

# **PROJECT MANUAL & SPECIFICATIONS**

## **Town of Montville Town Boat Launch Improvements and Fishing Pier Construction**

**55 Dock Road  
Uncasville, Connecticut 06382**

**Bid No. 2025-08**

### **Prepared for:**

**Town of Montville, Connecticut  
310 Norwich-New London Turnpike  
Uncasville, Connecticut 06382**

**Funding provided by the U.S. Fish and Wildlife Service, Sport Fish Restoration  
Program administered by the Connecticut Department of Energy and  
Environmental Protection (DEEP), and the Town of Montville**

**January 8, 2025 (Issued for Bid)  
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# **TABLE OF CONTENTS**

- I. ADVERTISEMENT FOR BIDS
- II. MONTVILLE BID DISCLOSURE INFORMATION TO BIDDERS
- III. INSTRUCTIONS TO BIDDERS
- IV. PROPOSAL FORMS
  - 1. Bid Form
  - 2. Form of Bid Bond
  - 3. Statement of Bidders Qualifications
  - 4. Proposed Subcontractors
  - 5. Proposed Suppliers
  - 6. Non-Discrimination in Employment
  - 7. Non-Collusion Affidavit of Prime Bidder
  - 8. Certificate as to Corporate Principal
  - 9. Commission on Human Rights and Opportunities Contract Compliance Regulations Notification to Bidders & Bidder Contract Compliance Monitoring Report
- V. AGREEMENT AND CONTRACT FORMS
  - 1. Form of Agreement
  - 2. Form of Performance Bond
  - 3. Form of Payment Bond
- VI. STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT
- VII. SUPPLEMENTARY CONDITIONS
- VIII. TECHNICAL SPECIFICATIONS
- IX. INSURANCE REQUIREMENTS
- X. PREVAILING WAGE REQUIREMENTS & RATES

APPENDIX A – Buy America, Build America Act Information

APPENDIX B – Permits and Conditions

## **I. ADVERTISEMENT TO BID**

**TOWN OF MONTVILLE**  
**INVITATION FOR PROPOSALS**  
**BID #2025-08**

The Town of Montville is interested in receiving proposals for the *Town Boat Launch Improvements & Fishing Pier Construction*. A copy of the plans and specifications is available at [www.montville-ct.org](http://www.montville-ct.org).

All proposals are due no later than **February 12, 2025 at 10:00 AM** and must be received at the Finance Office prior to the due date and time. A proposal must be delivered by regular or overnight mail to the Town of Montville, Finance Office, 310 Norwich/New London Turnpike, Uncasville, Connecticut 06382, with the proposal contained in a sealed envelope marked **“Town Boat Launch & Fishing Pier Construction”**. The proposal must be signed by a Company official. Proposals will be opened and read aloud in the Finance Office.

A pre-bid meeting will be held on January 23 at 10:00 AM at the Town Boat Launch site, 55 Dock Road, Uncasville, Connecticut 06382. Attendance is not mandatory.

Funding provided by the U.S. Fish and Wildlife Service, Sport Fish Restoration Program administered by the Connecticut Department of Energy and Environmental Protection (DEEP), and the Town of Montville.

This contract is subject to state contract compliance requirements, including non- discrimination statutes and set-aside requirements. State law requires a minimum of twenty-five (25%) percent of the state-funded portion of the contract be set aside for award to subcontractors holding current certification as Small Business Enterprises (“SBE”) from the Connecticut Department of Administrative Services (“DAS”). A minimum of 6.25% of the state-funded portion must be set aside for subcontractors holding current DAS certification as Minority-, Women-, and/or Disabled-owned businesses (“M/W/DisBE”). The contractor must demonstrate good faith effort to meet the 25% set-aside goals.

