accordance with AWWA C104.
 4. Exterior of pipe shall have an exterior bituminous coating measuring 1 mil in thickness and be marked with the manufacturer name, date of casting and pressure class.
- B. Pipe Accessories:
 1. Joints: ANSI/AWWA C111, vulcanized rubber gaskets for push-on pipe; mechanical joint with rods and retainer glands for fittings.
 2. Field lock gaskets by US Pipe Model 350 or equal shall be utilized on the last push-on joint of all dead-end mains, where a bell falls within 10 feet of a mechanical joint connection or as indicated on the plans or as directed by the Engineer.
 3. Gaskets shall be free from porous areas, foreign materials and visible defects. No reclaimed rubber shall be used
 4. Lubricant for Joints: Nontoxic, NSF-61 certified, shall not support the growth of bacteria, and shall have no deteriorating effects on the gasket or pipe material.
 5. Wedges: Bronze, installed at each push-on joint. (CLDIP only)

2.02 SPECIAL CASTINGS

- A. Manufacturers:
 1. US PIPE
 2. SIGMA CORP.
 3. TYLER UNION
 4. APPROVED EQUAL
- B. Material:
 1. Fittings shall be in accordance with ANSI/AWWA C153 (compact).
 2. Fittings shall be ductile iron.
 3. Ductile iron fittings shall have a pressure rating of 350 psi.
 4. Fittings shall be cement lined.

- C. All fittings shall be manufactured domestically with the United States.
- D. Mechanical Joint fittings shall be used with "push-on" joint pipe with the joint conforming to AWWA Specifications.
- E. Rubber gaskets shall be used at each pipe connection. Rubber gaskets shall be vulcanized rubber that is free of porous areas, foreign materials and visible defects. No reclaimed rubber shall be used. The size, mold number, gasket manufacturer's mark, the letters "MJ" and the year of manufacture shall be molded in the rubber.
- F. Wedge type restraining glands shall be required at all mechanical joints.
 - 1. Manufacturer:
 - a. EBAA IRON WORKS
 - b. FORD METER BOX CO.
 - c. SIGMA CORPORATION
 - d. TYLER UNION
 - e. US PIPE
 - f. Approved equal
 - 2. Wedge type restraining glands shall be secured to fittings using alloy steel T-head bolts and hex-head nuts.

2.03 BURIED VALVES

- A. Resilient Wedge Gate Valves (up to 12")
 - 1. Acceptable Manufacturers:
 - a. MUELLER COMPANY; A-2380-21
 - b. CLOW VALVE COMPANY
 - c. KENNEDY VALVE CO.
 - 2. All vertical gate valves up to and including 12-inch diameter shall conform to AWWA Specification C509 or latest revision, and shall be specified as follows:
 - a. Select from below as required:
 - b. Material: Iron body, bronze mounted.
 - c. Pressure: 250 psi minimum working pressure.
 - d. Wedge: Cast iron wedge with urethane rubber coating (encapsulated). The rubber/metal bond shall be tested to meet ASTM D429.
 - e. Stem: Forged bronze, non-rising stem with two "O" ring seals.
 - f. Wrench Nut: Two-inch square (at base) wrench nut opening to the left or counterclockwise.
 - g. Mechanical Joint Ends: Mechanical joint ends complete with all joint accessories including rubber gaskets.
 - h. Painting: The body and bonnet shall be coated with a fusion coating both interior and exterior to meet AWWA Standard C550.
 - i. Markings: Markings shall be cast on the bonnet or body of each valve, and shall show the manufacturer's name or mark, the year the valve casting was made, the size of the valve, and the designation of working water pressure for 4 to 12-inch valves.
 - j. Affidavit of Compliance: The Contractor shall have the manufacturer provide an affidavit directly to the Engineer that all valves supplied on this project comply with all applicable provisions of AWWA Specification C509, and that each valve was subjected to and passed the 500 psi hydrostatic test without leakage. No final payment for valves will be made until this Affidavit of Compliance is received by the Engineer.
- B. Butterfly Valves (14" and larger):

1. Acceptable Manufacturers:
 - a. CLOW VALVE COMPANY; Model 4500
 - b. MUELLER COMPANY Lineseal XP II
 - c. Approved equal
 2. All butterfly valves shall conform to AWWA Specification C504-06 or latest revision, and shall be specified as follows:
 - a. Select from below as required:
 - b. Material: Iron body, bronze mounted.
 - c. Pressure: 200 psi minimum working pressure.
 - d. Shaft: The valve shaft shall be a one-piece unit extending through the valve bearings into the valve disc. The shaft shall be 18-8 stainless steel, Type 302, 303, 304, 316, or if carbon steel, with 18-8 stainless steel journals.
 - e. The disc movement shall be 90 degrees open to shut. Discs shall be of cast iron conforming to ASTM A48, Class 40, or if alloy cast iron, conforming to ASTM A436, Type 1 or 2. Disc edge shall have Type 316 stainless steel seating surface.
 - f. Valve seats shall provide tight shutoff 200 psi upstream, zero psi downstream pressure differential. Rubber seats mounted on the disc and shall be retained without metal hardware. Rubber seats mounted on valve bodies shall be cemented and clamped, bonded or vulcanized into the valve body. Rubber seats shall be of new natural or synthetic rubber.
 - g. Valves shall be fitted with sleeve type bearings contained in the hubs of the valve body. A bearing shall be provided on the shaft outboard of the shaft seal or in the operator housing to protect the shaft seal from thrust forces developed in the operating mechanisms. Each valve shall be equipped with either one or two thrust bearings set to hold the valve disc securely in the center of the valve seat. Sleeve and other bearings fitted into the valve body proper shall be of self-lubricating materials and shall have a coefficient of friction not higher than 0.25.
 - h. Where shafts project through the valve body for operator connection, a shaft seal shall be provided. Seals shall be split "V" type or "O" ring type. "O" ring type shall be contained in a removable, corrosion-resistant recess. Seals shall be of a design allowing replacement without removing the valve shaft.
 - i. Manual operation shall be provided with totally enclosed gearing, with stop-limiting devices for the open and closed positions. Actuators shall be totally enclosed and shall produce full output torque requirements throughout the entire travel with an input torque no greater than 150 foot pounds.
- C. Valve Boxes
1. Manufacturer:
 - a. BINGHAM & TAYLOR
 - b. SIGMA CORPORATION
 - c. TYLER UNION
 2. Valve boxes shall be three piece, sliding type with 8" x 5-1/4" cast iron flanged bottom section, 9" x 6-1/8" ductile iron top section and 7" ductile iron drop lid with "WATER" cast on cover.

PART 3 - EXECUTION

3.01 INSTALLATION - PIPE

- A. Remove scale and dirt, on inside and outside, before assembly.
- B. Bevel plain ends of cut pipe at push-on joints.
- C. Excavate pipe trench in accordance with Section 312316.13 for work of this section. Hand trim excavation for accurate placement of pipe to elevations indicated.

- D. Place bedding material at trench bottom; level fill materials in one continuous layer not less than 6 inches compacted depth; compact to 95 percent maximum dry density.
- E. Maintain optimum moisture content of bedding material to attain required compaction density.
- F. The Contractor shall be responsible for verifying the location of the existing water mains and other utilities along the entire route of the project.
- G. The Contractor must have experienced personnel in his employ to perform the cut-ins and connections to the existing water mains and have available equipment necessary for cutting ductile iron, cast iron, asbestos cement and miscellaneous piping in the existing distribution system.
- H. Suitable facilities shall be available for proper dewatering, drainage and disposal of water removed from dewatered lines and excavations, without damage to adjacent properties. Exposed ends of the water main shall never be submerged either partially or fully.
- I. Maintain a 10 foot horizontal and 18 inch vertical separation of water main from all storm and sanitary sewer facilities. The Contractor shall install the water main with the minimum cover indicated in the Contract Documents. The Contractor shall verify the depth of any existing service laterals to the structures prior to crossing of same.
- J. Pipe trenches shall be of minimum width and allow six (6) inches on each side of the bell with sufficient width to allow straight alignment of pipe and provide sufficient room for joint-ing as required and to allow the backfill to be placed as specified.
- K. Only new full-lengths of pipe shall be delivered to and utilized on this project. Field cut pieces with bell ends shall be a minimum of 5 feet in length. Smaller pieces shall not be permitted for use and shall be removed from site.
- L. Pipe shall be laid with the bell end facing in the direction of laying. Where pipe is laid on a grade of 10% or greater, the laying shall start at the bottom and shall proceed upward with the bell ends of the pipe up gradient.
- M. Install pipe to indicated elevation to within tolerance of 1/2 inch.
- N. Clean bell end of pipe prior to placing gasket. Apply lubricant to both gasket and plain end of pipe.
- O. Do not field cut pipe within 24 inches of bell or 8 inches of spigot end. Verify the pipe diameter of cut end.
- P. Route pipe in straight line where possible. Joint deflections are permitted as outlined in ANSI/AWWA C600.
- Q. Install and test ductile iron piping and fittings to ANSI/AWWA C600.
- R. Establish elevations of buried piping to ensure not less than 4 feet of cover unless otherwise indicated on plans or specifically approved by Engineer or Owner in field.
- S. Trench widths shall not exceed the following authorized widths prior to cut-back:
 - 1. Less than 12-inches diameter mains: 30 inches
 - 2. 12-inch, 16-inch, and 20-inch diameter mains: 36 inches

- T. Backfill trench in accordance with Section 312317. Backfill around sides and to top of pipe with fill, tamped in place and compacted to 95 percent maximum dry density.
- U. The contractor shall restore, replace and/or reposition all decorative lawn ornaments, and miscellaneous items disturbed during water main installation including but not limited to the following: stones, brick driveway pavers, fences, signs, sprinklers, shrubs and trees.

3.02 DISINFECTION AND BACTERIA SAMPLING OF WATER UTILITIES

- A. Flush and disinfect system in accordance with Section 331300.

3.03 PRESSURE TESTING

- A. Perform hydrostatic pressure testing after disinfection, but prior to bacteria sampling.
- B. Expel all air from piping system, including pipe, valves and appurtenances. All new water mains shall be pressure tested to a minimum of 150 psi or 1.5 times line pressure, whichever is greater. The pressure test shall be held for a minimum of two hours with no leakage.
- C. Remove and replace any defective pipe, fittings, valves, and appurtenances. Repeat pressure test until satisfactory to Engineer.

3.04 INSTALLATION - SPECIAL CASTINGS

- A. Tighten glands in accordance with manufacturers direction.
- B. Ensure that fittings are free of dirt and debris prior to installation.
- C. Support fitting with solid blocking in areas of over excavation. Wood wedges, blocking and supports are prohibited.
- D. The contractor shall install a minimum of two ¾-inch steel tie rods on mechanical joint fittings. Additional tie-rods may be requested on vertical pipe or by Engineer in areas of high pressure.
- E. Steel tie rods shall be secured to fittings using ¾" steel eye-bolts, washers and nuts. The use of ductile iron "Duc-Lugs" is prohibited. Steel tie rods shall be secured to pipe using half-moon pipe clamps, restraints, washers and nuts.
- F. Bell ends of pipe shall not be installed within 5 feet of a mechanical joint assembly without being further restrained by locking gaskets and tie rods.
- G. Concrete blocking shall be applied on all pipe lines 4-inch in diameter and larger at all hydrants, tees, plugs, caps, and at bends deflecting 22-1/2 degrees or more. Blocking shall be placed between solid ground and the fitting to be anchored. The blocking shall be so placed that the pipe and fitting joints will be accessible for repair. Size of blocking and minimum bearing area shall be in accordance with the Bearing Area Table within this specification section.
- H. Form and place concrete for thrust blocks at each elbow or change of direction of pipe.

BEARING AREA TABLE

Pipe Size	Dead End of Tee	90 Degree Bend	45 Degree Bend	22½ Degree Bend
4 in	1 ft2	1 ft2	¾ ft2	½ ft2
6 in	2 ft2	3 ft2	2 ft2	1 ft2
8 in	4 ft2	5½ ft2	3 ft2	1½ ft2
10 in	6 ft2	8½ ft2	4½ ft2	2½ ft2

12 in	9 ft2	12 ft2	6½ ft2	3½ ft2
>16 in	15 ft2	22 ft2	12 ft2	6 ft2

- I. Concrete for Thrust Blocks: Portland Cement Concrete; 2,000 psi minimum strength at 28 days. Solid precast concrete blocking meeting the compressive strength requirement shall also be acceptable for use. When solid blocking is utilized, the contractor shall fill all annular spaces with cement or mortar. The use of wood wedges or blocking is not permitted.

3.05 NOTIFICATIONS

- A. The Engineer and local water utility shall be notified at least 24 hours in advance and immediately prior to any of the following:
1. Commencing work or starting again after more than a 72-hour shutdown.
 2. Admitting water to a new section.
 3. Flushing or blowing off piping.
 4. Chlorination of piping.

3.06 FIELD QUALITY CONTROL

- A. Field inspection and testing will be performed in accordance with Owner requirements.
- B. Leakage testing shall be in accordance with ANSI/AWWA C600.
- C. Compaction testing shall be in accordance with ANSI/ASTM D1557.
- D. If tests indicate work does not meet specified requirements, remove work, replace and retest at no cost to Owner.

END OF SECTION 331411

SECTION 331419 - WATER UTILITY DISTRIBUTION FIRE HYDRANTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Fire Hydrant Assemblies

1.02 RELATED SECTIONS

- A. Section 312316.13 - Trenching
- B. Section 312317 - Backfilling
- C. Section 331300 - Disinfection of Water Utility Distribution
- D. Section 331411 - Water Utility Distribution Piping

1.03 REFERENCES

- A. ANSI/AWWA C502 - Dry Barrel Fire Hydrants.

1.04 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Product Data: Provide data on hydrant assemblies.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.05 QUALITY ASSURANCE

- A. Perform work in accordance with the local water utility company requirements.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, protect and handle products to ensure they are kept free from damage.

PART 2 - PRODUCTS

2.01 FIRE HYDRANT ASSEMBLIES

- A. Acceptable Manufacturers:
 - 1. CLOW VALVE COMPANY, Eddy Hydrant Model No. F-2640.
- B. Hydrant: ANSI/AWWA C502, dry barrel type, inside dimension of 6 inches minimum, with minimum 4.50 inch diameter valve seat opening; minimum net water area of barrel not less than 190 percent of valve opening; 6 inches mechanical joint inlet connection with accessories, gland bolts and rubber gaskets.
- C. Hose Connection: Two 2-1/2 inch (64 mm) diameter hose nozzles conforming to NEW YORK CORPORATION dimensions (8 threads per inch).
- D. Hydrants shall be equipped with non-kinking chains.

- E. Steamer Connection: One 4-1/2 inch (114 mm) pumper nozzle conforming to NATIONAL STANDARD dimensions (4 threads per inch)
- F. Provide 5" Storz adapter style fitting on steamer connection. Storz fitting shall be constructed of forged aluminum with female NST with rubber gasket and two set screws. Fitting shall be equipped with steel aircraft cable for attachment of cap to adapter.
- G. Hydrant Extensions: Fabricate in multiples of 6 inches (150 mm) with rod and coupling to increase barrel length. Extensions shall be of the same manufacturer as the hydrant.
- H. Operating nut and outlet nozzle caps shall be pentagonal (5 sided) in shape, 1-1/2 inches point to flat at the base and open to the left or counterclockwise. A clearly visible arrow and the word "OPEN" shall be cast in relief on the top of the hydrant.
- I. Where indicated on the plans or by the Engineer, hydrant protector posts shall be 4-inch diameter cast iron, ductile iron or steel, filled with concrete and measure a minimum of 6-1/2 feet long. Post to be exposed a minimum of 36" feet above grade and be painted with two coats of reflective yellow exterior paint.
- J. All hydrants designated to be removed shall be delivered to the Owner. The Contractor shall use extreme care so as not to crack the hydrant or hydrant shoe.
- K. A poured concrete hydrant bracing pad shall be installed around the base of each hydrant from 3" to 6" below finished grade. Pad shall be a minimum of 4" thick.
- L. Finish: Primer and two coats of enamel to barrel and top section.
 - 1. Color:
 - a. Barrel color shall be red.
 - b. Bonnet color shall be aluminum.
 - c. Cap color shall be aluminum.

PART 3 - EXECUTION

3.01 INSTALLATION - HYDRANTS

- A. Set hydrants plumb and locate steamer connection perpendicular to roadway.
- B. Set hydrants to grade, with center of steamer connection at least 18 inches aboveground.
- C. Attach hydrant control valve to anchoring tee unless otherwise directed by Owner or Engineer. Attach hydrant to valve with a minimum of two 3/4" steel tie rods in all cases.
- D. Provide a drainage pit surrounding the hydrant 36 inches square by 24 inches deep filled with 1 inch diameter washed gravel. The stone shall be placed to a point 1 foot above the bottom flange.
- E. Brace behind elbow of hydrant with 4,000 psi minimum concrete having a minimum bearing area of 3 sq ft against unexcavated earth. A precast concrete block shall be installed beneath the elbow.

3.02 FIELD QUALITY CONTROL

- A. After activation of water main and hydrant, each hydrant shall be operated with the main valve fully opened and closed to ensure proper drainage and operation.

B. Field inspection and testing will be performed in accordance with District requirements.

END OF SECTION 331419

**SECTION 331613 - PRESTRESSED CONCRETE ABOVEGROUND WATER UTILITY STORAGE
TANKS**

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. 2.0 million gallon precast, wire-wound, prestressed concrete tank, including design, fabrication, delivery and erection.

1.02 RELATED SECTIONS

- A. Section 013300 - Submittals
- B. Section 014500 - Quality Control
- C. Section 311100 - Site Clearing
- D. Section 315000 - Excavation Support and Protection
- E. Section 312316 - Excavation
- F. Section 312316.13 - Trenching
- G. Section 312317- Backfill
- H. Section 331160 - Disinfection of Water Storage Facilities
- I. Section 331300 - Water Utility Distribution Piping

1.03 REFERENCES

- A. ACI 301 Specifications for Structural Concrete
- B. ACI 305 Hot Weather Concreting
- C. ACI 306 Cold Weather Concreting
- D. ACI 309R Guide for Consolidation of Concrete
- E. ACI 318 Building Code Requirements for Reinforced Concrete and Commentary
- F. ACI 350 Code Requirements for Environmental Engineering Concrete Structures and Commentary
- G. ACI 350.3 Seismic Design of Liquid Containing Concrete Structures and Commentary
- H. ACI 372R Design and Construction of Circular Wire- and Strand Wrapped Prestressed Concrete Structures
- I. ACI 506R Guide to Shotcrete
- J. ASTM A185 Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete
- K. ASTM A416 Standard Specification for Steel Strand, Uncoated Seven-Wire for Prestressed Concrete

- L. ASTM A475 Standard Specification for Zinc-Coated Steel Wire Strand
- M. ASTM A615/A615M Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
- N. ASTM A821 Standard Specification for Steel Wire, Hard Drawn for Prestressing Concrete Tanks
- O. ASTM A1008/A1008M Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable
- P. ASTM C31 Standard Practice for Making and Curing Concrete Test Specimens in the Field
- Q. ASTM C33 Standard Specification for Concrete Aggregates
- R. ASTM C39 Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
- S. ASTM C618, Type F Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete
- T. ASTM C920 Specification for Elastomeric Joint Sealants
- U. ASTM D1056 Standard Specification for Flexible Cellular Materials - Sponge or Expanded Rubber
- V. ASTM D1556 Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
- W. ASTM D1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 Ft. - lbf/ft³) 2700 KN-M/M³)
- X. ASTM D2000 Classification System for Rubber Products in Automotive Applications
- Y. ASCE Standard 7-05 Minimum Design Loads for Buildings and Other Structures
- Z. AWWA C652 Standard for Disinfection of Water-Storage Facilities
- AA. AWWA D110-04 Wire and Strand Wound, Circular, Prestressed Concrete Water Tanks, Type III
- AB. US Army Corps of Engineers Specification CRD-C-572, Specification for PVC Waterstop

1.04 SYSTEM DESCRIPTION

- A. The tank shall consist of a cast-in-place reinforced concrete floor, a precast wire-wound prestressed concrete wall with a continuous mechanically bonded steel diaphragm, and a precast or cast-in-place prestressed clear span concrete dome with no interior columns.
- B. Tank accessories include but are not limited to an internal ladder, roof hatch, roof handrailing, safety guide cable, roof pipe penetration, exterior ladder, ladder vandal guard, ladder safety climbing devices, overflow piping, inlet piping, outlet piping, conduit mounting brackets and roof vent as specified and shown on the plans.

1.05 QUALITY ASSURANCE

A. Qualifications and Experience

1. All tank work shall be performed by a company that specializes in the design and construction of precast, wire-wound prestressed concrete tanks using the method of circumferential prestress wire reinforcing and with proven capability of meeting all the requirements of these specifications. No company is considered qualified unless it has designed and built in its own name at least twenty precast, wire-wound prestressed concrete tanks conforming to AWWA D110, Type III in the last ten years. At least ten of the above tanks shall have been in successful service for a minimum of five years.
2. The tank contractor shall have in its employ a design engineer with a minimum of ten years experience in the design of AWWA D110 Type III tanks. The design engineer shall have been the engineer of record for a minimum of ten AWWA D110 Type III tanks.
3. The tank contractor shall have in its employ for this project a team consisting of a tank superintendent, project manager, shotcrete foreman, wire-winding foreman, and precast erection foreman, each of whom shall have constructed a minimum of five (5) AWWA D110 Type III tanks having a capacity of 1.0 MG or greater.
4. Experience in the design and construction of AWWA D110 Type I, Type II, or Type IV tanks is not acceptable.
5. The plans and specifications included in the contract documents are typical of an AWWA D110, Type III wire wound, prestressed concrete tank
6. Prequalification
 - a. All tank contractors are required to be prequalified. The bidder is required to state on the face of his sealed proposal the name of the prequalified tank contractor. Sealed proposals which do not state the name of the prequalified tank contractor will be returned to the bidder unopened.
 - b. DN Tanks, Inc. of Wakefield, Massachusetts, and, Preload Inc., of Hauppauge, New York are prequalified for precast, wire-wound prestressed, concrete tank construction. Additional tank contractors seeking prequalification shall make a complete submittal to the Engineer for review and approval no later than ten (10) days prior to the date set for receipt of bid, in accordance with Section 013300. The submittal shall include detailed design drawings and calculations meeting the requirements of these specifications, the company's record of previous experience in the design and construction of circular precast, wire-wound prestressed concrete tanks constructed in their own name, conforming to AWWA D110 Type III, including the experience of the design engineer and a project team meeting the requirements of Article 1.5(A) above. Within five (5) days prior to the date of receiving bids, the engineer will publish a list of additional prequalified tank contractors.
 - c. Experience in the design and construction of AWWA D110 Type I, Type II, or Type IV tanks is not acceptable.
 - d. All tank contractors not prequalified in accordance with this specification will be rejected.

1.06 QUALITY ASSURANCE

- A. Perform testing under provisions of Section 014500.
- B. Perform work in accordance with applicable standards.

1.07 SUBMITTALS

- A. All submittals shall be made in accordance with Section 013300.
- B. Prequalification Submittals Ten Days Prior to Bid Date

1. Tank contractors not previously prequalified shall submit preliminary design drawings and calculations showing the dimensions of the tank, details of the type of construction, wire-wound prestressing methods, and sizes of principal members. The drawings and calculations shall be of sufficient detail to show compliance with the specification and all required standards and shall be signed and sealed by an Engineer registered in the state the tank is to be constructed. The registered Engineer shall certify the design is in conformance with AWWA D110, Type III.
2. Tank contractors not previously prequalified shall submit a complete experience record for the tanks they have designed and built in their own name. The record shall include the contractor's experience in the design and construction of precast, wire-wound, prestressed concrete tanks conforming to AWWA D110, Type III. The record shall also indicate the size of the tank, the name and address of the Owner, the year of construction, and the name of the Engineer for each project.
3. Tank contractors not previously prequalified shall submit the resume of the tank designer, currently in its employ, and his/her experience as the designer of record for AWWA D110 Type III tanks, meeting the requirements of Article 1.5(A) above.
4. Tank contractors not previously prequalified shall submit the resumes for each member of the project team including the tank superintendent, project manager, shotcrete foreman, wire-winding foreman, and precast erection foreman that will be used for this project, meeting the requirements of Article 1.5(A) above.
5. Experience in the design and construction of AWWA D110 Type I, Type II, or Type IV tanks is not acceptable.
6. Design Submittal after Execution of Contract
 - a. Design calculations and shop drawings in quadruplicate, showing details and procedures of construction, shall be submitted to the Engineer for approval after execution of the Contract. After approval by the Engineer, one set of the drawings and calculations will be returned to the Contractor, and any changes found necessary by the Engineer shall be made by the Contractor.
 - b. Approval by the Engineer of the drawings and calculations submitted by the Contractor will not in any way relieve the Contractor of full responsibility for the accuracy and completeness of the drawings and calculations.
 - c. Design calculations and shop drawings shall be stamped by a Professional Engineer experienced in the design of AWWA D110, Type III wire-wound, prestressed concrete tanks and registered in the state of New York.
 - d. Design calculations and shop drawings shall be submitted within 30 days after execution of the contract.
7. Pre-Bid Submissions
 - a. Each bidder shall submit an alternate tank sketch, to be included with the proposal, showing all major dimensions, including, but not limited to, the tank height, diameter, overflow height and buried depth for the alternate 2.0 MG concrete ground storage tank and foundation. Include any drawings that will be required to evaluate the alternate tank dimension proposal and impacts to the project.
8. Submittals
 - a. Design proportions for all concrete and shotcrete. Concrete strengths of trial mixes.
 - b. Admixtures to be used in the concrete or shotcrete and their purpose.
 - c. Reinforcing steel shop drawings showing fabrication and placement.
 - d. Catalog cuts or shop drawings of all appurtenances, i.e. hatch, vent, ladders, waterstops.

1.08 WARRANTY

- A. The Contractor shall provide a Warranty Certificate typed on company letterhead and signed by an authorized officer of the Contractor. The certificate shall be witnessed by a notary public in the state in which the company headquarters is located. The Warranty Certificate shall be submitted, verbatim and without exception, as follows:

Assuming the ground storage tank is being operated in accordance with the written operating instructions provided by (*Name of Contractor*), the Contractor shall guarantee the structure against defective materials or workmanship for a period of 10 years from the date of completion. If any materials or workmanship prove to be defective within 10 years, they shall be replaced or repaired by the Contractor at the Contractor's expense.

Defective material or workmanship includes but is not limited to: Concrete spalling, excessive efflorescence as determined by the owner, cracking, other than due to normal shrinkage, wall and foundation penetration leakage and excessive waterstop leakage as determined by the owner.

Agreed upon this _____ (Date)
by _____ of _____ (Name of Authorized Agent), who, _____ (Name of Supplier)

by signing this document, affirms that he/she is legally authorized to submit this warranty on behalf of the Supplier.

AUTHORIZED SIGNATURE DATE

TYPEWRITTEN NAME DATE

This certificate shall be notarized and contain the corporate embossed seal of the corporation. An acknowledgment shall also be provided by the corporation that the person signing this certificate is authorized to do so

PART 2 - PRODUCTS

2.01 2.01 - DESIGN

A. Design Requirements:

1. The prestressed concrete tank shall be designed and constructed in accordance with the provisions of AWWA D110 Standard for Wire Wound Circular Prestressed-Concrete Water Tanks, Type III: Precast Concrete with a Steel Diaphragm.
2. Horizontal prestressing shall be continuous. Discontinuous prestressing tendons or strands will not be allowed.
3. Design Criteria:
 - a. Storage Capacity: 2.0 million gallons
 - b. Inside Diameter: 120 feet
 - c. Liquid Depth: 24 feet
 - d. Liquid Unit Weight: 62.5 pounds per cubic foot
 - e. Roof Live Load: 30 pounds per square foot
 - f. Maximum Overflow Rate: 2,000 gallons per minute
 - g. Maximum Withdrawal Rate: 3,000 gallons per minute

B. Wall:

1. The precast, wire-wound prestressed tank wall shall be designed as a composite concrete wall with an embedded mechanically bonded steel diaphragm in combination with vertical mild steel reinforcement.
2. The prestressed tank wall shall be considered as a cylindrical shell with partial edge restraint.

3. The prestressed tank wall shall be reinforced vertically by deformed steel reinforcing rods. The continuous mechanically bonded steel diaphragm can be taken as effective vertical reinforcing.
 4. The prestressed tank wall shall be of precast construction. Shotcrete or cast-in-place concrete core walls are not permitted.
 5. A stress plate shall be required at all above grade locations where prestress wires are displaced 24 inches or greater. The stress plate shall be designed to transfer stress across the opening.
 6. Minimum precast wall thickness shall be four (4) inches.
 7. No reduction in ring compression or tension in the wall will be taken due to restraint at the bottom.
- C. Floor Slab:
1. The floor slab shall be designed as a membrane floor not less than four (4) inches thick and shall be placed monolithically. No construction joints will be allowed unless otherwise approved by the engineer.
 2. Minimum ratio of floor reinforcement area to concrete area shall be 0.6 percent.
 3. Wall footings may be above or below floor grade, but shall be placed monolithically with the floor.
- D. Dome Roof:
1. The dome roof shall have a rise to span ratio within the range of 1:8 to 1:14.
 2. The minimum concrete thickness shall be as per AWWA D110.
 3. The dome shall be fixed to the tank wall. Columns or interior supports will not be allowed. Dome design shall be based on elastic spherical shell analysis.

2.02 MATERIALS

A. CONCRETE

1. Concrete shall conform to ACI 301.
2. Cement shall be Portland cement Type I or Type II.
3. Admixtures, other than air-entraining and water reducing admixtures, will not be permitted unless approved by the Engineer.
4. Concrete for tank wall and dome construction shall have a minimum compressive strength of 4,000 psi at 28 days. All precast wall and dome concrete shall be air-entrained.
5. Concrete for the tank floor, footings, pipe encasement, and all other work shall have a minimum compressive strength of 4,000 psi at 28 days and shall not be air-entrained. The coarse and fine aggregate shall meet the requirements of ASTM C33. Course aggregate shall be No. 467 with 100 percent passing the 1½ inch sieve. Superplasticizer and water-reducing admixtures shall be incorporated into the floor concrete. Fibers shall be Microfiber by Grace, Fibermesh 150 by Propex, or equal. Fiber lengths shall be a maximum of ¾ inches. The amount of polypropylene fibers added to the concrete mix shall conform to the manufacturer's recommendations.
6. Proportioning for concrete shall be in accordance with ACI 301.
7. Concrete in contact with prestressing steel shall have a maximum water soluble chloride ion concentration of 0.06 percent by weight of cement.

B. SHOTCRETE

1. Shotcrete shall conform to ACI Standard 506, except as modified herein.
2. The wet mix process shall be employed for shotcreting.
3. Shotcrete used for covering prestressed wire shall consist of not more than three parts sand to one part Portland cement by weight. Additional coats of shotcrete shall consist of not more than four parts sand to one part Portland cement by weight. Polypropylene fibers shall be included in the shotcrete used for the finish covercoat. Fibers shall be Fibercast 500 by Propex, or equal. Fiber length shall be ¼". The amount of the fibers

added to the shotcrete used for the finish covercoat shall conform to the manufacturer's recommendations. Fly ash may be incorporated into the finish covercoat. Fly ash shall conform to ASTM C618, Type F. Shotcrete shall have a minimum strength of 4,500 psi at 28 days.

4. Shotcrete in contact with prestressing steel shall have a maximum water soluble chloride ion concentration of 0.06 percent by weight of cement.
- C. MORTAR FILL AND NON-SHRINK GROUT
1. Mortar fill and non-shrink grout shall have a minimum compressive strength of 4,000 psi at 28 days.
- D. REINFORCING STEEL
1. Reinforcing steel shall be new billet steel Grade 60, as shown on the shop drawings, meeting the requirements of ASTM A615. Welded wire fabric shall conform to ASTM A185.
 2. Reinforcing steel shall be accurately fabricated and shall be free from loose rust, scale, and contaminants, which reduce bond.
 3. Reinforcing steel shall be accurately positioned on supports, spacers, hangers, or other reinforcements and shall be secured in place with wire ties or suitable clips. Rebar chair supports may be either steel or plastic.
 4. When required by design, the tank designer shall use base restraint cables to resist earthquake loads. Seismic base restraint cables shall be hot-dipped galvanized seven-wire strand and shall be manufactured in accordance with ASTM A416 prior to galvanizing, and ASTM A475 after galvanizing.
- E. STEEL DIAPHRAGM
1. The steel diaphragm shall conform to ASTM A1008 and shall be a minimum thickness of 0.017 inches. It shall be vertically ribbed with reentrant angles. The back of the channels shall be wider than the front, providing a mechanical keyway anchorage with the concrete and shotcrete encasement.
 2. The steel diaphragm shall extend to within one inch of the full height of the wall panel with no horizontal joints. Vertical joints within a wall panel shall be roll seamed or otherwise fastened in a fashion that results in a firm mechanical lock. Joints between wall panels that are not roll seamed shall be edge sealed with polysulfide or polyurethane sealant.
 3. No punctures will be permitted in the diaphragm except those required for pipe sleeves, temporary construction openings, or special appurtenances. The Engineer shall approve details of the openings. All openings shall be completely edge sealed with polysulfide or polyurethane sealant.
 4. Diaphragm steel may be considered as contributing to the vertical reinforcement of the wall.
- F. PRESTRESSING STEEL
1. Steel for prestressing shall be cold drawn, high carbon wire meeting the requirements of ASTM A821, having a minimum ultimate tensile strength of 210,000 psi.
 2. Splices for horizontal prestressed reinforcement shall be ferrous material compatible with the reinforcement and shall develop the full strength of the wire. Wire splice and anchorage accessories shall not nick or otherwise damage the prestressing.
- G. ELASTOMERIC MATERIALS
1. Twelve inch minimum waterstop with centerbulb shall be polyvinyl chloride meeting the requirements of the Corps of Engineers Specification CRD-C 572. Splices shall be made in accordance with the manufacturer's recommendations subject to the approval of the Engineer. Waterstop shall be manufactured by Greenstreak Plastic Products Company, Inc., or equal.
 2. Bearing pads shall be natural rubber or neoprene.

3. Natural rubber bearing pads shall contain only virgin natural polyisoprene as the raw polymer and the physical properties shall comply with ASTM D2000 Line Call-Out M 4 AA 414 A1 3.
4. Neoprene bearing pads shall have a hardness of 40 to 50 durometer, a minimum tensile strength of 1,500 psi, a minimum elongation of 500 percent, and a maximum compressive set of 50 percent. Pads shall meet the requirements of ASTM D2000 Line Call-Out M 2 BC 410 A1 4 B14 for 40 durometer material.
5. Sponge filler shall be closed-cell neoprene or rubber conforming to ASTM D1056, Type 2, Class A, and Grade 1. Compression deflection limited to 25 percent at two to five psi.
6. Polysulfide or polyurethane sealant will be a two or three component elastomeric compound meeting the requirements of ASTM C920. Sealants must have permanent characteristics of bond to metal surfaces, flexibility, and resistance to extrusion due to hydrostatic pressure. Air cured sealants shall not be used.
7. DECORATIVE COATING
 - a. Decorative coating shall be applied to the exterior tank surfaces using Enviro-Crete Series 156 by Tnemec Co., Inc., or approved equal.
 - 1) Prime Coat: Series 156, thinned 20 - 30%
 - 2) Second Coat: Series 156, 4 - 6 mils
 - 3) Third Coat: Series 156, 4 - 6 mils

2.03 ACCESSORIES

- A. The Contractor shall furnish and install all accessories as detailed in the plans and specifications, including:
 1. Inlet piping
 2. Outlet piping
 3. Overflow piping
 4. Roof vent
 5. Roof hatch
 6. Roof handrail with swing gate(s)
 7. Interior ladder with safety climb device
 8. Exterior ladder with safety climb device and vandal guard
 9. Conduit mounting bracket(s)
 10. Dome safety line
 11. Tank Mixer and Panel

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify existing site conditions.