In addition to other reservations and conditions contained in the proposal documents, the Town of Montville reserves the right to waive any technical defects in the proposals received; to waive any formalities or irregularities; to reject any and all proposals for any reason, including that it or they do not conform to the terms and conditions described herein, as determined by the Town in its sole discretion; to accept or reject any part of any proposal received; to present and negotiate terms of a contract together or separately with any party submitting a proposal; to determine qualifications exclusively and finally; to request additional qualifications; and to select any proposal or part thereof based on any combination of factors, including the amount proposal, the time of completion, and the Town’s best interests. The Town further reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether or not that proposal is selected.

Leonard G. Bunnell Sr.  
Mayor

## **II. MONTVILLE BID DISCLOSURE** **INFORMATION TO BIDDERS**

## **BID DISCLOSURE**

The Town of Montville reserves the right to reject any or all bids and waive any informalities or irregularities in the bid procedure or bids.

The Town may hold the bids for a period not to exceed ninety (90) days from the date of the bid opening to review the bids and investigate the bidders' qualifications prior to awarding the contract.

All bidders are advised the Town of Montville has enacted through resolutions the following special conditions concerning Town bids and purchases.

1. Seller agrees that as a condition of his sale of goods and/or services to the Town of Montville, the Town of Montville will be authorized to deduct from the proceeds due Seller an amount not to exceed 25% of the total amount due Seller. Said amount is to be applied against any unpaid and overdue taxes, assessments, fees, or other charges levied by the town of Montville or any agency thereof against the Seller. The Seller further agrees that Seller shall insure that Seller has the right to withhold an amount not to exceed 25% from each subcontractor working for the Seller, and providing goods and/or services to the Town of Montville, and to remit such withheld money to the Town in full or partial satisfaction of any unpaid and overdue taxes, assessments, fees, or other charges levied by the Town of Montville or any agency thereof against such subcontractor.

# **III. INSTRUCTIONS TO BIDDERS**

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1420 King Street, Alexandria, VA 22314-2794  
(703) 684-2882  
[www.nspe.org](http://www.nspe.org)

American Council of Engineering Companies  
1015 15th Street N.W., Washington, DC 20005  
(202) 347-7474  
[www.acec.org](http://www.acec.org)

American Society of Civil Engineers  
1801 Alexander Bell Drive, Reston, VA 20191-4400  
(800) 548-2723  
[www.asce.org](http://www.asce.org)

Associated General Contractors of America  
2300 Wilson Boulevard, Suite 400, Arlington, VA 22201-3308  
(703) 548-3118  
[www.agc.org](http://www.agc.org)

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## TABLE OF CONTENTS

	<b>Page</b>
Article 1 – Defined Terms.....	1
Article 2 – Copies of Bidding Documents.....	1
Article 3 – Qualifications of Bidders .....	1
Article 4 – Examination of Bidding Documents, Other Related Data, and Site .....	1
Article 5 – Pre-Bid Conference.....	3
Article 6 – Site and Other Areas .....	3
Article 7 – Interpretations and Addenda.....	3
Article 8 – Bid Security .....	3
Article 9 – Contract Times .....	4
Article 10 – Liquidated Damages .....	4
Article 11 – Substitute and “Or-Equal” Items .....	5
Article 12 – Subcontractors, Suppliers and Others.....	5
Article 13 – Preparation of Bid .....	5
Article 14 – Basis of Bid; Comparison of Bids .....	7
Article 15 – Submittal of Bid .....	7
Article 16 – Modification and Withdrawal of Bid .....	8
Article 17 – Opening of Bids .....	8
Article 18 – Bids to Remain Subject to Acceptance .....	8
Article 19 – Evaluation of Bids and Award of Contract .....	9
Article 20 – Contract Security and Insurance .....	9
Article 21 – Signing of Agreement.....	10
Article 22 – Sales and Use Taxes.....	10
Article 23 – Retainage .....	10
Article 24 – Employment of Labor .....	10
Article 25 – Provisional Items.....	10
Article 26 – Safety Standards.....	10
Article 27 - Build America, Buy America .....	12
Article 28 – State Set Aside .....	14



## **ARTICLE 1 – DEFINED TERMS**

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. Issuing Office – The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered. In this case the Finance Office, Montville Town Hall located at 310 Norwich New London Tpke, Uncasville, Connecticut 06382.

## **ARTICLE 2 – COPIES OF BIDDING DOCUMENTS**

- 2.01 Complete sets of the Bidding Documents are available digitally only as stated in the advertisement or invitation to bid. Neither the Owner nor Engineer will be responsible for full or partial sets of Bid Documents obtained from any other source.
- 2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

## **ARTICLE 3 – QUALIFICATIONS OF BIDDERS**

- 3.01 To demonstrate Bidder's qualifications to perform the Work, within 5 days of Owner's request, Bidder shall submit written evidence such as financial data, previous experience, present commitments, and such other data as may be called for below or as otherwise requested by the Owner.
- A. Not Applicable
- B. List of major equipment available for this contract.
- 3.02 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

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

- 4.01 Not Applicable
- 4.02 Underground Facilities
- A. Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site is based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.

- 4.03 Not Applicable
- 4.04 Not Applicable
- 4.05 On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates. *The Bidder must perform these investigations within the bid advertisement period and at a time at the discretion of the Owner.*
- 4.06 Not Applicable
- 4.07 It is the responsibility of each Bidder before submitting a Bid to:
- A. examine and carefully study the Bidding Documents, and the other related data identified in the Bidding Documents;
  - B. visit the Site and become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
  - C. become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work;
  - D. Not Applicable
  - E. Not Applicable
  - F. agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
  - G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
  - H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder; and
  - I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.
- 4.08 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has

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

## **ARTICLE 5 – PRE-BID CONFERENCE**

- 5.01 A pre-bid meeting will be held on January 23 at 10:00 AM at the Town Boat Launch site, 55 Dock Road, Uncasville, Connecticut 06382. Attendance is not mandatory.

## **ARTICLE 6 – SITE AND OTHER AREAS**

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

## **ARTICLE 7 – INTERPRETATIONS AND ADDENDA**

- 7.01 No interpretation of the meaning of the Drawings, Specifications, or other prebid documents will be made to any bidder orally. *Every request for such interpretation must be in writing and addressed to Kyle Haubert, CLA Engineers, Inc., 317 Main Street, Norwich, CT 06360; Fax: 860-886-9165, email at: [khaubert@claengineers.com](mailto:khaubert@claengineers.com).* Interpretations or clarifications considered necessary in response to such questions will be issued by Addenda. Questions received less than five (5) days prior to the date and time for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer.
- 7.03 *Potential Bidders are responsible for checking the Town of Montville website at <http://www.townofmontville.org/> for any addenda and updates regarding this Bid.*

## **ARTICLE 8 – BID SECURITY**

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

have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Agreement or 120 days after the Bid opening, whereupon Bid security furnished by such Bidders will be returned.

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

## **ARTICLE 9 – CONTRACT TIMES**

- 9.01 The number of days within which the Work is to be substantially completed and ready for final payment is set forth in the Agreement.
- 9.02 All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.
- 9.03 Days to Achieve Substantial Completion and Final Payment
- A. The Work will be substantially completed within 180 calendar days after the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within 240 calendar days after the date when the Contract Times commence to run.
- B. The time of completion shall exclude the time period from each December 1 through the following March 31 (the “winter shutdown period”) in accordance with DOT Form 819 Section 1.08.07. The Contractor shall install temporary stabilization measures over any disturbed areas, and shall be required to maintain the site stability and temporary measures in a stable and safe condition for traffic throughout the duration of the shutdown. There shall be no raised structures left in the roadway. The Contractor shall also be responsible for maintaining erosion & sedimentation control measures and disturbed earth slopes in stable condition throughout the duration of the shutdown. This work shall be completed at no additional expense to the Owner. The Contractor shall be required to return to the site on or before April 1<sup>st</sup> of the following year to complete the project. The Contractor may perform work during the “winter shutdown period” if weather conditions allow; there shall be no charge to the Contract Time for work performed during this period. There shall be no additional expense to the Owner for work during the “winter shutdown period”. The Contractor shall maintain all unit prices as outlined in the Bid form through the winter shutdown period and for the duration of the contract.