3.02 EXCAVATION AND BACKFILL

- A. After excavation is complete, the bottom of the excavation shall be proof rolled and leveled as directed by the Engineer before the compacted select fill is placed. The Engineer shall inspect the subgrade for conformance with the original geotechnical report and its suitability for the tank foundation.
- B. A leveling base material consisting of a minimum six inch thick layer of compacted select fill shall be placed beneath the entire tank foundation. A non-woven geotextile fabric such as Mirafi 1100N, Propex 4545, or equal, shall be placed between the subgrade and leveling base material as shown on the drawings or directed by the tank builder. Select fill shall consist of a clean, well graded angular or subangular material having not more than 8 percent by weight passing the No. 200 sieve. The maximum size stone shall be 1½ inch. Select fill shall be

placed in layers not exceeding twelve inches and compacted to a minimum density equal to 95 percent of the maximum laboratory density in accordance with ASTM D1557. Field testing for density achieved shall be in accordance with ASTM D1556 or D2922.

- C. A uniformly graded ¾ inch minus crushed stone shall be used as the leveling base material. The crushed stone shall be ¾ inch sieve size with 100 percent passing the one inch. If uniformly graded crushed stone is used for the leveling base material, compaction performance criteria shall be used to gauge the degree of compaction. Crushed stone shall be placed in layers not exceeding 9 inches and compacted with at least two passes in each direction with vibratory roller compaction equipment. Compaction shall be inspected and verification of compaction effort shall be documented by an approved testing laboratory.
- D. The surface elevation of the leveling base shall be fine graded to a tolerance of plus zero inches to minus ½ inch over the entire foundation areas. Fine grading tolerances for floor pipe encasements shall be plus zero inches to minus six inches.
- E. Crushed stone material shall consist of clean, hard, durable, crushed particles or fragments of stone or ledge rock of uniform quality reasonably free of thin or elongated pieces. The materials shall be free from ice, snow, rubbish, sods, roots, and other deleterious or organic materials and shall conform to the following gradation requirements meeting ASTM C 33 stone size No. 67.

SIEVE SIZE	PERCENT PASSING
	BY WEIGHT
1 INCH	100%
¾ INCH	90% - 100%
⅜ INCH	20% - 55%
NO. 4	0% - 10%
NO. 8	0% - 5%

- A. Compacted select fill should consist of sandy gravel or gravelly sand free of ice, snow, rubbish, sods, roots and other deleterious or organic materials and should be well graded within the following limits.

SIEVE SIZE	PERCENT FINER
	BY WEIGHT
1.5 INCH	100%
NO. 4	30% - 90%
NO. 40	10% - 50%
NO. 200	0% - 8%

3.03 FLOOR

- A. The floor and wall footings shall be constructed to the dimensions shown on the Approved Shop Drawings.
- B. Prior to placement of the floor reinforcing, a six mil polyethylene moisture barrier shall be placed over the leveling base material. Joints in the polyethylene shall be overlapped a minimum of six inches.
- C. Prior to placement of the floor concrete, all piping that penetrates the floor shall be set and encased in concrete.

- D. The vertical waterstop shall be placed and supported so that the bottom of the center bulb is at the elevation of the top of the footing. The waterstop shall be supported without puncturing any portion of the waterstop unless it is manufactured with holes for tying. The waterstop shall be spliced using a thermostatically controlled sealing iron and each splice shall be successfully spark tested prior to encasement in concrete.
- E. The floor shall have a minimum thickness of four inches and be poured monolithically. There shall be no construction joints in the floor or between the floor and footing.
- F. The floor shall be cured by applying one coat of curing compound and/or flooding with water, and shall remain saturated for a minimum of seven days.

3.04 PRECAST PANEL CONSTRUCTION AND ERECTION

- A. The precast wall shall be constructed with a continuous waterproof steel diaphragm embedded in the exterior of the precast panel. Horizontal joints in the diaphragm will not be allowed.
- B. No holes for form ties, nails, or other punctures will be permitted in the wall.
- C. Temporary wall openings may be provided for access and removal of construction materials from the tank interior subject to the approval of the Engineer.
- D. Wall and dome panel beds shall be located around the periphery of the tank as required. The beds shall be constructed to provide finished panels with the proper curvature of the tank.
- E. Polyethylene sheeting shall be placed between successive pours to provide a high moisture environment and a long slow cure for the concrete.
- F. The erecting crane and lifting equipment shall be capable of lifting and placing the precast panels to their proper location without causing damage to the panel.
- G. The precast panels shall be erected to the correct vertical and circumferential alignment. The edges of adjoining panels shall not vary inwardly or outwardly by more than 3/8 inch and shall be placed to the tank radius within + 3/8 inch.
- H. Joints between precast wall panels shall be bridged with a 10 gauge steel plate edge sealed with polysulfide or polyurethane and filled with mortar as shown on the drawings. No through-wall ties will be permitted.
- I. Minimum dome and wall panel thickness shall be four inches.

3.05 CONCRETE

- A. All concrete shall be conveyed, placed, finished, and cured as required by pertinent ACI standards.
- B. Weather Limitations
 - 1. Unless specifically authorized in writing by the Engineer, concrete shall not be placed without special protection during cold weather when the ambient temperature is below 35 degrees Fahrenheit and when the concrete is likely to be subjected to freezing temperatures before initial set has occurred and the concrete strength has reached 500 psi. Concrete shall be protected in accordance with ACI 306. The temperature of the concrete shall be maintained in accordance with the requirements of ACI 301 and ACI 306. All methods and equipment for heating and for protecting concrete in place shall be subject to the approval of the Engineer.

2. During hot weather, concreting shall be in accordance with the requirements of ACI 305.
3. Placement of concrete during periods of low humidity (below 50 percent) shall be avoided when feasible and economically possible, particularly when large surface areas are to be finished. In any event, surfaces exposed to drying wind shall be covered with polyethylene sheets immediately after finishing, or flooded with water, or shall be water cured continuously from the time the concrete has taken initial set. Curing compounds may be used in conjunction with water curing, provided they are compatible with coatings that may later be applied, or they are degradable.

C. Finishes

1. The tank shall be given the following finishes:
 - a. The floor slab shall receive a bull float finish or Fresno finish.
 - b. The interior of precast wall panels shall receive a light broom finish.
 - c. The exterior of precast dome panels, dome slots, and cast-in-place domes shall receive a light broom finish.
 - d. Exterior shotcrete shall receive a nozzle finish.

D. Curing

1. Concrete shall be cured using water methods, sealing materials, or curing compounds. Curing compounds shall not be used on surfaces to which decorative coatings, mortar, or shotcrete is to be applied. Curing compounds used within the tank shall be suitable for use with potable water.

E. Testing

1. For concrete placed in precast panels or wall slots, a set of three cylinders shall be made for each truck load of concrete placed. For concrete placed in the floor, dome ring, or dome slots, two sets of three cylinders for the first 50 cubic yards, and one set of three cylinders for every 100 cubic yards thereafter placed in the same day. One cylinder shall be tested at seven days, one at 28 days, and one held as a spare.
2. Slump, air content and temperature testing shall be performed on each truck where cylinders are taken.
3. All concrete testing shall be in accordance with ASTM C31 and C39, at the expense of the Contractor, and shall be conducted by an independent testing agency approved by the Engineer.
4. All concrete testing shall be in accordance with Section 014500.

3.06 SHOTCRETING

A. Weather Limitations

1. Shotcrete shall not be placed in freezing weather without provisions for protection against freezing. Shotcrete placement can start without special protection when the temperature is 35 degrees Fahrenheit and rising, and must be suspended when the temperature is 40 degrees Fahrenheit and falling. The surface to which the shotcrete is applied must be free from frost. Cold weather shotcreting shall be in accordance with ACI 301 and ACI 306.
2. Hot weather shotcreting shall be in accordance with the requirements of ACI 301 and ACI 305.

B. Coating of Steel Diaphragm

1. The steel diaphragm shall be covered with a layer of shotcrete at least ½ inch thick prior to prestressing.
2. Total minimum coating over the steel diaphragm shall be 1½ inches including diaphragm cover, wire cover, and finish covercoat.

C. Coating Over Prestressing Wire

1. Each prestress wire shall be individually encased in shotcrete. Wire coat thickness shall be sufficient to provide a clear cover over the wire of at least $\frac{1}{4}$ inch.
 2. Finish covercoat shotcrete shall be applied as soon as practical after the last application of wire coat. The total thickness of shotcrete shall not be less than one inch over the wire.
- D. Placement of Shotcrete
1. Shotcrete shall be applied with the nozzle held at a small upward angle not exceeding five degrees and constantly moving during application in a smooth motion with the nozzle pointing in a radial direction toward the center of the tank. The nozzle distance from the prestressing shall be such that shotcrete does not build up or cover the front face of the wire until the spaces behind and between the prestressing elements are filled.
 2. Total covercoat thickness shall be controlled by shooting guide wires. Vertical wires shall be installed under tension and spaced no more than two feet apart to establish uniform and correct coating thickness. Monofilament line (100 lb. test) or 18 or 20 gauge high tensile strength steel wire shall be used. Guide wires shall be removed after placement of the covercoat.
- E. Curing
1. Shotcrete shall be cured using water curing methods or sealing materials at the option of the Contractor.
- F. Testing
1. Testing of shotcrete shall be in accordance with ACI 506, except as specified herein. One test panel shall be made for each of the following operations: cove, wire cover, and covercoat. Test panels shall be made from the shotcrete as it is being placed, and shall, as nearly as possible, represent the material being applied. The method of making a test sample shall be as follows: A frame of wire fabric (one foot square, three inches in depth) shall be secured to a plywood panel and hung or placed in the location where shotcrete is being placed. This form shall be filled in layers simultaneously with the nearby application. After 24 hours, the fabric and plywood backup shall be removed and the sample slab placed in a safe location at the site.
 2. The sample slab shall be moist cured in a manner identical with the regular surface application. The sample slab shall be sent to the testing laboratory. Nine three inch cubes shall be cut from the sample slab and subjected to compression tests in accordance with current ASTM Standards. Three cubes shall be tested at the age of 7 days, three shall be tested at the age of 28 days, and three shall be retained as spares. Testing shall be by an independent testing laboratory, approved by the Engineer and at the Contractor's expense.
 3. All shotcrete testing shall be in accordance with Section 014500.

3.07 PRESTRESSING

- A. Prestressing wire will be placed on the wall with a wire winding machine capable of consistently producing a stress in the wire within a range of minus seven percent to plus seven percent of the stress required by the design. No circumferential movement of the wire along the tank wall will be permitted during or after stressing the wire. Stressing may be accomplished by drawing the wire through a die or by another process that results in uninterrupted elongation, thus assuring uniform stress throughout its length and over the periphery of the tank.
- B. Each coil of prestressing wire shall be temporarily anchored at sufficient intervals to minimize the loss of prestress in case a wire breaks during wrapping.
- C. Minimum clear space between prestressing wires is $\frac{5}{16}$ inch or 1.5 wire diameters, whichever is greater. Any wires not meeting the spacing requirements shall be respaced. Prestressing shall be placed no closer than two inches from the top of the wall, edges of openings, or

inserts, nor closer than three inches from the base of walls or floors where radial movement may occur.

- D. The band of prestressing normally required over the height of an opening shall be displaced into circumferential bands immediately above and below the opening to maintain the required prestressing force. Bundling of wires shall be prohibited.
- E. A stress plate shall be used at all permanent wall penetrations above grade that results in displacement of wire equal to or greater than 24 inches in height. The stress plate shall accommodate a portion of the prestressing wires normally required for the height of the opening. The remaining prestress wires normally required shall be displaced into circumferential bands immediately above and below the penetration. The effect of banded prestressing shall be taken into account in the design.
- F. Ends of individual coils shall be joined by suitable steel splicing devices capable of developing the full strength of the wire.
- G. The Contractor shall furnish a calibrated stress recording device, which can be recalibrated, to be used in determining wire stress levels on the wall during and after the prestressing process. At least one stress reading per vertical foot or one stress reading for every roll of wire, whichever is greater, shall be taken immediately after the wire has been applied on the wall. Readings shall be recorded and shall refer to the applicable height and layer of wire for which the stress is being taken. The Contractor shall keep a written record of stress readings. All stress readings shall be made on straight lengths of wire. If applied stresses fall below the design stress in the steel, additional wire will be provided to bring the force on the corewall up to the required design force. If the stress in the steel is more than seven percent over the required design stress, the wrapping operation should be discontinued, and satisfactory adjustment made to the stressing equipment before proceeding.

3.08 DECORATIVE COATINGS

- A. All exposed exterior dome surfaces, exterior exposed wall surfaces and down to 18" below finished grade shall be coated as per the system specified in Part 2.02,G, above. Work shall be performed by workmen skilled in the application of these types of products. The manufacturer's application instructions shall be submitted to the Engineer for approval. The Contractor shall confer with the manufacturer's representatives regarding application techniques and shall follow the manufacturer's instructions implicitly.
- B. The concrete surface to be coated must be clean, free of all laitance, dirt, grease, or other foreign materials. All defective surfaces shall be filled and/or repaired. Application shall be in full accordance with the manufacturer's instructions or as amended by the Engineer.
- C. The Owner shall select the color.

3.09 DISINFECTION

- A. The Contractor shall, at the completion of tank construction, thoroughly clean the interior of the tank.
- B. The Contractor shall notify the Engineer prior to disinfecting the tank. Disinfection shall meet with the approval of the Engineer, AWWA C652, and the health department.
- C. The tank shall be disinfected in accordance with Section 331160.
- D. Prior to placing the tank in service, successful sample results shall be achieved in accordance with Section 331160. Testing shall be by an independent testing laboratory, approved by the

Engineer. Should initial sample tests fail, the contractor shall at his own expense dispose of water, clean, re-disinfect, re-fill and re-test until successful sample results are achieved.

3.10 WATERTIGHTNESS TEST

- A. Upon completion, the tank shall be tested to determine watertightness. The tank shall be filled with potable water to the maximum level. Water for an initial test will be furnished to the tank by the new booster station. If the tank construction is complete prior to the completion of the booster station the tank shall be filled via a fire hydrant. Contractor must install an approved backflow prevention device and meter. The test shall consist of measuring the liquid level over the next 24 hours to determine if any change has occurred. If a change is observed and exceeds the maximum allowance, the test shall be extended to a total of five days. If at the end of five days the average daily change has not exceeded the maximum allowance, the test shall be considered satisfactory.
- B. The liquid volume loss for a period of 24 hours shall not exceed one-twentieth of one percent of the tank capacity, $0.0005 \times \text{tank volume}$. If the liquid volume loss exceeds this amount, it shall be considered excessive, and the tank shall be repaired and re-tested. Any water needed for re-testing shall be at the expense of the contractor.
- C. During the test, no water shall be added to or taken from the tank.
- D. Damp spots will not be permitted at any location on the tank wall. Damp spots are defined as spots where moisture can be picked up on a dry hand. All such areas shall be repaired as necessary.
- E. Damp spots or standing water on the footing may occur upon tank filling and are permissible within the allowable volume loss. Measurable flow in this area is not permissible and must be corrected.

3.11 TANK BACKFILL

- A. Backfill material around the tank shall be placed in uniform layers and compacted as specified for the material and site conditions. Asymmetrical backfill placement, except as may be required by the design and site conditions, shall be avoided.

3.12 CLEAN-UP

- A. The premises shall be kept clean and orderly at all times during the work. Upon completion of construction, the Contractor shall remove or otherwise dispose of all rubbish and other materials caused by the construction operation. The Contractor shall leave the premises in as good a condition as it was found.

END OF SECTION 331613

SECTION 464127 - SUBMERSIBLE MIXERS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Active mixing system for storage tank and accessories.

1.02 REFERENCES

- A. NSF/ANSI Standard 61.

1.03 SUBMITTALS

- A. Submit under provision of Section 013300.
- B. Product data: provide data on mixing system and all associated accessories.
- C. Shop drawing of unit and all accessory installations.
- D. Computational Fluid Dynamics (CFD) modeling including:
 1. The average flow induced throughout the tank.
 2. The corresponding average turnover for the tank (in hours)
 3. The corresponding average power consumption of the mixer.
- E. Manufacturer's certificate: certify that manufacturer's product meets or exceeds specified requirements.

1.04 WARRANTY

- A. Manufacturer's warranty: Materials shall be free of defects in material and workmanship for a period of five (5) years from the date of installation.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. PAX Water Technologies of Richmond, CA
- B. SolarBee, Inc. of Dickinson, ND
- C. Or specifically approved equal.

2.02 GENERAL PERFORMANCE AND FEATURES

- A. Mixer shall be of submersible type and shall continuously mix water storage tank such that all temperatures converge within 2°F within 48 hours after mixing system installation. All temperatures shall remain within 2°F thereafter during continuous operation.
- B. Mixer shall be able to be installed through a maximum 24"Ø hatch, and not require any major welding operations or structural changes to the existing storage tank.
- C. Mixer shall be of Type 316 stainless steel construction.
- D. Motor shall be water lubricated, direct-drive operated, low voltage, and designed for continuous submersible operation.

- E. Submersible mixer shall be able to sit within tank without any additional bracing or supports, and shall not damage any interior coatings during operation.
- F. Submersible mixer shall be NSF/ANSI 61 approved.

2.03 POWER REQUIREMENTS AND CONTROLS

- A. Motor control box shall be a NEMA 4X enclosure.
- B. Motor controller box shall have a manual speed controller, built in current overload and thermal shut-off protection, and green and red LED indicating lights showing motor status.
- C. Additional SCADA control board with digital output signals indicating motor running, and motor fault. Digital input/output signal allowing remote submersible mixer on/off control.
- D. Provide all required conduit, wiring, junction boxes, etc. as required by the manufacturer for a full complete mixing system.

PART 3 - EXECUTION

3.01 DELIVERY AND STORAGE

- A. Delivery of materials to the site shall be made in unopened cartons with the name of the manufacturer clearly visible on the carton.
- B. Materials shall be stored in a safe, dry place.