## **ARTICLE 10 – LIQUIDATED DAMAGES**

- 10.01 Provisions for liquidated damages are set forth in the Agreement and as follows.
- 10.02 Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner **\$1,000.00**

for each day that expires after the time specified in Paragraph 4.02 above for Substantial Completion until the Work is substantially complete.

## **ARTICLE 11 – SUBSTITUTE AND “OR-EQUAL” ITEMS**

- 11.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, or those substitute or “or-equal” materials and equipment approved by Engineer and identified by Addendum. The materials and equipment described in the Bidding Documents establish a standard of required type, function and quality to be met by any proposed substitute or “or-equal” item. No item of material or equipment will be considered by Engineer as a substitute or “or-equal” unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids. Each such request shall conform to the requirements of Paragraph 6.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon Bidder. Engineer’s decision of approval or disapproval of a proposed item will be final. If Engineer approves any proposed item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

## **ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS AND OTHERS**

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

## **ARTICLE 13 – PREPARATION OF BID**

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

- 13.02 All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each part of the Bid Proposal, bid item, and unit price item listed therein. The Bid price(s) shall be written in both words and figures, and in the case of a discrepancy between the two the amount in words shall govern.
- 13.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown.
- 13.04 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.
- 13.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 13.06 A Bid by an individual shall show the Bidder's name and official address.
- 13.07 A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 13.08 All names shall be printed in ink below the signatures.
- 13.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.10 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.
- 13.12 Bidders shall include a statement that they and all subcontractors will comply with Executive Order No. Three, Executive Order No. Sixteen and Executive Order No. Seventeen, Office of Federal Contract Compliance Programs (OFCC) Executive Order No. 11246, Executive Order 12549 and CGS 31-53a, and federal regulation 2 CFR 200.216 as amended, copies of which are attached at the end of this document.
- 13.13 All bidders shall complete and submit the following documents with their bid:
- A. Required Bid security in the form of a Bid Bond, bank money order or Certified Check;
  - B. Statement of Bidders Qualifications
  - C. List of Proposed Subcontractors;

- D. List of Proposed Suppliers;
- E. Non-Discrimination in Employment Statement;
- F. Non-Collusion Affidavit of Prime Bidder;
- G. Certificate as to Corporate Principal;
- H. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;
- I. Contractor's License *[or]* Evidence of Bidder's ability to obtain a State Contractor's License and a covenant by Bidder to obtain said license within the time for acceptance of Bids;
- J. CHRO – Bidder Contract Compliance Monitoring Report;
- K. A Form W-9

## ARTICLE 14 – BASIS OF BID; COMPARISON OF BIDS

### 14.01 Unit Price

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

### 14.02 Allowances

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

## ARTICLE 15 – SUBMITTAL OF BID

- 15.01 Sealed Bids **One (1) Original and a PDF version on a USB drive (or equal) of all bid documents** shall be submitted no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title, bid number, time of bid opening and date, the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to the *Finance Office, Montville Town Hall located at 310 Norwich New London Tpke, Uncasville, Connecticut 06382*, and must arrive prior to the date and time of Bid Opening.

Sales and Use Tax: Vendors are reminded that the Connecticut State Sales and Use Tax and associated Federal taxes are not applicable under this contract, and therefore these taxes are not to be included in the price.

Under the terms of Connecticut Agencies Regulations §12-426-18, Contractors and Subcontractors, the contractor may purchase materials and supplies as are to be installed or placed in projects being performed under these contracts and will remain in such projects after completion, including tangible personal property that remains tangible personal property after its installation or placement, without payment of the tax and shall not charge any such exempt organization or agency any sales or use tax thereon.