3.02 INSTALLATION

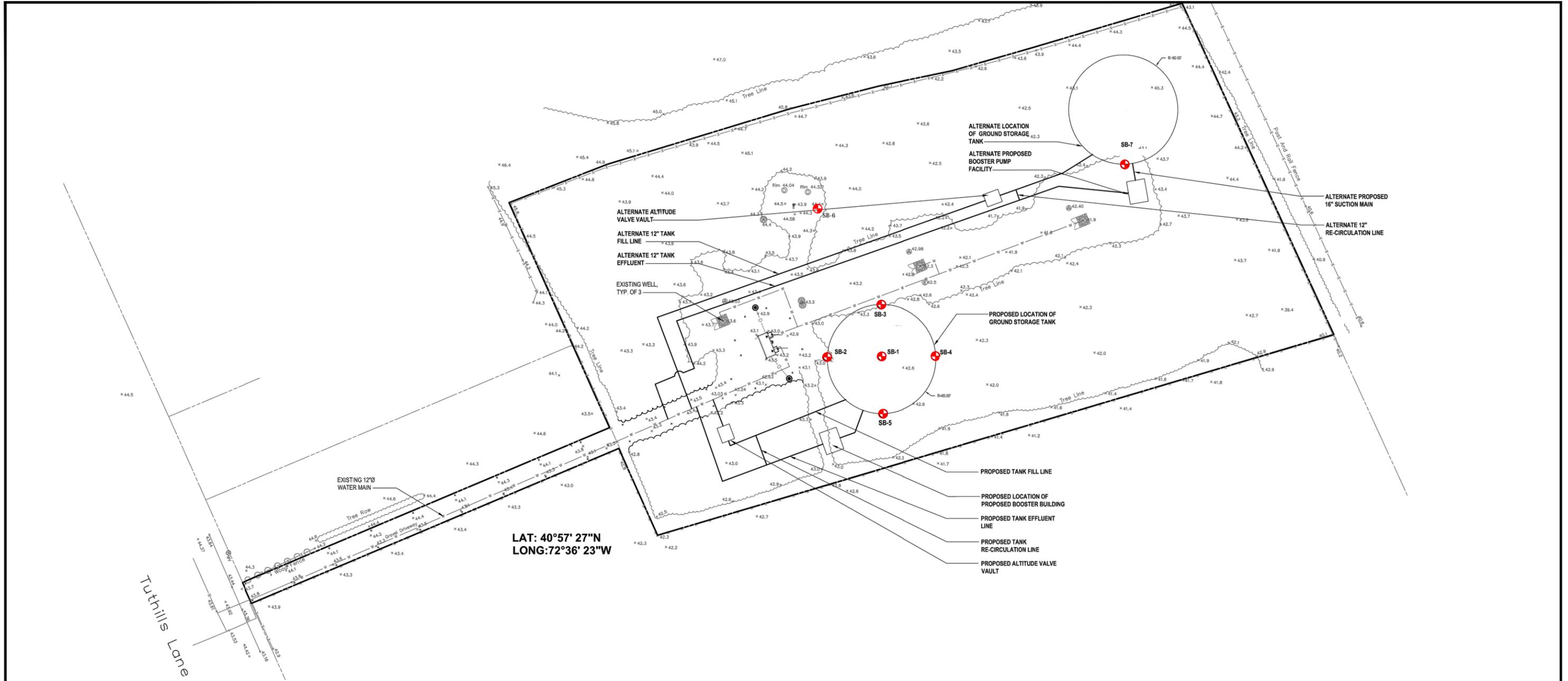
- A. Install submersible mixer, controllers, and all associated accessories as indicated in the specifications and according to manufacturer's instructions.

3.03 START-UP, TESTING, AND DEMONSTRATION

- A. Start-up submersible mixer after disinfection and testing to ensure proper electrical connections.
- B. Contractor shall record water temperature for a period of ten (10) consecutive days after installation and start-up of submersible mixer. Five (5) days shall be when the mixer is turned off while the last five (5) days shall be when the mixer is turned on. Temperature readings shall be in increments of five (5) feet. Submit report to Engineer within 30 days of start-up.
- C. Demonstrate operation of mixer to Owner and maintenance personal of the Water District.

END OF SECTION 464127

APPENDIX A



LAT: 40°57' 27"N
LONG: 72°36' 23"W

Tuthills Lane

GENERAL NOTES:

1. GENERAL LAYOUT WAS OBTAINED FROM A DRAWING THAT WAS PREPARED BY H2M ENTITLED "SOIL BORING PLAN", DATED JUNE 2017.
2. BORING LOCATIONS WERE LAID OUT IN THE FIELD BY CARLIN-SIMPSON & ASSOCIATES (CSA).
3. THE BORING WAS PERFORMED BY GENERAL BORINGS INC. IN SEPTEMBER 2017 UNDER THE FULL TIME INSPECTION OF CSA.
4. LOCATIONS ARE APPROXIMATE.

LEGEND:

- BORING LOCATION

ROBERT B. SIMPSON, P.E.
PROFESSIONAL ENGINEER

LICENSE NO. _____ SIGNATURE _____ DATE _____

BORING LOCATION PLAN

PROPOSED STORAGE TANK
RIVERHEAD WATER DISTRICT - PLANT NO. 15
308 TUTHILLS LANE
JAMESPORT, NEW YORK

DRAWN	SR	SCALE	NO SCALE
CHECKED	RBS	DATE	16-OCT-17
PROJECT NO.	17-140	DWG NO.	FIG - 1
APPROVED			

CARLIN-SIMPSON AND ASSOCIATES
61 Main Street
Sayreville, NJ 08872
Consulting Geotechnical and
Environmental Engineers



CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ				TEST BORING LOG				BORING NUMBER SB-1	
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY				SHEET NO.: 1 of 3				JOB NUMBER: 17-140	
Client: H2M				ELEVATION: +42.6				DATUM: TOPO	
Drilling Contractor: General Borings Inc				START DATE: 20-Sep-17				FINISH DATE: 20-Sep-17	
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DRILLER: TM	
DATE	TIME	DEPTH	CASING	TYPE	CAS	SS		INSPECTOR: JP	
				DIA.	4"	1 3/8"			
				WGHT		140#			
				FALL		30"			
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	S y m	IDENTIFICATION			REMARKS	
1		S-1	2		<u>Topsoil</u> 0'6"			Rec = 14"	
			5		Br Sandy Topsoil with leaves, roots			moist	
2			5		<u>Brown Sandy Topsoil, with leaves, roots</u>				
			6		<u>[OL]</u>				
3		S-2A	8		same 3'0"			Rec = 9"	
			11		Or cf S, t \$, l cf G			moist	
4		S-2B	12					Rec = 8"	
			20					moist	
5									
6		S-3	7		Lt br cf S, t \$, a cf G			Rec = 14"	
			12					moist	
7			15						
			16						
8		S-4	21		same, l cf G			Rec = 17"	
			14					moist	
9			16						
10								Switch to mud rotary	
11		S-5	12		<u>Orange coarse to fine SAND, trace Silt, little coarse to fine Gravel [SP]</u>			Rec = 4"	
			15	same					
12			14						
			12						
13									
14									
15									
16		S-6	9		same			Rec = 9"	
			10						
17			12						
			14						
18									
19									
20									
21		S-7	10		same			Rec = 10"	
			12						
			15						
22			20						

CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ		TEST BORING LOG			BORING NUMBER SB-1	
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY				SHEET NO.: 2 of 3		
Client: H2M				JOB NUMBER: 17-140		
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS
23					<u>Orange coarse to fine SAND, trace Silt, little coarse to fine Gravel [SP]</u>	
24						
25						
26		S-8	9 14		same, w/ Cy \$ seams	Rec = 7"
27			14 17			
28						
29						
30						
31		S-9	9 14		Br cf S, t \$	Rec = 12"
32			14 20			
33			20 28			
34						
35						
36		S-10	14 16		same, t f G	Rec = 12"
37			16 14			
38			14 15			
39						
40						
41		S-11	9 8		same	Rec = 12"
42			8 11			
43			11 12			
44						
45						
46		S-12	14 15		same, l cf G	Rec = 9"
47			15 11			
			11 14			

CARLIN-SIMPSON & ASSOCIATES Sayreville, NJ		TEST BORING LOG			BORING NUMBER SB-1			
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY				SHEET NO.: 3 of 3				
Client: H2M				JOB NUMBER: 17-140				
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION	REMARKS		
48					<u>Orange coarse to fine SAND, trace Silt, little coarse to fine Gravel [SP]</u>	Rec = 10" wet		
49								
50								
51		S-13	9	14			same, s cf G	
52			8					
53			12					
54								
55								
56		S-14	14	11			same	Rec = 10"
57			14	14				
58								
59								
60								
61		S-15	7	11	same, l cf G	Rec = 11"		
62			16	17				
62					62'0"			
63					<u>End of Boring @ 62'0"</u>			
64								
65								
66								
67								
68								
69								
70								
71								
72								

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER SB-2	
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY				SHEET NO.: 1 of 2				JOB NUMBER: 17-140	
Client: H2M				ELEVATION: +42.6				DATUM: TOPO	
Drilling Contractor: General Borings Inc				START DATE: 20-Sep-17				FINISH DATE: 20-Sep-17	
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DRILLER: TM	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS		INSPECTOR: JP	
No Water Encountered				DIA.	3 1/4"	1 3/8"			
				WGHT		140#			
				FALL		30"			
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	SYMBOL	IDENTIFICATION			REMARKS	
1		S-1	2		<u>Topsoil</u>			0'4"	
			3		Br Sandy Topsoil with leaves, roots			Rec = 12" moist	
2			4		<u>Brown Sandy Topsoil, with leaves, roots</u>				
			5		<u>[OL]</u>			2'0"	
3		S-2	10						
			9		Lt br cf S, t \$, t cf G			Rec = 12" moist	
			12						
4			18						
5									
6		S-3	11						
			14		same, l cf G			Rec = 17" moist	
7			19						
			25						
8		S-4	24						
			21		same			Rec = 15" moist	
9			20						
10					<u>Light brown coarse to fine SAND, trace Silt, trace coarse to fine Gravel [SP]</u>				
11		S-5	5						
			4		same, t cf G			Rec = 19" moist	
12			5						
			9						
13									
14									
15									
16		S-6	5						
			10		same, l cf G			Rec = 15" moist	
17			11						
			12						
18									
19									
20									
21		S-7	7						
			8		Lt br cf s, t \$			Rec = 14" moist	
			10						
22			12						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.		TEST BORING LOG			BORING NUMBER SB-2	
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY				SHEET NO.: 2 of 2		
Client: H2M				JOB NUMBER: 17-140		
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Symbol	IDENTIFICATION	REMARKS
23					<u>Light brown coarse to fine SAND, trace Silt, trace coarse to fine Gravel [SP]</u>	Rec = 15" moist
24						
25						
26		S-8	8	same, w/ Cy \$ seams		
			10			
			14			
27			12			
28						
29						
30						
31		S-9	8	same		
			12			
			12			
32			17		32'0"	
33					<u>End of Boring @ 32'0"</u>	
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER SB-3	
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY				SHEET NO.: 1 of 2				JOB NUMBER: 17-140	
Client: H2M				ELEVATION: +43.0				DATUM: TOPO	
Drilling Contractor: General Borings Inc				START DATE: 19-Sep-17				FINISH DATE: 19-Sep-17	
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DRILLER: TM	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS		INSPECTOR: JP	
No Water Encountered				DIA.	3 1/4"	1 3/8"			
				WGHT		140#			
				FALL		30"			
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION			REMARKS	
1		S-1	4		<u>Topsoil</u> 0'5"			Rec = 14" moist	
			5		Br Sandy Topsoil with leaves, roots				
2			6		<u>Brown Sandy Topsoil, with leaves, roots</u>				
			9		<u>[OL]</u>				
3		S-2A	8		same 3'0"			Rec = 9" moist	
			10		Lt br cf S, t \$, s cf G				
4		S-2B	12					Rec = 5" moist	
			19						
5									
6		S-3	7		Lt br, wht cf S, t \$, l cf G			Rec = 17" moist	
			18						
7			20						
			23						
8		S-4	25		same			Rec = 14" moist	
			21						
9			25						
			21						
10					<u>Light brown coarse to fine SAND, trace Silt, some coarse to fine Gravel [SP]</u>				
11		S-5	6		same, s cf G			Rec = 12" moist	
			10						
12			9						
			9						
13									
14									
15									
16		S-6	7		same, t cf G			Rec = 14" moist	
			7						
17			8						
			9						
18									
19									
20									
21		S-7	8		same			Rec = 16" moist	
			12						
			14						
22			14						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.		TEST BORING LOG		BORING NUMBER SB-3		
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY			SHEET NO.: 2 of 2			
Client: H2M			JOB NUMBER: 17-140			
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Symbol	IDENTIFICATION	REMARKS
23					<u>Light brown coarse to fine SAND, trace Silt, some coarse to fine Gravel [SP]</u>	Rec = 8" moist
24						
25						
26		S-8	10	same, w/ Cy \$ seams		
			18			
			19			
27			24			
28						
29						
30						
31		S-9	8	same		
			14			
			15			
32			16		32'0"	
33					<u>End of Boring @ 32'0"</u>	
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER SB-4	
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY				SHEET NO.:		1 of 2			
Client: H2M				JOB NUMBER:		17-140			
Drilling Contractor: General Borings Inc				ELEVATION:		+42.5			
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DATUM: TOPO	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS			START DATE: 21-Sep-17
No Water Encountered				DIA.	3 1/4"	1 3/8"			FINISH DATE: 21-Sep-17
				WGHT		140#			DRILLER: TM
				FALL		30"			INSPECTOR: JP
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Symbol	IDENTIFICATION				REMARKS
1		S-1	4		<u>Topsoil</u> 0'4"				Rec = 2" moist
			4		Br Sandy Topsoil with leaves, roots				
2			5		<u>Brown Sandy Topsoil, with leaves, roots</u>				Rec = 5" moist
			5		<u>[OL]</u>				
3		S-2	4		same				Rec = 5" moist
			3						
4			4		4'0"				
5									
6		S-3	6		Br or gr cf S, t \$, 1 cf G				Rec = 16" moist
			8						
7			9						
8		S-4	15		Lt br, wht cf S, t \$, 1 cf G				Rec = 8" moist
			14						
9			16						
10			14						
11		S-5	7		Lt br cf S, t \$				Rec = 14" moist
			6						
12			7		<u>Light brown, white coarse to fine SAND, trace</u>				
13					<u>Silt, little coarse to fine Gravel [SP]</u>				
14									
15									
16		S-6	4		same, 1 cf G				Rec = 14" moist
			7						
17			12						
18			16						
19									
20									
21		S-7	7		Lt br cf S, t \$				Rec = 17" moist
			8						
22			12						
			11						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.			TEST BORING LOG		BORING NUMBER SB-4	
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY				SHEET NO.: 2 of 2		
Client: H2M				JOB NUMBER: 17-140		
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Symbol	IDENTIFICATION	REMARKS
23					<u>Light brown, white coarse to fine SAND, trace Silt, little coarse to fine Gravel [SP]</u>	Rec = 10" moist
24						
25						
26		S-8	7			
			12	same, w/ Cy \$ seams		
			14			
27			17			
28					Rec = 17" moist	
29						
30						
31		S-9	12			
			16	same		
			18			
32			21		32'0"	
<u>End of Boring @ 32'0"</u>						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER SB-5	
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY				SHEET NO.: 1 of 2				JOB NUMBER: 17-140	
Client: H2M				ELEVATION: +43				DATUM: TOPO	
Drilling Contractor: General Borings Inc				START DATE: 19-Sep-17				FINISH DATE: 19-Sep-17	
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DRILLER: TM	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS		INSPECTOR: JP	
No Water Encountered				DIA.	3 1/4"	1 3/8"			
				WGHT		140#			
				FALL		30"			
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Sym	IDENTIFICATION			REMARKS	
1		S-1	3		<u>Topsoil</u> 0'5"			Rec = 12" moist	
			6		Br Sandy Topsoil with leaves, roots				
2			3		<u>Brown Sandy Topsoil, with leaves, roots</u>			Rec = 1" moist	
			6		[OL]				
3		S-2	7					Rec = 1" moist	
				8		3'0"			
4			14		Lt or cf S, t \$				
			24						
5									
6		S-3	9					Rec = 9" moist	
				17		Lt br, wht cf S, t \$, l cf G			
7			22						
			25						
8		S-4	28					Rec = 14" moist	
				20		same, t cf G			
9			19						
			21						
10					<u>Light brown, white coarse to fine SAND, trace Silt, little coarse to fine Gravel [SP]</u>				
11		S-5	4					Rec = 18" moist	
				6		same, l cf G			
12			6						
			5						
13									
14									
15									
16		S-6	5					Rec = 19" moist	
				10		same			
17			15						
			18						
18									
19									
20									
21		S-7	6					Rec = 17" moist	
				7		same, t f G			
22			9						
			12						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.			TEST BORING LOG		BORING NUMBER SB-5	
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY			SHEET NO.: 2 of 2		JOB NUMBER: 17-140	
Client: H2M						
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Symbol	IDENTIFICATION	REMARKS
23					<u>Light brown, white coarse to fine SAND, trace Silt, little coarse to fine Gravel [SP]</u>	
24						
25						
26		S-8	7			
26			8		same, w/ Cy \$ seams	Rec = 15" moist
27			11			
27			14			
28						
29						
30						
31		S-9	9		Lt br cf S, t \$	Rec = 19" moist
31			12			
32			16			
32			18			32'0"
33					<u>End of Boring @ 32'0"</u>	
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER SB-6	
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY				SHEET NO.: 1 of 2				JOB NUMBER: 17-140	
Client: H2M				ELEVATION: +44.4				DATUM: TOPO	
Drilling Contractor: General Borings Inc				START DATE: 19-Sep-17				FINISH DATE: 19-Sep-17	
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DRILLER: TM	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS		INSPECTOR: JP	
No Water Encountered				DIA.	3 1/4"	1 3/8"			
				WGHT		140#			
				FALL		30"			
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	SYMBOL	IDENTIFICATION			REMARKS	
1		S-1	2		<u>Topsoil</u>			0'4"	
			4		Br Sandy Topsoil with leaves, roots			Rec = 8"	
			10		<u>Brown Sandy Topsoil, with leaves, roots</u>			moist	
2			7		<u>[OL]</u>				
			6						
3		S-2A	5		same			3'0"	
			7					Rec = 7"	
4		S-2B	12		Lt br, or cf S, t \$, s cf G			moist	
								Rec = 4"	
5								moist	
			4						
6		S-3	7		Lt br cf S, t \$, s cf G			Rec = 12"	
			17					moist	
7			21						
			25						
8		S-4	25		same			Rec = 15"	
			26					moist	
9			18						
10									
			5						
11		S-5	10		same, l cf G			Rec = 14"	
			12					moist	
12			12		<u>Light brown, orange coarse to fine SAND,</u>				
					<u>trace Silt, some coarse to fine Gravel [SP]</u>				
13									
14									
15									
			6						
16		S-6	11		same			Rec = 12"	
			12					moist	
17			14						
18									
19									
20									
			9						
21		S-7	14		Lt br cf S, t \$			Rec = 26"	
			12					moist	
22			15						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.		TEST BORING LOG		BORING NUMBER SB-6		
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY			SHEET NO.: 2 of 2			
Client: H2M			JOB NUMBER: 17-140			
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Soil	IDENTIFICATION	REMARKS
23					<u>Light brown, orange coarse to fine SAND, trace Silt, some coarse to fine Gravel</u>	Rec = 11" moist
24						
25						
26		S-8	10	same, w/ Cy \$ seams		
			14			
			18			
27			19			
28						
29						
30						
31		S-9	7	same		
			8			
			10			
32			15		32'0"	
33					<u>End of Boring @ 32'0"</u>	
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.				TEST BORING LOG				BORING NUMBER SB-7	
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY				SHEET NO.: 1 of 2				JOB NUMBER: 17-140	
Client: H2M				ELEVATION: +43.1				DATUM: TOPO	
Drilling Contractor: General Borings Inc				START DATE: 18-Sep-17				FINISH DATE: 18-Sep-17	
GROUNDWATER				CASING	SAMPLE	CORE	TUBE	DRILLER: TM	
DATE	TIME	DEPTH	CASING	TYPE	HSA	SS		INSPECTOR: JP	
No Water Encountered				DIA.	3 1/4"	1 3/8"			
				WGHT		140#			
				FALL		30"			
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	SYMBOL	IDENTIFICATION			REMARKS	
1		S-1	4		<u>Topsoil</u>			0'7"	
			6		Br or cf S, t \$, s cf G			Rec = 10" moist	
2			7						
			8						
3		S-2	7		Lt or cf S, t \$, s cf G			Rec = 12" moist	
			9						
4			11						
5									
6		S-3	10		same, l cf G			Rec = 12" moist	
			14						
7			18						
			23						
8		S-4	23		Or cf S, t \$, t cf G			Rec = 14" moist	
			24						
9			24						
			25						
10					<u>Brown orange coarse to fine SAND, trace Silt, some coarse to fine Gravel [SP]</u>				
11		S-5	4		Wt cf S, t \$, l cf G			Rec = 15" moist	
			7						
12			7						
13									
14									
15									
16		S-6	6		Lt br cf S, t \$, t cf G			Rec = 16" moist	
			9						
17			12						
			14						
18									
19									
20									
21		S-7	8		Lt br cf S, t \$			Rec = 17" moist	
			9						
			10						
22			14						

CARLIN - SIMPSON & ASSOCIATES Sayreville, N.J.		TEST BORING LOG		BORING NUMBER SB-7		
Project: Proposed Ground Storage Tank, Riverhead Water District, Jamesport NY				SHEET NO.: 2 of 2		
Client: H2M				JOB NUMBER: 17-140		
Depth (ft.)	Casing Blows per Foot	Sample Number	Blows on Sample Spoon per 6"	Symbol	IDENTIFICATION	REMARKS
23					<u>Brown orange coarse to fine SAND, trace Silt, some coarse to fine Gravel [SP]</u>	Rec = 20" moist
24						
25						
26		S-8	8	same, w/ Cy \$ seams		
			14			
			17			
27			17			
28						
29						
30						
31		S-9	8	same		
			15			
			18			
32			22		32'0"	
33					<u>End of Boring @ 32'0"</u>	
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						



water

CONTRACT AND SPECIFICATIONS

**RIVERHEAD WATER DISTRICT
TOWN OF RIVERHEAD
SUFFOLK COUNTY, NEW YORK**

**CONSTRUCTION OF PRE-
STRESSED GROUND STORAGE
TANK AT PLANT NO. 15**



TUTHILLS LANES, JAMESPORT
Project No: RDWD 17-02

TOWN SUPERVISOR
Sean Walter

TOWN COUNCIL
John Dunleavy
Jodi Giglio
Timothy Hubbard
James Wooten

TOWN CLERK
Diane Wilhelm

SUPERINTENDENT OF WATER
Mark Conklin

ASSISTANT SUPERINTENDENT
Thomas Kruger



NOVEMBER 2017

H2M architects + engineers
538 Broad Hollow Rd, Melville, NY 11747
tel 631.756.8000 fax 631.694.4122

www.h2m.com

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Appendix A – SOIL BORING REPORT

SECTION 001113 - NOTICE TO BIDDERS

Notice is hereby given that SEALED PROPOSALS for:

Construction of Pre-Stressed Ground Storage Tank at Plant No. 15

Contract T - Tank Construction

Tuthills Lane, Jamesport

H2M Project No.: RDWD 1702

will be received by the Town Board of the Town of Riverhead (Owner) at the Town Clerk's office, Town Hall, 200 Howell Avenue, Riverhead, New York 11901, until 10:00 A.M., Prevailing Time on Thursday, December 7, 2017, at which time and place they will be publicly opened and read aloud.

Plans and specifications may be examined on or after Thursday, November 16, 2017 by visiting the Town of Riverhead website: <<http://townofriverheadny.gov>> and click on "Bid Requests". Plans and specifications are available in electronic format only from the aforementioned website.

Each proposal submitted must be accompanied by a certified check or bid bond, made payable to the Town of Riverhead, in an amount equal to five percent (5%) of the total amount of the bid, as a commitment by the bidder that, if its bid is accepted, it will enter into a contract to perform the work and will execute such further security as may be required for the faithful performance of the contract.

The Owner reserves the right to reject any or all bids, waive any informalities and to accept such bid which, in the opinion of the Owner, is in the best interests of the Owner.

BY ORDER OF THE TOWN BOARD
TOWN OF RIVERHEAD
SUFFOLK COUNTY, NEW YORK

ACTING AS THE GOVERNING BODY OF
THE RIVERHEAD WATER DISTRICT

TOWN CLERK, TOWN OF RIVERHEAD

DATED: NOVEMBER 16, 2017

END OF SECTION 001113

SECTION 002113 - INFORMATION FOR BIDDERS

The BOARD OF COMMISSIONERS of the RIVERHEAD WATER DISTRICT (hereinafter called DISTRICT), will receive Sealed Proposals for:

**Construction of Pre-Stressed Ground Storage Tank at Plant No. 15
Contract T - Tank Construction
H2M PROJECT NO.: RDWD 1702**

TIME AND PLACE

Bids are to be submitted in sealed opaque envelopes, and will be received by the Town of Riverhead, at the Town Clerk's office, Town Hall, 200 Howell Avenue, Riverhead, New York, not later than 10:00 A.M. prevailing time, on Thursday, December 7, 2017 at which time and place they will be publicly opened and read aloud. Use of the mails shall be at the Bidder's own risk, and the Bidder shall be responsible for physical delivery of the bid at the time and place set for opening of bids..

ENVELOPES

All proposals and either the certified check or bid bond must be placed in a sealed opaque envelope bearing the Bidder's firm name and address and marked, "NEW GROUND STORAGE TANK AT PLANT NO. 15 FOR THE RIVERHEAD WATER DISTRICT, TOWN OF RIVERHEAD, SUFFOLK COUNTY, NEW YORK", but otherwise unmarked. Bid package shall include Proposal sheets, Qualifications of Bidder sheets, Approval of Subcontractor sheets, and the New York State Uniform Contracting Questionnaire.

PLANS AND SPECIFICATIONS

Plans and specifications may be examined on or after Thursday, November 16, 2017 by visiting the Town of Riverhead website: <http://townofriverheadny.gov> and click on "Bid Requests".

Plans and specifications are available from the aforementioned Town of Riverhead website only. All contractors who intend to submit a bid package are required to register on the web site.

VERBAL ANSWERS

The Town Board, its agents, servants or employees, or the Engineer, will not be responsible in any manner for verbal answers to any inquiries regarding the meaning of the contract drawings or Specifications given prior to the awarding of the contract.

Bid document inquiries may be submitted in writing by the Contractor to the Town until 12:00 P.M. on Friday, December 1, 2017, after which they will no longer be accepted.

PRE-BID SITE MEETING

A pre-bid site meeting will be held on Tuesday, November 28, 2017 at 10:00 am. Contractor presence is not mandatory for bidding.

EXAMINATION OF SITE

Bidders must satisfy themselves by personal examination of the location of the proposed work and of the actual conditions and requirements of the work and shall not, at any time after the submission of a proposal, dispute or complain of such estimate or assert that there was any misunderstanding in regard to the depth or character of excavation to be made or the nature of the work to be done.

PROPOSAL

The Proposal contained herein shall be used in making out bids. Any proposal not in accordance with these instructions or containing bids not asked for may be rejected. While separate prices are required for various items under this contract, it is understood that the contract will be awarded as a whole.

As the estimates of quantities of items stated in the Proposal are approximate only, bidders are required to submit their proposal upon and in the following express conditions, which shall apply and become part of every proposal received.

Bids will be compared by total amounts, said total amount being the sum of the products of the quantities multiplied by the unit price bid for the various items, with due consideration being given to the lump sum prices bid for any contingent or optional items. Unbalanced bids will not be accepted.

Each bidder shall fill out in ink, in both words and figures, in the spaces provided, its unit or lump sum bid, as the case may be, for each item in said Proposal for which it is submitting a bid. If there is any discrepancy between the prices in words and figures, the prices in words shall govern as unit and lump sum prices.

A bid which does not include bids for all items in the Proposal may not be considered valid.

If the contract is not awarded by the Town Board within forty five (45) days after the receipt of bids, the obligation of the bidder under this Proposal may terminate at its option and it shall thereupon be entitled to a refund of its certified check or release of its bid bond furnished by it as security with its proposal.

BOND OR CERTIFIED CHECK

Each proposal from a Contractor shall be accompanied by a bid bond or certified check on a solvent bank of the STATE OF NEW YORK, in the amount of five percent (5%) of the total bid. Such check shall be made payable to TOWN OF RIVERHEAD, RIVERHEAD, NEW YORK, and the amount thereof shall be the measure of liquidated damages which the Town may sustain by failure, neglect or refusal of the bidder to execute and deliver the contract, should the contract be awarded to it. The checks of all unsuccessful bidders will be returned upon the rejection of bids and the awarding of the contract; also, the check of the successful bidder will be returned upon the execution of the contract and the furnishing of the required bond.

NAME OF BIDDER

Each bidder must state, in its proposal, its full name and business address, and the full name of every person, firm or corporation, interested in same, and the address of every person or firm, or president and secretary of every corporation, interested with it.

QUALIFICATIONS OF BIDDERS

The Town Board reserves the right to waive any informalities in, or reject any and all bids. The Board reserves the right to reject any and all bids which do not conform to the Proposal.

All bidders must prove to the satisfaction of the Town Board that they are reputable, reliable and responsible, and that they possess the necessary qualifications (financial, labor, equipment and otherwise) to complete successfully the proposed work.

In determining the qualifications of a bidder, the Town Board will consider its record in the performance of any contracts entered into by it for the work contemplated or of similar nature, may make such investigation as it deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Board all such information and data for this purpose as the Town Board may request.

The Town Board shall be the sole judge of the qualifications of the bidders and of the merits thereof and reserves the right to reject any bid if the record of the bidder in the performance of contracts, payment of bills and meeting of obligations to subcontractors, material men or employees is not satisfactory to the Town Board, or if the evidence submitted by, or the investigation of, such bidders fails to satisfy the Town Board that it is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein ".

PERFORMANCE AND MAINTENANCE BOND

The Contractor shall furnish a Performance Bond, Labor and Materials Bond, and a one (1) year Maintenance Bond each in an amount equal to one hundred (100%) percent of the total contract price as security for its faithful performance of this contract, for the payment of all persons performing labor or furnishing materials in connection with this contract. Such bonds shall also cover any penalties, interest charges and assessments levied by any governmental unit for failure to comply with laws and/or regulations governing public work. The Maintenance Bond shall be an assurance that all work and materials provided under this contract shall be maintained for a minimum period of one (1) year. The Maintenance Bond shall be furnished following final completion, and payment under the contract. The contractor shall be required to furnish all guarantees and warranties of manufacturers of products in connection with this contract, but no manufacturer's limitation of time shall act to limit the responsibility of the contractor or its surety hereunder.

The surety must be licensed in the State of New York and have a BEST A rating, or the surety shall present information satisfactory to the TOWN/DISTRICT to permit the TOWN/DISTRICT to accept the bond.

At the time of submission of bonds or at any time thereafter, the TOWN/DISTRICT may evaluate the surety or sureties proposed, and demand a change of surety if it determines that the financial position of such surety does not provide for a proper protection of the interests of the TOWN/DISTRICT. The TOWN/DISTRICT shall be guided by its legal counsel, and insurance industry consultants in determining proper sureties for TOWN/DISTRICT public works contracts. If the TOWN/DISTRICT notifies the contractor in writing that a surety is unacceptable for any reason, then the contractor shall replace the surety and the bond in question within five (5) business days with a surety and bond deemed suitable by the said TOWN/DISTRICT. The premiums charged for all such bonds shall be a cost of the contractor and not the TOWN/DISTRICT. Upon notice to change surety being forwarded to a contractor, no further payments shall be made until a new bond in proper form naming an acceptable surety is provided.

SIGNATURE OF CONTRACTOR

The bidder to whom a contract may be awarded shall attend at the office of the Town Board, with the sureties offered by it, within seven (7) days, Weekends and Holidays excepted, after date of notification of the acceptance of its proposal, and there sign the contract in quadripartite for the work and furnish approved security for its performance.

In case of failure to do so, the bidder shall be considered as having abandoned the same, and the check accompanying its proposal shall be forfeited to the Town Board, or the penalty of the bid bond shall be invoked.

CONTRACTOR'S INSURANCE

The Contractor shall not commence any work until it has obtained and had approved by the Town all of the insurance specified and required by the Contract.

The Contractor shall not permit any subcontractor to commence any operation on the site until satisfactory proof of carriage of the above required insurance has been posted with, and approved by, the Town Board.

RESPONSIBILITY OF BIDDER

Attention is hereby particularly directed to the provisions of the contract whereby the Contractor will be responsible for any loss or damage that may happen to the work or any part thereof during its progress; and also whereby the Contractor shall make good any defects or faults that may occur during the progress of the work or within twelve (12) months after date of the Engineer's approval of the final payment request.

LABOR RATES

The Contractor shall pay not less than the minimum hourly wage rates on this contract as established in accordance with Section 220 of the Labor Law, as shown on the Wage Schedule and Prevailing Rate Schedule, either shown on the following pages or the current prevailing rates paid at the time of construction.

Each bidder shall submit with its bid a separate sealed list that names each subcontractor that the bidder will use to perform work on the contract, and the agreed-upon amount to be paid to each, for: (i) plumbing and gas fitting, (ii) steam heating, hot water heating, ventilating and air conditioning apparatus and (iii) electric wiring and standard illuminating fixtures. After the low bid is announced, the sealed list of subcontractors submitted with such low bid shall be opened and the names of such subcontractors shall be announced, and thereafter any change of subcontractor or agreed-upon amount to be paid to each shall require the approval of the owner, upon a showing presented to the owner of legitimate construction need for such change, which shall be open to public inspection. Legitimate construction need shall include, but not be limited to, a change in project specifications, a change in construction material costs, a change to subcontractor status as determined pursuant to paragraph (e) of subdivision two (2) of section two hundred twenty-two (222) of the labor law, or the subcontractor has become otherwise unwilling, unable or unavailable to perform the subcontract. The sealed lists of subcontractors submitted by all other bidders shall be returned to them unopened after the contract award.

COMPLETION OF WORK

Work is required to be completed to the satisfaction of the Engineer, and in substantial accordance with the Specifications hereunto annexed and the Plans therein referred to and the Change Orders amended to the Contract.

RESPONSIBILITY OF CONTRACTOR

Attention is hereby particularly directed to the provisions of the contract whereby the Contractor will be responsible for any loss or damage that may happen to the work or any part thereof during its progress; and also whereby the Contractor shall make good any defects or faults that may occur during the progress of the work or within twelve (12) months after its completion and acceptance. Any progress payments made by the Town during the completion of this contract by the Contractor shall not be a waiver of the foregoing provision.

TOWN BOARD TOWN OF
RIVERHEAD
SUFFOLK COUNTY, NEW YORK

END OF SECTION 002113

SECTION 004105 - BIDDER'S DECLARATION

BIDDER'S DECLARATION:

The undersigned, as Bidder, declares that the only person or persons interested in this bid or proposal as principal or principals is or are named herein; and that no other person than herein named has any interest in this proposal or in the contract proposed to be taken; that this bid or proposal is made without any connections with any other person or persons making a bid or proposal for the same purpose; that the bid or proposal is in all respects fair and without collusion or fraud; that it has examined the site of the work and the Contract Documents; and fully understands all the same; and it proposes and agrees, if this proposal is accepted, it will contract with the Town of Riverhead in the Contract accompanying this bid to furnish all the material, implements, etc., and perform all the work required in accordance with the Contract Documents; and it will accept in full payment therefore the following sums to wit:

Acknowledgement that the foregoing Bidder's Declaration is true and factual.

SIGNATURE	PRINT NAME	TITLE	DATE
-----------	------------	-------	------

END OF SECTION 004105

SECTION 004116 - PROPOSAL

Board:

The undersigned hereby offers to furnish all labor, equipment, materials and appurtenances for **Construction of Pre-Stressed Ground Storage Tank at Plant No. 15**, Contract T - Tank Construction all in accordance with the plans and specifications prepared by H2M architects + engineers for the following unit and lump sum prices:

ITEM 1 - MOBILIZATION AND DEMOBILIZATION

For mobilization, demobilization, bonds, and insurances, as specified.
(Item not to exceed 5% of the total base bid)

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 2A - SITE CLEARING

For clearing the site of plant life and growth as required to allow for installation of ground storage tank, as specified.