- 15.02 The bidder agrees and warrants that in the submission of this sealed bid, they will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religion, national origin, sex, or physical disability including, but not limited to blindness, unless it is shown by such bidder that such disability prevents performance of that which must be done to successfully fulfill the terms of this sealed bid or in any manner which is prohibited by the laws of the United States or the State of Connecticut: and further agrees to provide the Human Relations Commission with such information requested by the Commission concerning the employment practices and procedures of the bidder. An Affirmative Action Statement will be required by the successful bidder.

#### **ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID**

- 16.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids or authorized postponement thereof.
- 16.02 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work. This provision to withdraw a Bid without forfeiting the Bid Security does not apply to Bidder's errors in judgment in preparing the Bid.

#### **ARTICLE 17 – OPENING OF BIDS**

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

#### **ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE**

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



## ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

- 19.01 Owner reserves the right to reject any or all Bids or any part of any Bid, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.
- 19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- 19.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 19.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.
- 19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work in accordance with the Contract Documents.
- 19.06 If Contract is to be awarded, Owner will award the Contract to the responsible Bidder who's Bid, conforming with all the material terms and conditions of the Instructions to Bidders, is lowest, price and other factors considered. *The lowest price will be determined based on the "Total Bid Amount", or if the Owner elects to perform any "Alternate" work if specified on the Bid Form the Base Bid Price as modified by the selected "Alternate" amount(s).* If detailed in the bid form, factors such as discounts, transportation costs, and life cycle costs may be used to determine which bidder, if any, is to be offered the award.
- 19.07 *The Town of Montville reserves the right to award in part, to reject any and all, in whole or in part, for misrepresentation or if the respondent is in default of any prior Town contract, or if the Respondent limits or modifies any of the terms and conditions and/or specifications of the Request. The Town also reserves the right to waive technical defects, irregularities and omissions if, in its judgment, the best interest of the Town will be served.*

## ARTICLE 20 – CONTRACT SECURITY AND INSURANCE

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

## ARTICLE 21 – SIGNING OF AGREEMENT

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the required number of unsigned counterparts of the Agreement along with the other Contract Documents which are identified in the Agreement as attached thereto. Within 15 days thereafter, Successful Bidder shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner. Within ten days thereafter, Owner shall deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

## ARTICLE 22 – SALES AND USE TAXES

22.01 Owner is exempt from Connecticut state sales and use taxes on materials and equipment to be incorporated in the Work. (Exemption Number will be provided after execution of the agreement). Said taxes shall not be included in the Bid. Refer to Paragraph 6.10 of the Supplementary Conditions for additional information.

## ARTICLE 23 – RETAINAGE

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

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with Paragraph 14.02 of the General Conditions.

- a. 95 percent of Work completed (with the balance being retainage); and

- b. 0 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).

23.02 Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts as Engineer shall determine in accordance with Paragraph 14.02.B.5 of the General Conditions and less 200 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

## ARTICLE 24 – EMPLOYMENT OF LABOR

24.01 The wages paid to mechanics, laborers or workmen employed upon the work herein contracted to be done shall be at a rate equal to the rate of wages prevailing for the same work in the same trade or occupation in the Montville area as determined by the labor Commissioner of the State of

Connecticut. See Section 31.53 of the General Statutes of the State of Connecticut, Revision of 195S, as amended.

- 24.02 Public Act 79-325 passes by the 1979 Legislature covers exemptions from Section 31.53 of the General Statutes. Under the new exemptions, effective *October 31, 2017*, the regulations that the prevailing wage must be paid for work performed by contractors and subcontractors in connection with work on public facilities will not apply:

To public work alterations, repair, refinishing projects with total cost of less than \$100,000.  
To public works new construction with a total cost of less than \$1,000,000.

**All Bidders are informed that the project is considered ALTERATION/REPAIR construction.**

- 24.03 All Bidders are advised to inform themselves and to comply with the requirements of Federal, State and local laws governing the employment of labor.
- 24.04 The Contractor shall provide certified payroll sheets to the Owner which includes all employees involved with the project for each payroll period during the course of the project.

## **ARTICLE 25 – PROVISIONAL ITEMS**

- 25.01 Provisional items are delineated in the bid form. Quantities for provisional items may or may not be used in whole or in part at the discretion of the Owner. This shall in no way affect the established contract unit prices. All bid unit prices for provisional items shall be added to establish the total bid amount.

## **ARTICLE 26 – SAFETY STANDARDS**

- 26.01 Bidder agrees to comply with all of the latest Federal and State Safety Standards and Regulations and certifies that all work required in this bid will conform to and comply with said standards and regulations. Bidder further agrees to indemnify and hold harmless the Town for all damages assessed against the Town as a result of Bidder's failure to comply with said standards and/or regulations.
- 26.02 Safety and Health Standards: Successful bidders must demonstrate compliance with all applicable OSHA standards including without limitations the following standards:

29 CFR 1926.650 “Excavations-Scope, application, and definitions”  
29 CFR 1926.651 “Excavations-Specific Excavation Requirements”  
29 CFR 1926.652 “Excavations-Requirements for Protective Systems”  
29 CFR 1926.Subpart P Appendix F – “Selection of Protective Systems”  
29 CFR 1910.1200 “Hazard Communication”  
29 CFR 1910.146 “Permit Required Confined Spaces”  
DOT “Pipeline Safety Regulations Part 192”

- 26.03 The successful bidder shall provide written documentation of each employee's "Operator Qualifications" for the appropriate required tasks.
- 26.04 The successful bidder shall provide written documentation of the company's Drug & Alcohol policy in accordance with DOT 49 CFR part 199 and DOT 49 CFR part 40
- 26.05 The successful bidder shall provide written "competent person" training documentation.
- 26.06 The contractor is responsible for ensuring OSHA compliance, and his responsibility includes supervising and monitoring work site conditions for OSHA compliance. If the contractor uses subcontractors the contractor is responsible for ensuring that the subcontractors fulfill their obligations with respect to employee safety, particularly including those which affect the entire site.
- 26.07 The Owner shall consider OSHA violations(s) over the past five years in determining the ability of the Contractor to comply with OSHA requirements and in determining whether contractor is a responsible bidder. If there has been an OSHA violation within the past five (5) years (measured from the date of the bid), the contractor shall provide copies of the citation(s), all documents regarding final determination of such citations including settlement and any explanation(s) of such violation(s).

## **ARTICLE 27 – BUILD AMERICA, BUY AMERICA**

- 27.01 This project is subject to Build American, Buy America (BABA) requirements concerning the use of construction materials and manufactured products covered under BABA. See Appendix A for additional information.
- 27.02 Guidance information, definitions, requirements, items and products covered, and waiver procedures can be found on the US EPA BABA website at:  
  
<https://www.epa.gov/cwsrf/build-america-buy-america-baba>
- 27.03 The Contractor shall refer to the Bid Form for the acknowledgment and certification as to compliance with the Build America, Buy America requirements.
- 27.04 As required by Section 70914 of the Infrastructure Investment and Jobs Act (Pub. L. 117-58), on or after May 14, 2022, none of the funds under a federal award that are part of a Federal financial assistance program for infrastructure may be obligated for a project unless all the iron, steel, manufactured products, and construction materials used in the project are produced in the United States, unless subject to an approved waiver. Recipients must include the requirements in this section all subawards, including all contracts and purchase orders for work or products under this program.