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 2B - EARTHWORK

For the removal/installation of required fill, soil preparation, etc. associated with the new tank construction, as specified on the plans.

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 2C - EARTHWORK (ALTERNATE)

For the removal/installation of required fill, soil preparation, etc. associated with the construction of an alternate size tank.

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 3A - NEW GROUND STORAGE TANK

For the design and construction of the new 2.0 MG concrete ground storage tank and all associated accessories, as specified on the plans.

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 3B – NEW GROUND STORAGE TANK (ALTERNATE)

For the design and construction of a new 2.0 MG concrete ground storage tank and all associated accessories. Contractor may modify the diameter, overflow elevation, and buried depth to optimize the construction costs. The dome height of the alternate tank shall not exceed a height of 35 feet above grade.

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 4 - DISINFECTION AND WATER QUALITY SAMPLING

For disinfection and water quality testing as required.

LUMP SUM: _____ (\$ _____)
DOLLARS

ITEM 5A - CASH ALLOWANCES - QUALITY CONTROL TESTING

Allowances as specified in Section 012100 - Allowances for independent testing laboratory services, as specified.

LUMP SUM: Twenty Five Thousand (\$ 25,000.00)
DOLLARS

ITEM 5B - CASH ALLOWANCES - ADDITIONAL/UNFORSEEN WORK

Allowances as specified in Section 012100 - Allowances for additional work not included in the original scope of this project due to unforeseeable conditions or requested by the owner.

LUMP SUM: Twenty Five Thousand (\$ 25,000.00)
DOLLARS

ITEM 6 - PROJECT RECORD DOCUMENTS

For furnishing all project record documents, as specified.
(Items not to be less than \$5,000.00)

LUMP SUM: _____ (\$ _____)
DOLLARS

TOTAL BASE BID (Sum of Items 1-2B, 3A, 4-6)

DOLLARS (\$ _____)

TOTAL ALTERNATE BID (Sum of Items 1-2A, 2C, 3B, 4-6)

DOLLARS

(\$

)

The Board of the Town of Riverhead reserves the right to award this contract based on either the total bid or any combination of bid items, as may be in the best interest of the Town of Riverhead. The award shall be made to the lowest responsible bidder based upon the bid items awarded. The Board reserves the right to reject any or all bids. The Board reserves the right to award this contract within forty-five (45) days of the bid opening.

Within ten (10) consecutive calendar days after the date of the Notice of Award (weekends and holidays included), the bidder shall execute the contract and furnish the required bonds and insurances. The Notice to Proceed will be issued after the contract has been executed by the Owner.

All work specified under this contract shall be substantially complete by July 6, 2018, and shall be ready for final payment by September 30, 2018. Substantially complete shall only be considered once all tank work is complete, including all disinfection, water quality sampling, and all associated Health Department approvals where the District will have beneficial use of the tank.

Failure of the contractor to complete all work within the specified time will subject him to liquidated damages as set forth in the contract, in the sum of Two Hundred and Fifty dollars (\$250.00) per day, commencing with the respective day from the date of the Notice to Proceed.

In addition to liquidated damages, specific damages will be assessed and deducted from amounts otherwise due the contractor for additional inspection and contract management time required to be expended by the Engineer should the project be completed beyond the contract completion date. Such deduction shall be in accordance with the billing rates and fees established between H2M and the Town of Riverhead.

Each bidder shall submit with its bid a separate sealed list that names each subcontractor that the bidder will use to perform work on the contract, and the agreed-upon amount to be paid to each, for: I) plumbing and gas fitting, II) steam heating, hot water heating, ventilating and air conditioning apparatus, and III) electric wiring and standard illuminating fixtures. After the low bid is announced, the sealed list of subcontractors submitted with such low bid shall be opened and the names of such subcontractors shall be announced, and thereafter any change of subcontractor or agreed-upon amount to be paid to each shall require the approval of the Owner, upon a showing presented to the Owner of legitimate construction need for such change, which shall be open to public inspection. Legitimate construction need shall include, but not be limited to, a change in project specifications, a change in construction material costs, a change to subcontractor status as determined pursuant to paragraph (E) of subdivision two (2) of section two hundred twenty-two (222) of the labor law, or the subcontractor has become otherwise unwilling, unable, or unavailable to perform the subcontract. The sealed lists of subcontractors submitted by all other bidders shall be returned to them unopened after the contract award.

The contractor shall coordinate all work with the Owner to minimize disturbances to Owner operations.

The bidder represents herewith that he is aware of the working conditions, has carefully reviewed the proposal and specifications, has checked and certifies the accuracy of the bid.

The undersigned hereby acknowledges receipt of the following addenda (if any):

ADDENDUM NO.

DATED

_____	_____
_____	_____
_____	_____

Each proposal shall be accompanied by either a certified check drawn on a solvent bank with an office in the State of New York, or a bid bond equal to five percent (5%) of the total amount of the bid and payable to the Town of Riverhead. The certified check or bid bond shall specify which contract it accompanies.

**SECURITY ENCLOSED FOR THIS SECTION
(BASE BID PLUS CONTINGENCY ITEMS)**

**YES / NO
(Circle One)**

PROPOSAL CERTIFICATION

This Bid is hereby submitted by:

BIDDER:

BIDDER'S ADDRESS:

SIGNED BY: _____ TITLE: _____

PRINT NAME: _____ DATE: _____

FEDERAL I.D. NO. OR
SOCIAL SECURITY NO.:

Telephone number where the contractor or a competent representative can accept a telephone message and provide a reasonable reply as soon as possible, but within 24 hours of being contacted.

DAY: _____ NIGHT: _____

EMERGENCY: _____ FAX: _____

EMAIL: _____

Acknowledgement that the Qualification of Bidders section has been fully completed/executed.

SIGNATURE	PRINT NAME	TITLE	DATE
-----------	------------	-------	------

END OF SECTION 004116

SECTION 004313 - BID SECURITY

Enclosed is a certified check or bid bond for five percent (5%) of the total amount of the bid as required in the foregoing "Information for Bidders".

The Bidder hereby agrees to appear with its sureties at the office of the Town of Riverhead within ten (10) calendar days after due notice from the Board of the Town of Riverhead that the Contract has been awarded to it and is ready for signature; such notice to be given in writing within forty five (45) days of opening of the bids; and, on the signing of such Contract by the Bidder, to furnish the indemnifying bonds as provided in the Contract.

The Bidder hereby further agrees that in the event of its failure or refusal to enter into a contract in accordance with this bid within ten (10) days after due notice from the Board that the Contract has been awarded to it and is ready for signature, as given in accordance with the Contract Documents and/or its failure to execute and deliver the bond for the full amount of the Contract price, as provided in said Contract Documents, the Bidder's check or bid bond which is herewith deposited with the Board (at the option of said Board) become due and payable as ascertained and liquidated damages for such default; otherwise, said check or bid bond will be returned to the undersigned.

The full names and residences of all persons and parties interested in the foregoing bid as principals are as follows:

NAME

ADDRESS

_____	_____
_____	_____
_____	_____

NAME OF BIDDER:

BUSINESS ADDRESS OF BIDDER:

Telephone number where the bidder or a competent representative can accept a telephone message and provide a reasonable reply as soon as possible, but no later than twenty four (24) hours:

DAY: _____ EVENING: _____

DATED AT: _____ THE _____ DAY OF _____, 20_____

END OF SECTION 004313

SECTION 004350 - APPROVAL OF SUBCONTRACTORS/SUBCONTRACT LIMITS

Town of Riverhead

Suffolk County, New York

Bidders shall submit to the Owner the names of the Subcontractors which the Bidder proposes to use on the project. The Owner reserves the right to disapprove the use of any proposed subcontractor and in such event the Bidder shall submit the name of another Subcontractor in the like manner and in the time specified by the Owner. Such disapproval shall not result in additional costs to the Owner. The Owner reserves the right to reject any bid if the name of the proposed Subcontractors, or additional subcontractor information, is not submitted as required.

BIDDER:

FIRM NAME: _____

ADDRESS: _____

PREPARED BY: _____

SIGNED BY: _____

TITLE: _____

END OF SECTION 004350

SECTION 004355 - INDEMNITY, LIMITATION OF LIABILITY

1.0 - INDEMNITY

The Contractor and all subcontractors performing work in connection with this Contract shall HOLD HARMLESS, INDEMNIFY and DEFEND the Owner and Engineer, their consultants and each of their officers, agents and employees from any liability, claims, losses or damage including reasonable costs of defense arising out of or alleged to arise from the Contractor's or subcontractor's negligence in the performance of the work described in the Contract Documents, but not including liability that may be due to the sole negligence of the Owner, the Engineer or their officers, agents and employees.

2.0 - LIMITATION OF LIABILITY

The Contractor and all subcontractors agree to limit the liability of the Owner and the Engineer due to the Engineer's professional negligent errors or omissions such that the total aggregate liability of the Engineer to those named shall not exceed Fifty Thousand Dollars (\$50,000) or five percent (5%) of the Contract award amount, whichever is greater.

3.0 - NO CLAIM FOR DELAY

The Contractor and all subcontractors agree to HOLD HARMLESS from any and all claims for loss or damages of any nature against the Owner or Engineer for delays in commencement, performance or completion of the Contract, regardless of whether said delays are, or may be, caused by the Owner, Engineer or any governmental agency.

END OF SECTION 004355

SECTION 004519 - NON-COLLUSIVE BIDDING CERTIFICATE

NON-COLLUSIVE BIDDING CERTIFICATE

Pursuant to Section 103-D of the General Municipal Law, the Contractor makes the following statement under penalty of perjury, and by submission of this bid or proposal, the Bidder certifies that:

(a) this bid or proposal has been independently arrived at without collusion with any other bidder or with any competitor or potential competitor; (b) this bid or proposal has not been knowingly disclosed and will not be knowingly disclosed prior to the opening of the bids or proposals for this project to any other bidder, competitor or potential competitor; (c) no attempt has been or will be made to induce any other person, partnership or corporation to submit or not to submit a bid or proposal; (d) the person signing this bid or proposal certified that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties of perjury, affirms the truth thereof, such penalties being applicable to the Bidder as well as to the person signing in its behalf; (e) attached hereto (if a corporate bidder) is a certified copy of resolution authorizing the execution of this certificate by the signatory of the bid or proposal on behalf of the corporate bidder.

Resolved that

(Name of Corporation)

be authorized to sign and submit the bid or proposal of this corporation for the following project:

Construction of Pre-Stressed Ground Storage Tank at Plant No. 15
Contract T - Tank Construction
(Name of Project)

and to include in such bid or proposal the certificate as to non-collusion required by Section 103-D of the General Municipal Law as the act and deed of said corporation; and for any inaccuracies or misstatements in such certificate, this corporate bidder shall be liable under the penalties of perjury.

The foregoing is a true and correct copy of the resolution adopted by _____

at a meeting of its Board of Directors held on the _____ day of _____, 20____

(Seal of the Corporation)

Secretary:

Respectfully submitted,

FIRM NAME: _____

FIRM ADDRESS:

SIGNED BY: _____

TITLE: _____

END OF SECTION 004519

NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

You have selected the For-Profit Construction questionnaire, commonly known as the “CCA-2,” which may be printed and completed in this format or, **for your convenience, may be completed online using the [New York State VendRep System](#).**

COMPLETION & CERTIFICATION

The person(s) completing the questionnaire must be knowledgeable about the vendor’s business and operations. An owner or official must certify the questionnaire and the signature must be notarized.

NEW YORK STATE VENDOR IDENTIFICATION NUMBER (VENDOR ID)

The Vendor ID is a ten-digit identifier issued by New York State when the vendor is registered on the Statewide Vendor File. This number must now be included on the questionnaire. If the business entity has not obtained a Vendor ID, contact the IT Service Desk at ITServiceDesk@osc.state.ny.us or call 866-370-4672.

DEFINITIONS

All underlined terms are defined in the “New York State Vendor Responsibility Definitions List,” found at <http://www.osc.state.ny.us/vendrep/documents/questionnaire/definitions.pdf>. These terms may not have their ordinary, common or traditional meanings. Each vendor is strongly encouraged to read the respective definitions for any and all underlined terms. By submitting this questionnaire, the vendor agrees to be bound by the terms as defined in the "New York State Vendor Responsibility Definitions List" existing at the time of certification.

RESPONSES

Every question must be answered. Each response must provide all relevant information which can be obtained within the limits of the law. However, information regarding a determination or finding made in error which was subsequently corrected or overturned, and/or was withdrawn by the issuing government entity, is not required. Individuals and Sole Proprietors may use a Social Security Number but are encouraged to obtain and use a federal Employer Identification Number (EIN).

NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

BUSINESS ENTITY INFORMATION				
<u>Legal Business Name</u>		<u>EIN</u> _____		
Address of the <u>Principal Place of Business</u> (street, city, state, zip code)		<u>New York State Vendor Identification Number</u>		
		Telephone ext.		Fax
		Website		
Authorized Contact for this Questionnaire				
Name		Telephone ext.		Fax
Title		Email		
Additional <u>Business Entity</u> Identities: If applicable, list any other <u>DBA</u> , <u>Trade Name</u> , <u>Former Name</u> , Other Identity, or <u>EIN</u> used in the last five (5) years, the state or county where filed and the status (active or inactive).				
Type	Name	EIN	State or County where filed	Status

I. BUSINESS CHARACTERISTICS			
1.0 <u>Business Entity</u> Type – Check appropriate box and provide additional information:			
a) <input type="checkbox"/> <u>Corporation</u> (including <u>PC</u>)	Date of Incorporation		
b) <input type="checkbox"/> <u>Limited Liability Company</u> (<u>LLC</u> or <u>PLLC</u>)	Date Organized		
c) <input type="checkbox"/> <u>Limited Liability Partnership</u>	Date of Registration		
d) <input type="checkbox"/> <u>Limited Partnership</u>	Date Established		
e) <input type="checkbox"/> <u>General Partnership</u>	Date Established	County (if formed in NYS)	
f) <input type="checkbox"/> <u>Sole Proprietor</u>	How many years in business?		
g) <input type="checkbox"/> Other	Date Established		
If Other, explain:			
1.1 Was the <u>Business Entity</u> formed in New York State?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If “No,” indicate jurisdiction where the <u>Business Entity</u> was formed:			
<input type="checkbox"/> United States	State		
<input type="checkbox"/> Other	Country		

NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

I. BUSINESS CHARACTERISTICS			
1.2 Is the <u>Legal Business Entity</u> publicly traded?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If "Yes," provide the <u>CIK code</u> or Ticker Symbol:			
1.3 Is the <u>Business Entity</u> currently <u>registered to do business in New York State</u> ?			<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>Note: Select "Not Required" if the Business Entity is a Sole Proprietor or General Partnership</i>			<input type="checkbox"/> Not Required
If "No," explain why the <u>Business Entity</u> is not required to be <u>registered to do business in New York State</u> :			
1.4 Is the responding <u>Business Entity</u> a <u>Joint Venture</u> ? Note: If the submitting <u>Business Entity</u> is a <u>Joint Venture</u> , also submit a separate questionnaire for each <u>Business Entity</u> comprising the <u>Joint Venture</u> .			<input type="checkbox"/> Yes <input type="checkbox"/> No
1.5 If the <u>Business Entity's</u> <u>Principal Place of Business</u> is not in New York State, does the <u>Business Entity</u> maintain an office in New York State?			<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>(Select "N/A" if <u>Principal Place of Business</u> is in New York State.)</i>			<input type="checkbox"/> N/A
If "Yes," provide the address and telephone number for one office located in New York State.			
1.6 Is the Business Entity a New York State certified <u>Minority-Owned Business Enterprise</u> , or <u>Women-Owned Business Enterprise</u> , or <u>New York State Small Business</u> , or federally certified <u>Disadvantaged Business Enterprise</u> ?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If "Yes," check all that apply:			
<input type="checkbox"/> New York State certified <u>Minority-Owned Business Enterprise</u> (MBE)			
<input type="checkbox"/> New York State certified <u>Women-Owned Business Enterprise</u> (WBE)			
<input type="checkbox"/> <u>New York State Small Business</u>			
<input type="checkbox"/> Federally certified <u>Disadvantaged Business Enterprise</u> (DBE)			
1.7 Identify each person or business entity that is, or has been within the past five (5) years, <u>Principal Owner</u> of 5.0% or more of the firm's shares; a Business Entity Official; or one of the five largest shareholders, if applicable. <i>(Attach additional pages if necessary.)</i>			
<u>Joint Ventures</u> : Provide information for all firms involved.			
Name <i>(For each person, include middle initial)</i>	Title	Percentage of ownership (Enter 0%, if not applicable)	Employment status with the firm
			<input type="checkbox"/> Current <input type="checkbox"/> Former
			<input type="checkbox"/> Current <input type="checkbox"/> Former
			<input type="checkbox"/> Current <input type="checkbox"/> Former
			<input type="checkbox"/> Current <input type="checkbox"/> Former

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE
FOR-PROFIT CONSTRUCTION (CCA-2)**

II. AFFILIATE and JOINT VENTURE RELATIONSHIPS		
2.0 Are there any other <u>construction</u> -related firms in which, now or in the past five years, the submitting <u>Business Entity</u> or any of the individuals or business entities listed in question 1.7 either owned or owns 5.0% or more of the shares of, or was or is one of the five largest shareholders or a director, officer, partner or proprietor of said other firm? (<i>Attach additional pages if necessary.</i>)		<input type="checkbox"/> Yes <input type="checkbox"/> No
Firm/Company Name	Firm/Company EIN (If available)	Firm/Company's Primary Business Activity
Firm/Company Address		
Explain relationship with the firm and indicate percent of ownership, if applicable (enter N/A, if not applicable):		
Are there any shareholders, directors, officers, owners, partners or proprietors that the submitting <u>Business Entity</u> has in common with this firm?		<input type="checkbox"/> Yes <input type="checkbox"/> No
Individual's Name (<i>Include middle initial</i>)	Position/Title with Firm/Company	
2.1 Does the <u>Business Entity</u> have any <u>construction</u> -related <u>affiliates</u> not identified in the response to question 2.0 above? (<i>Attach additional pages if necessary.</i>)		<input type="checkbox"/> Yes <input type="checkbox"/> No
Affiliate Name	Affiliate EIN (If available)	Affiliate's Primary Business Activity
Affiliate Address		
Explain relationship with the affiliate and indicate percent of ownership, if applicable (<i>enter N/A, if not applicable</i>):		
Are there any shareholders, directors, officers, owners, partners or proprietors that the submitting Business Entity has in common with this affiliate?		<input type="checkbox"/> Yes <input type="checkbox"/> No
Individual's Name (<i>Include middle initial</i>)	Position/Title with Firm/Company	
2.2 Has the <u>Business Entity</u> participated in any <u>construction-related Joint Ventures</u> within the past three (3) years? (<i>Attach additional pages if necessary.</i>)		<input type="checkbox"/> Yes <input type="checkbox"/> No
Joint Venture Name	Joint Venture EIN (If available)	Identify parties to the Joint Venture

NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

III. CONTRACT HISTORY

3.0 Has the Business Entity completed any construction contracts? Yes No

If "Yes," list the ten most recent construction contracts the Business Entity has completed using Attachment A – Completed Construction Contracts, found at www.osc.state.ny.us/vendrep/documents/questionnaire/ac3294s.doc.