None of the funds provided under this award may be used for a project for infrastructure unless:

1. All iron and steel used in the project are produced in the United States. This means all manufacturing processes, from the initial melting stage through the application of coatings,

occurred in the United States,

2. All manufactured products used in the project are produced in the United States. This means the manufactured product was manufactured in the United States, and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation, and
3. all construction materials are manufactured in the United States. This means that all manufacturing processes for the construction material occurred in the United States.

This Buy America preference only applies to articles, materials, and supplies consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

For more information, visit the Department's Buy America site at

[www.doi.gov/grants/BuyAmerica](http://www.doi.gov/grants/BuyAmerica)

and the Office of Management and Budget's site at

[www.whitehouse.gov/omb/management/made-in-america/](http://www.whitehouse.gov/omb/management/made-in-america/).

- 27.05 The Contractor acknowledges to and for the benefit of the Town of Montville ("Owner") and the that it understands the goods and services under this Agreement are being funded with federal monies and have statutory requirements commonly known as "Build America, Buy America;" that requires all of the iron and steel, manufactured products, and construction materials used in the project to be produced in the United States ("Build America, Buy America Requirements") including iron and steel, manufactured products, and construction materials provided by the Contactor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Owner and Funding Authority (a) the Contractor has reviewed and understands the Build America, Buy America Requirements, (b) all of the iron and steel, manufactured products, and construction materials used in the project will be and/or have been produced in the United States in a manner that complies with the Build America, Buy America Requirements, unless a waiver of the requirements is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the Build America, Buy America Requirements, as may be requested by the Owner or the Funding Authority. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Owner or Funding Authority to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Owner or Funding Authority resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the Funding Authority or any damages owed to the Funding Authority by the Owner). If the Contractor has no direct contractual privity with the Funding Authority, as a lender or awardee to the Owner for the funding of its project, the Owner and the

Contractor agree that the Funding Authority is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the Funding Authority.

## **ARTICLE 28 – STATE SET ASIDE**

- 28.01 The contractor who is selected to perform this State project must comply with CONN. GEN. STAT. §§ 4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Special Session Public Act 15-5.
- 28.02 An Affirmative Action Plan and Set Aside Plan must be filed with and approved by the Commission on Human Rights and Opportunities prior to the commencement of construction.
- 28.03 General contractors intending to subcontract any portion of work under this Contract shall subcontract 25% of the total contract value to small contractors certified by the Department of Administrative Services (DAS) and are further required to subcontract 25% of that 25% to minority and women small contractors certified as minority business enterprises by DAS. Selected general contractors that are certified by DAS as small contractors, minority business enterprises, or both are excused from this requirement but must comply with CGS sec. 4a-60g(e) and complete a minimum of 30% of the work by dollar value with their own workforces and ensure at least 50% of the work overall by dollar value is completed by contractors or subcontractors certified as small contractors or minority business enterprises by DAS. The contractor must demonstrate good faith effort to meet the 25% set-aside goals.

## **IV. PROPOSAL FORMS**

# **BID FORM**

**TOWN OF MONTVILLE**

**TOWN BOAT LAUNCH IMPROVEMENTS &  
FISHING PIER CONSTRUCTION**



## TABLE OF CONTENTS

	<b>Page</b>
Article 1 – Bid Recipient .....	1
Article 2 – Bidder’s Acknowledgements .....	1
Article 3 – Bidder’s Representations .....	1
Article 4 – Bidder’s Certification .....	2
Article 5 – Basis of Bid .....	4
Article 6 – Time of Completion.....	18
Article 7 – Attachments to This Bid .....	18
Article 8 – Defined Terms .....	18
Article 9 – Bid Submittal .....	19

## ARTICLE 1 – BID RECIPIENT

- 1.01 This Bid is submitted to:  
**Town of Montville**  
**Finance Department**  
**310 Norwich-New London Turnpike**  
**Uncasville, CT 06382**
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

## ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

- 2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for **90** days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

## ARTICLE 3 – BIDDER’S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
- A. Bidder has examined and carefully studied the Bidding Documents, other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged:
- | <u>Addendum No.</u> | <u>Addendum Date</u> |
|---------------------|----------------------|
| _____               | _____                |
| _____               | _____                |
| _____               | _____                |
| _____               | _____                |
| _____               | _____                |
- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in SC-4.02 as containing reliable "technical data," and (2) reports

and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in SC-4.06 as containing reliable "technical data."