If less than ten, include most recent subcontracts on projects up to that number.

3.1 Does the Business Entity currently have uncompleted construction contracts? Yes No

If "Yes," list all current uncompleted construction contracts by using Attachment B – Uncompleted Construction Contracts, found at www.osc.state.ny.us/vendrep/documents/questionnaire/ac3295s.doc.

Note: Ongoing projects must be included.

IV. INTEGRITY – CONTRACT BIDDING

Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:

4.0 Been suspended or debarred from any government contracting process or been disqualified on any government procurement? Yes No

4.1 Been subject to a denial or revocation of a government prequalification? Yes No

4.2 Had any bid rejected by a government entity for lack of qualifications, responsibility or because of the submission of an informal, non-responsive or incomplete bid? Yes No

4.3 Had a proposed subcontract rejected by a government entity for lack of qualifications, responsibility or because of the submission of an informal, non-responsive or incomplete bid? Yes No

4.4 Had a low bid rejected on a government contract for failure to make good faith efforts on any Minority-Owned Business Enterprise, Women-Owned Business Enterprise or Disadvantaged Business Enterprise goal or statutory affirmative action requirements on a previously held contract? Yes No

4.5 Agreed to a voluntary exclusion from bidding/contracting with a government entity? Yes No

4.6 Initiated a request to withdraw a bid submitted to a government entity or made any claim of an error on a bid submitted to a government entity? Yes No

For each "Yes," provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, the government entity involved, project(s), relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.

V. INTEGRITY – CONTRACT AWARD

Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:

5.0 Defaulted on or been suspended, cancelled or terminated for cause on any contract? Yes No

5.1 Been subject to an administrative proceeding or civil action seeking specific performance or restitution (except any disputed work proceeding) in connection with any government contract? Yes No

5.2 Entered into a formal monitoring agreement, consent decree or stipulation settlement as specified by, or agreed to with, any government entity? Yes No

5.3 Had its surety called upon to complete any contract whether government or private sector? Yes No

5.4 Forfeited all or part of a standby letter of credit in connection with any government contract? Yes No

NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

V. INTEGRITY – CONTRACT AWARD

Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:

For each “Yes,” provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, the government entity/owners involved, project(s), contract number(s), relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.

VI. CERTIFICATIONS/LICENSES

Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:

- | | |
|--|--|
| 6.0 Had a revocation or <u>suspension</u> of any business or professional permit and/or license? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 6.1 Had a denial, decertification, revocation or forfeiture of New York State certification of <u>Minority-Owned Business Enterprise</u> , <u>Women-Owned Business Enterprise</u> or a federal certification of <u>Disadvantaged Business Enterprise</u> status, for other than a change of ownership? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

For each “Yes,” provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, the government entity involved, relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.

VII. LEGAL PROCEEDINGS/GOVERNMENT INVESTIGATIONS

Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:

- | | |
|--|--|
| 7.0 Been the subject of a criminal <u>investigation</u> , whether open or closed, or an indictment for any business-related conduct constituting a crime under local, state or <u>federal</u> law? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7.1 Been the subject of:
(i.) An indictment, grant of immunity, <u>judgment</u> or conviction (including entering into a plea bargain) for conduct constituting a crime; or
(ii.) Any criminal <u>investigation</u> , felony indictment or conviction concerning the formation of, or any business association with, an allegedly false or fraudulent <u>Minority-Owned Business Enterprise</u> , <u>Women-Owned Business Enterprise</u> , or a <u>Disadvantaged Business Enterprise</u> ? | <input type="checkbox"/> Yes <input type="checkbox"/> No

<input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7.2 Received any <u>OSHA</u> citation, which resulted in a final determination classified as <u>serious</u> or <u>willful</u> ? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7.3 Had a <u>government entity</u> find a willful prevailing wage or supplemental payment violation? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7.4 Had a New York State Labor Law violation deemed willful? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7.5 Entered into a consent order with the New York State Department of Environmental Conservation, or a <u>federal</u> , state or local government enforcement determination involving a violation of <u>federal</u> , state or local environmental laws? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE FOR-PROFIT CONSTRUCTION (CCA-2)

VII. LEGAL PROCEEDINGS/GOVERNMENT INVESTIGATIONS

Within the past five (5) years, has the Business Entity, an affiliate, or any predecessor company or entity:

7.6 Other than previously disclosed, been the subject of any <u>citations</u> , notices or violation orders; a pending administrative hearing, proceeding or determination of a violation of: <ul style="list-style-type: none"> • <u>Federal</u>, state or local health laws, rules or regulations; • <u>Federal</u>, state or local environmental laws, rules or regulations; • Unemployment insurance or workers compensation coverage or <u>claim</u> requirements; • Any labor law or regulation, which was deemed willful; • Employee Retirement Income Security Act (ERISA); • <u>Federal</u>, state or local human rights laws; • <u>Federal</u>, state or local security laws? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
--	--

For each "Yes," provide an explanation of the issue(s), the Business Entity involved, the relationship to the submitting Business Entity, the government entity involved, relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.

Note: Information regarding a determination or finding made in error, which was subsequently corrected or overturned, and/or was withdrawn by the issuing government entity, is not required.

VIII. LEADERSHIP INTEGRITY

If the Business Entity is a Joint Venture Entity, answer "N/A - Not Applicable" to questions in this section.

Within the past five (5) years has any individual previously identified or any individual currently or formerly having the authority to sign, execute or approve bids, proposals, contracts or supporting documentation on behalf of the Business Entity with any government entity been:

8.0 <u>Sanctioned</u> relative to any business or professional permit and/or license?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
8.1 <u>Suspended, debarred or disqualified</u> from any <u>government contracting process</u> ?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
8.2 The subject of a criminal <u>investigation</u> , whether open or closed, or an indictment for any business-related conduct constituting a crime under local, state or <u>federal</u> law?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
8.3 Charged with a misdemeanor or felony, indicted, granted immunity, convicted of a crime or subject to a judgment for: <ul style="list-style-type: none"> (i.) Any business-related activity, including but not limited to fraud, coercion, extortion, bribe or bribe-receiving, giving or accepting unlawful gratuities, immigration or tax fraud, racketeering, mail fraud, wire fraud, price-fixing or collusive bidding; or (ii.) Any crime, whether or not business-related, the underlying conduct of which related to truthfulness, including but not limited to the filing of false documents or false sworn statements, perjury or larceny 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

For each "Yes," provide an explanation of the issue(s), the individual involved, the relationship to the submitting Business Entity, the government entity involved, relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer(s) below or attach additional sheets with numbered responses.

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE
FOR-PROFIT CONSTRUCTION (CCA-2)**

IX. FINANCIAL AND ORGANIZATIONAL CAPACITY		
9.0 Within the past five (5) years, has the <u>Business Entity</u> or any <u>affiliate</u> received any <u>formal unsatisfactory performance assessment(s)</u> from any <u>government entity</u> on any contract?		<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If "Yes," provide an explanation of the issue(s), the <u>Business Entity</u> involved, the relationship to the submitting <u>Business Entity</u>, the <u>government entity</u> involved, relevant dates, any remedial or corrective action(s) taken and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</i>		
9.1 Within the past five (5) years, has the <u>Business Entity</u> or any <u>affiliate</u> had any <u>liquidated damages</u> assessed over \$25,000?		<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If "Yes," provide an explanation of the issue(s), the <u>Business Entity</u> involved, the relationship to the submitting <u>Business Entity</u>, relevant dates, the contracting party involved, the amount assessed and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</i>		
9.2 Within the past five (5) years, has the <u>Business Entity</u> or any <u>affiliate</u> had any <u>liens, claims or judgments</u> over \$25,000 filed against the <u>Business Entity</u> which remain undischarged or were unsatisfied for more than 90 days? (Note: Including but not limited to tax warrants or liens. Do not include UCC filings.)		<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If "Yes," provide an explanation of the issue(s), the <u>Business Entity</u> involved, the relationship to the submitting <u>Business Entity</u>, relevant dates, the Lien holder or Claimants' name(s), the amount of the <u>lien(s)</u> and the current status of the issue(s). Provide answer below or attach additional sheets with numbered responses.</i>		
9.3 In the last seven (7) years, has the <u>Business Entity</u> or any <u>affiliate</u> initiated or been the subject of any bankruptcy proceedings, whether or not closed, or is any bankruptcy proceeding pending?		<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If "Yes," provide the <u>Business Entity</u> involved, the relationship to the submitting <u>Business Entity</u>, the bankruptcy chapter number, the court name and the docket number. Indicate the current status of the proceedings as "Initiated," "Pending" or "Closed." Provide answer below or attach additional sheets with numbered responses.</i>		
9.4 What is the <u>Business Entity's</u> Bonding Capacity?		
a. Single Project		b. Aggregate (All Projects)
9.5 List <u>Business Entity's</u> Gross Sales for the previous three (3) Fiscal Years:		
1st Year (Indicate year) Gross Sales	2nd Year (Indicate year) Gross Sales	3rd Year (Indicate year) Gross Sales
9.6 List <u>Business Entity's</u> Average Backlog for the previous three (3) fiscal years: (Estimated total value of uncompleted work on outstanding contracts)		
1st Year (Indicate year) Amount	2nd Year (Indicate year) Amount	3rd Year (Indicate year) Amount
9.7 Attach <u>Business Entity's</u> most recent annual <u>financial statement</u> and accompanying notes or complete Attachment C – Financial Information, found at www.osc.state.ny.us/vendrep/documents/questionnaire/ac3296s.xls . (This information must be attached.)		

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE
FOR-PROFIT CONSTRUCTION (CCA-2)**

X. FREEDOM OF INFORMATION LAW (FOIL)

10.0 Indicate whether any information provided herein is believed to be exempt from disclosure under the Freedom of Information Law (FOIL).
Note: A determination of whether such information is exempt from FOIL will be made at the time of any request for disclosure under FOIL. Attach additional pages if necessary.

Yes No

If "Yes," indicate the question number(s) and explain the basis for the claim.

**NEW YORK STATE VENDOR RESPONSIBILITY QUESTIONNAIRE
FOR-PROFIT CONSTRUCTION (CCA-2)**

Certification

The undersigned: (1) recognizes that this questionnaire is submitted for the express purpose of assisting New York State government entities (including the Office of the State Comptroller (OSC)) in making responsibility determinations regarding award or approval of a contract or subcontract and that such government entities will rely on information disclosed in the questionnaire in making responsibility determinations; (2) acknowledges that the New York State government entities and OSC may, in their discretion, by means which they may choose, verify the truth and accuracy of all statements made herein; and (3) acknowledges that intentional submission of false or misleading information may result in criminal penalties under State and/or Federal Law, as well as a finding of non-responsibility, contract suspension or contract termination.

The undersigned certifies that he/she:

- is knowledgeable about the submitting Business Entity’s business and operations;
- has read and understands all of the questions contained in the questionnaire;
- has not altered the content of the questionnaire in any manner;
- has reviewed and/or supplied full and complete responses to each question;
- to the best of his/her knowledge, information and belief, confirms that the Business Entity’s responses are true, accurate and complete, including all attachments, if applicable;
- understands that New York State government entities will rely on the information disclosed in the questionnaire when entering into a contract with the Business Entity; and
- is under an obligation to update the information provided herein to include any material changes to the Business Entity’s responses at the time of bid/proposal submission through the contract award notification, and may be required to update the information at the request of the New York State government entities or OSC prior to the award and/or approval of a contract, or during the term of the contract.

Signature of Owner/Official _____

Printed Name of Signatory _____

Title _____

Name of Business _____

Address _____

City, State, Zip _____

Sworn to before me this _____ day of _____, 20__;

_____ Notary Public

SECTION 004547 - IRAN DIVESTMENT ACT CERTIFICATION

IRAN DIVESTMENT ACT CERTIFICATION

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of section 165-a of the state finance law.

Dated: _____

(Name of corporation or partnership)

(Signature of Individual)

(Officer stating title) (Partner)

(Print Name of Individual)

END OF SECTION 004547

SECTION 004550 - QUALIFICATION OF BIDDERS**Town of Riverhead
Suffolk County, New York**

The Owner may make such investigation as the Owner deems necessary to determine the responsibility of any Bidder or to determine the ability of any Bidder to perform the Work. Bidders shall furnish to the Owner all information and data required by the Owner, including complete financial data, within the time and in the form and manner required by the Owner. The Owner reserves the right to reject any bid if the evidence required by the Owner is not submitted as required or if the evidence submitted by or the investigation of any Bidder fails to satisfy the Owner that the Bidder is responsible, or is able or qualified to carry out the obligations of the Contract or to complete the Work as contemplated. At the discretion of the Owner, any bidder may be required to complete and submit the enclosed New York State Vendor Responsibility Questionnaire to assist in determining the bidder's qualifications.

The following is a list showing the name of the Owner, Location, Date of Construction, General Description of Work, Amount of the Contract and Contract Period for projects of similar nature in size, construction method and construction procedure, which have been completed by the undersigned as the prime contractor, and which have been in operation for a period of not less than one year, (minimum of five such projects).

PROJECT NO. 1Owner:

Contact Name and Phone Number: _____

Location:
_____General Description:

Contract Amount: _____

Contract Period: _____

PROJECT NO. 2Owner:

Contact Name and Phone Number: _____

Location:
_____General Description:

Contract Amount: _____

Contract Period: _____

PROJECT NO. 3

Owner: _____

Contact Name and Phone Number: _____

Location: _____

General Description: _____

Contract Amount: _____

Contract Period: _____

PROJECT NO. 4

Owner: _____

Contact Name and Phone Number: _____

Location: _____

General Description: _____

Contract Amount: _____

Contract Period: _____

PROJECT NO. 5

Owner: _____

Contact Name and Phone Number: _____

Location: _____

General Description: _____

Contract Amount: _____

Contract Period: _____

The Town of Riverhead reserves the right to reject any and all bids which do not include a completed qualifications section and/or do not meet the necessary qualifications criteria, for both prime contractor and subcontractors, as described within this qualifications section, for construction work to be performed and completed as required by the contract documents.

BIDDER

FIRM NAME: _____

ADDRESS: _____

PREPARED BY: _____

SIGNED BY: _____

TITLE: _____

END OF SECTION 004550

SECTION 004555 - CONTRACTOR'S RESPONSIBILITY

It is the Contractor's responsibility to inform the Engineer in advance when a situation arises that forces the Contractor to cancel work for a given day. For example, if the Contractor informs the Engineer that he will be on the job on a certain day and then has to cancel the appointment because he cannot obtain certain materials or equipment, it is the Contractor's responsibility to inform the Engineer of these latest developments and to let him know that construction observation services will not be needed for that day.

In the event that the Engineer is not given ample warning of such a cancellation and, as a result, unnecessary time is spent sending field personnel out to the project site to observe the previously scheduled construction, sufficient funds will be deducted from monies due the Contractor to reimburse the Engineer for his wasted time.

By the same token, sufficient funds will be deducted from monies due the Contractor to reimburse the Engineer for any services rendered in the field or in the office regarding work that had to be performed a second time due to substandard work on the part of the Contractor on the original work.

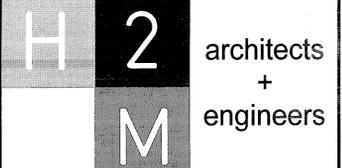
END OF SECTION 004555

Riverhead Water District

Construction of Pre-Stressed Ground Storage Tank at Plant No. 15

RDWD 17-02
NOVEMBER 2017

CONTRACT T - TANK CONSTRUCTION



538 Broad Hollow Road, 4th Floor
East
Melville, NY 11747



DESIGNED BY: AMM	DRAWN BY: AMM/JMA	CHECKED BY: [Signature]	REVIEWED BY:
PROJECT No: RDWD 17-02	DATE: NOVEMBER 2017	SCALE: AS SHOWN	

Riverhead Water District

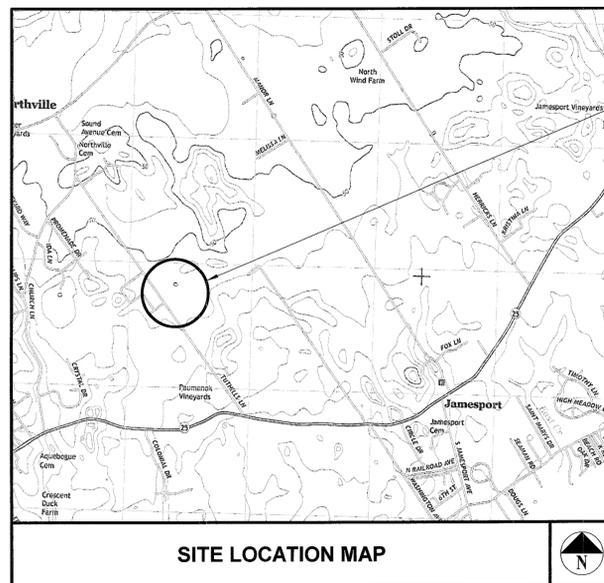
Construction of Pre-Stressed Ground Storage Tank at Plant No. 15

Tuthills Lane, Jamesport

STATUS
FINAL BID DOCUMENT

DRAWING No. G0.0	SHEET No. 1 OF 10
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CONTRACT T SHEET LIST		
SHEET NUMBER	DRAWING NUMBER	SHEET TITLE
1	G0.0	COVER SHEET
2	G1.0	GENERAL PROJECT NOTES
3	C1.0	SITE PLAN
4	C2.0	SITE DETAILS
5	SP1.0	SITE PIPING PLAN
6	T1.0	TANK ISOMETRIC AND ELEVATION VIEWS
7	T1.1	TANK FLOOR PLANS
8	T2.0	TANK DETAILS (1)
9	T2.1	TANK DETAILS (2)
10	T2.2	TANK DETAILS (3)



TOWN SUPERVISOR

SEAN WALTER

TOWN COUNCIL

JOHN DUNLEAVY
JODI GIGLIO
TIMOTHY HUBBARD
JAMES WOOTEN

TOWN CLERK

DIANE WILHEIM

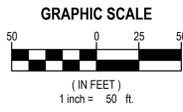
SUPERINTENDENT

MARK CONKLIN

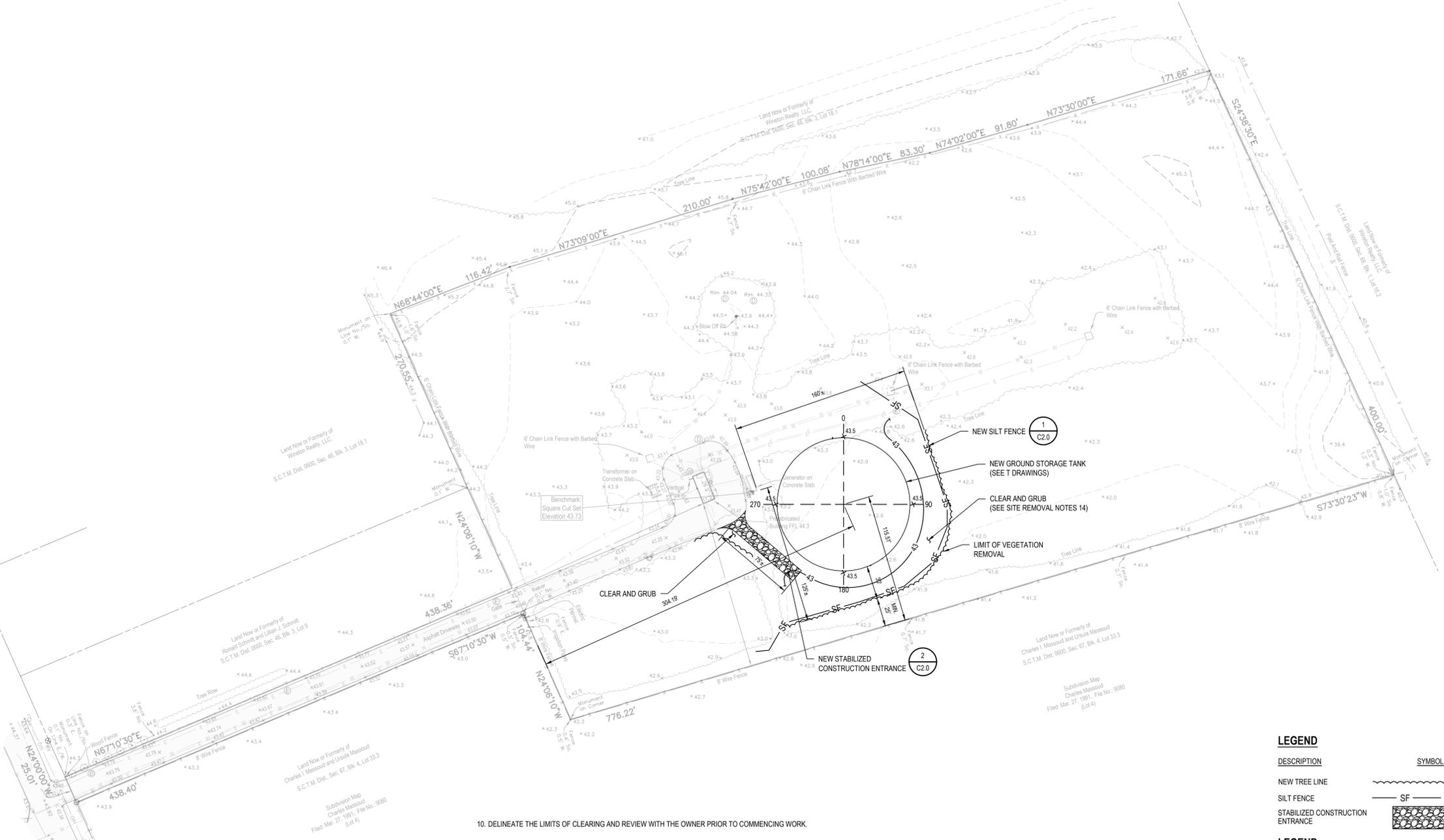
ASSISTANT SUPERINTENDENT

TOM KRUGER

C:\Users\james\Documents\RDWD1702_Contract T_M_James.rvt 11/14/2017 3:45:00 PM



Tuthills Lane



EXISTING CONDITIONS NOTES:

- EXISTING SURVEY PREPARED BY H2M ARCHITECTS + ENGINEERS, DATED 10/17/2017.
- MARKOUT OF UNDERGROUND UTILITIES COMPLETED BY SINGER UTILITY ENGINEERING PC, ON AUG. 2017.
- DATUM N.A.V.D. 1988.
- LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES BOTH PUBLIC AND CUSTOMER OWNED, WERE OBTAINED FROM EITHER OLD MAPS, SURVEYS, DRAWINGS/RECORDS SUPPLIED BY OTHERS AND/OR UTILITY MARKOUT. THE OWNER AND ENGINEER DO NOT GUARANTEE OR ACCEPT RESPONSIBILITY FOR ANY DAMAGE TO SUCH FACILITIES DUE TO DISCREPANCIES IN LOCATION AND SIZE SHOWN ON THE PLANS OR THOSE UTILITIES AND STRUCTURES NOT SHOWN.

UTILITY NOTES:

SUBSURFACE UTILITY ENGINEERING (SUE) QUALITY LEVELS OF SERVICE (ACCURACY)
 ALL MARKOUT IS QUALITY LEVEL B UNLESS OTHERWISE NOTED.

QL-A = QUALITY LEVEL A (TEST HOLES)
 DATA TYPICALLY ACQUIRED AT ONE POINT ON AN UNDERGROUND UTILITY FEATURE EXPOSED BY AIR VACUUM EXCAVATION OR OTHER MEANS. THE HORIZONTAL AND VERTICAL LOCATION OF THIS REFERENCE POINT IS ACQUIRED AND REPORTED TO ACCEPTABLE SURVEY TOLERANCES. THE ACQUIRED DATA FULFILLS SECTION 5.4.5 ON PAGE 6 OF ASCE STANDARD 38-02.

QL-B = QUALITY LEVEL B (UTILITY DESIGNATION)
 DEPICTION OF AN UNDERGROUND UTILITY LINE ESTABLISHED BY SENSING THE LOCATION WITH ELECTRONIC INSTRUMENTATION. LINEWORK AND UTILITY SURFACE FEATURES ARE ACQUIRED BY SURVEYING POINTS ALONG ALIGNMENT TO ACCEPTABLE SURVEY TOLERANCES.

QL-C = QUALITY LEVEL C (RECORDS PLOTTING)
 UTILITY INFORMATION OBTAINED FROM RECORD INFORMATION AND PLOTTED TO CORRELATE WITH SURFACE UTILITY FEATURES WHICH HAVE BEEN SURVEY LOCATED AND ACCURATELY REDUCED ON TO DESIGN/CONSTRUCTION DOCUMENTS.

QL-D = QUALITY LEVEL D (RECORDS DRAFTING)
 DEPICTION OF UNDERGROUND UTILITY LINES BY TRANSCRIPTION FROM UTILITY RECORDS OR PLACED FROM VERBAL RECOLLECTIONS WITHOUT BENEFIT OF SURVEYED SURFACE FEATURES. ACCURACY OF INFORMATION IS QUESTIONABLE.

EOI
 END OF INFORMATION PERTAINS TO THE LOSS OF SIGNAL THAT HAS BEEN APPLIED TO AN UNDERGROUND UTILITY AND THEN DETECTED TO ELECTRONICALLY LOCATE THE UTILITY. COMMONLY FOUND WHERE UTILITIES CHANGE TO NON-CONDUCTIVE MATERIALS, ARE CUT OR AT END OF UTILITY.

SITE REMOVALS NOTES:

- REPORT ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THE PLANS TO THE ENGINEER IN WRITING IMMEDIATELY.
- UNDERGROUND UTILITY INFORMATION SHOWN ON THESE PLANS WAS OBTAINED FOR DESIGN PURPOSES ONLY. PROVIDE FOR CONSTRUCTION MARKOUT AND LOCATE EXISTING UNDERGROUND UTILITIES. NO EXCAVATION CAN COMMENCE UNTIL UTILITY DOCUMENTATION HAS BEEN COMPLETED.
- AFTER MARKOUT AND PRIOR TO DISTURBING THE SITE, UNCOVER ALL SUBSURFACE UTILITIES AND STRUCTURES WITHIN LIMITS OF DISTURBANCE TO CONFIRM THEIR LOCATION AND DEPTH.
- NO COMPENSATION WILL BE MADE FOR ANY INCONVENIENCE CAUSED BY ENCOUNTERING UTILITIES AND STRUCTURES WHICH ARE NOT SHOWN, OR ARE INACCURATELY SHOWN ON THE PLANS.
- REPAIR ANY DAMAGE TO EXISTING UTILITIES RESULTING FROM CONTRACTOR OPERATIONS IMMEDIATELY AT NO COST TO OWNER.
- REPAIR ANY DAMAGE TO EXISTING SITE FEATURES SCHEDULED TO REMAIN RESULTING FROM CONTRACTOR OPERATIONS AT NO COST TO OWNER.
- LOCATE ALL COMPONENTS OF ANY EXISTING IRRIGATION SYSTEMS PRIOR TO CONSTRUCTION AND PROTECT THROUGHOUT THE DURATION OF THE CONTRACT. REPAIR ALL DAMAGED COMPONENTS AT NO ADDITIONAL COST TO THE OWNER.
- PROVIDE TEMPORARY FENCING TO PROTECT WORK AREAS.
- INSTALL EROSION CONTROL MEASURES PRIOR TO ANY GROUND DISTURBANCE.

10. DELINEATE THE LIMITS OF CLEARING AND REVIEW WITH THE OWNER PRIOR TO COMMENCING WORK.

11. NOTIFY OWNER AND ENGINEER IMMEDIATELY IN WRITING WHEN UNKNOWN STRUCTURES OR SUSPECTED HAZARDOUS OR CONTAMINATED MATERIALS ARE ENCOUNTERED PRIOR TO REMOVAL OR DISTURBANCE.

12. TAKE APPROPRIATE MEASURES TO PROTECT PEDESTRIANS AND VEHICULAR TRAFFIC DURING REMOVAL ACTIVITIES, AND PROVIDE TEMPORARY MEASURES FOR THE PROTECTION AND SAFETY OF THE PUBLIC UNTIL FINAL ACCEPTANCE BY THE OWNER.

13. BACKFILL ALL VOIDS RESULTING FROM THE REMOVAL OF EXISTING SITE FEATURES. BACKFILL TO BE SOIL, FREE OF ORGANIC MATERIAL, DEBRIS, TRASH, CLAY AND STONES LARGER THAN 4 INCHES.

14. CONTRACTOR SHALL MINIMIZE REMOVAL OF EXISTING TREES. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE LAYOUT, TAGGING AND REMOVAL OF THE TREES REQUIRED TO COMPLETE ALL WORK. OWNER SHALL APPROVE TREES TO BE REMOVED PRIOR TO ACTUAL REMOVALS. REMOVALS SHALL INCLUDE REMOVAL OF COMPLETE STUMP AND ROOT SYSTEM. CONTRACTOR SHALL NOT BE PERMITTED TO GRIND STUMPS.

SITE PLAN NOTES:

- INSPECT THE SITE PRIOR TO SUBMISSION OF BIDS AND MAKE NO ADDITIONAL CLAIMS REGARDING SITE CONDITIONS THEREAFTER.
- NOTIFY THE OWNER AND H2M (TELEPHONE 631-756-8000) AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF THE WORK. THE SAME NOTICE SHALL BE REQUIRED WHEN RESUMING WORK AFTER ANY STOPPAGE OR DELAY.
- COMPLETE ALL SURVEY AND STAKEOUT AS REQUIRED TO PROPERLY COMPLETE THE WORK.
- PERFORM DAILY CLEANUP OPERATIONS INCLUDING REMOVAL OF DEBRIS AND EXCESS CONSTRUCTION MATERIAL, AND DRIVEWAY/STREET CLEANING TO THE SATISFACTION OF THE OWNER.
- DURING ALL NON-WORKING HOURS, STORE ALL EQUIPMENT AND MATERIALS WITHIN AN AREA DESIGNATED BY THE OWNER AT THE PROJECT SITE.
- ALL CONSTRUCTION TO CONFORM WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODE REQUIREMENTS.
- COORDINATE CONSTRUCTION ACTIVITIES WITH OWNER TO MINIMIZE INTERRUPTION TO THE OWNER'S OPERATIONS.
- RESTORE SURROUNDING AREAS DAMAGED OR DISTURBED DURING CONSTRUCTION. RESTORE TO NEW CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
- RESTORE ALL DISTURBED GRASS AREAS AND ALL AREAS NOT SPECIFICALLY IDENTIFIED FOR OTHER IMPROVEMENTS WITH 4 INCHES OF TOPSOIL AND SEED.

EROSION CONTROL NOTES:

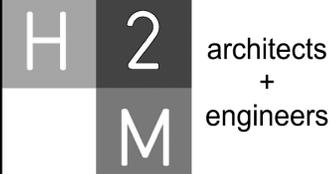
- DURING THE COURSE OF CONSTRUCTION, EROSION AND SEDIMENT CONTROL MEASURES ARE NECESSARY TO PREVENT THE TRANSPORT OF SEDIMENT TO UNDISTURBED AREAS, PONDS, WATER COURSES, DRAINAGE SYSTEMS, RECHARGE BASINS, AND ROADS. THE MINIMUM EROSION CONTROL MEASURES REQUIRED ARE INDICATED ON THIS PLAN. IN ADDITION, THE FOLLOWING GENERAL CONDITIONS SHALL BE OBSERVED:
 - EXISTING VEGETATION SCHEDULED TO REMAIN SHALL BE PROTECTED AND REMAIN UNDISTURBED.
 - INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED TO PREVENT THE INCIDENTAL DISCHARGE OF SEDIMENT FROM THE SITE.
- SPECIFIC METHODS AND MATERIALS EMPLOYED IN THE INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES MUST CONFORM TO THE LATEST EDITION OF THE 'NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL'.
- INSTALL PROPRIETARY EROSION AND SEDIMENT CONTROL PRODUCTS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
- ADJUST EROSION AND SEDIMENT CONTROL MEASURES TO ACCOMMODATE CONSTRUCTION PHASING TO MAINTAIN EFFECTIVENESS OF EROSION AND SEDIMENT CONTROL MEASURES.
- PROTECT EXISTING DRAINAGE INLETS WITHIN THE PROJECT LIMITS AND NEW DRAINAGE INLETS INSTALLED AS PART OF THIS PROJECT FROM SEDIMENT INTRUSION.
- PERFORM INSPECTION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES ON A WEEKLY BASIS AND AFTER HEAVY OR PROLONGED STORMS. MAINTENANCE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, CLEANING AND REPAIR OF ALL EROSION AND SEDIMENT CONTROL MEASURES.
- UTILIZE APPROPRIATE MEANS TO CONTROL DUST DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO APPLYING WATER TO BARE SOIL SURFACES.
- MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE TO PREVENT SOIL AND LOOSE DEBRIS FROM BEING TRACKED ONTO LOCAL ROADS. MAINTAIN THE CONSTRUCTION ENTRANCE WEEKLY UNTIL THE SITE IS PERMANENTLY STABILIZED.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED. AFTER PERMANENT STABILIZATION, REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AND ALL ACCUMULATED SEDIMENT AND DEBRIS FROM THE SITE AND DRAINAGE STRUCTURES.

LEGEND

DESCRIPTION	SYMBOL
NEW TREE LINE	
SILT FENCE	
STABILIZED CONSTRUCTION ENTRANCE	

LEGEND

DESCRIPTION	SYMBOL
MONUMENT	
BENCHMARK	
STAKE	
DRAINAGE MANHOLE	
WELL	
HYDRANT	
WATER MANHOLE	
WATER METER	
WATER VALVE	
ELECTRIC MANHOLE	
UTILITY POLE/GUY POLE	
GUY WIRE	
MONITORING WELL	
SIGN	
BOLLARD	
CURB	
STORM DRAIN	
WATER MAIN	
UNDERGROUND ELECTRIC	
UNDERGROUND TELEPHONE	
OVERHEAD WIRES	
FENCE	
EDGE OF PAVEMENT	
CONTOUR	
SPOT ELEVATION	
TOP/BOT CURB GRADE	
ASPHALT PAVEMENT	
CONCRETE PAVEMENT	



538 Broad Hollow Road, 4th Floor East
 Melville, NY 11747
 631.756.8000 • www.h2m.com

CONSULTANTS:

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MARK	DATE	DESCRIPTION



DESIGNED BY: DS | DRAWN BY: DS | CHECKED BY: MRM | REVIEWED BY: MRM

PROJECT NO.: RDWD 17-02 | DATE: NOVEMBER 2017 | SCALE:

Riverhead Water District

Construction of Pre-Stressed Ground Storage Tank at Plant No. 15



Tuthills Lane, Jamesport

**CONTRACT T
 TANK CONSTRUCTION**

**STATUS
 FINAL BID DOCUMENT**

**SHEET TITLE
 SITE PLAN**

DRAWING NO.: **C1.0** | SHEET NO.: **3** OF **10**