- E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.
- F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- K. The Bidder has familiarized themselves with and shall adhere to the Build America, Buy America Requirements outlined in the Instructions to Bidders.**

#### **ARTICLE 4 – BIDDER'S CERTIFICATION**

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:

1. “corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
  2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
  3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
  4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.
- E. Bidder and all subcontractors will comply with Executive Order No. Three, Executive Order No. Sixteen and Executive Order No. Seventeen, Office of Federal Contract Compliance Programs (OFCC) Executive Order No. 11246, Executive Order 12549 and CGS 31-53a, and federal regulation 2 CFR 200.216 as amended.
- F. State of Connecticut Set Aside: The contractor who is selected to perform this State project must comply with CONN. GEN. STAT. §§ 4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Special Session Public Act 15-5.
- State law requires a minimum of twenty-five (25%) percent of the state-funded portion of the contract be set aside for award to subcontractors holding current certification from the Connecticut Department of Administrative Services (“DAS”) under the provisions of CONN. GEN. STAT. § 4a-60g. (25% of the total state-funded value with DAS-certified Small Businesses and 6.25% of the total state-funded value with DAS-certified Minority-, Women-, and/or Disabled-owned Businesses.) The contractor must demonstrate good faith effort to meet the 25% set-aside goals.
- G. The Bidder and all subcontractors shall adhere to the Build America, Buy America Requirements outlined in the Instructions to Bidders.

## **ARTICLE 5 – BASIS OF BID**

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

**Unit prices are to be written in both words and figures. In case of discrepancy, the unit price shown in words will govern.**

### **SUMMARY OF BID PARTS**

Part “A”: Project General Conditions  
Part “B”: Town Boat Launch Improvements  
Part “C”: Fishing Pier Construction

### **BID REQUIREMENT**

The unit price amounts quoted for the same items of Work in PART “B” and PART “C” of the SCHEDULE OF BID PRICES MUST BE IDENTICAL. In the event of a discrepancy, the unit prices and/or lump sum amounts quoted in PART “B” shall govern. Asterisks (\*) indicate such items and include the following.

- Gravel Fill (2B / 3C)
- Process Gravel Base (3B / 4C)
- ¾” Crushed Stone (4B / 5C)
- Two Course Bituminous Concrete (5B / 8C)

## **PART A – PROJECT GENERAL CONDITIONS**

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
1A.	Mobilization	L.S.	L.S.	_____	_____

UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

2A.	Maintenance and Protection of Traffic	L.S.	L.S.	_____	_____
-----	--	------	------	-------	-------

UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

3A.	Sedimentation and Erosion Control	L.S.	L.S.	_____	_____
-----	--------------------------------------	------	------	-------	-------

UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

**PART A SUBTOTAL AMOUNT:** \_\_\_\_\_

**PART A SUBTOTAL AMOUNT IN WORDS:** \_\_\_\_\_

\_\_\_\_\_

## **PART B – TOWN BOAT LAUNCH IMPROVEMENTS**

*Funded by the Town of Monville*

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
1B.	Dewatering, Control, and Diversion of Water	L.S.	L.S.	_____	_____

UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

2B*.	Gravel Fill	100	C.Y.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

3B*.	Processed Gravel Base	150	C.Y.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

4B*.	¾" Crushed Stone	100	C.Y.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

5B*.	Two Course Bituminous Concrete	170	Ton	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
6B.	Boat Launch: Remove & Dispose of Existing Wood Piles	L.S.	L.S.	_____	_____

UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

7B.	Boat Launch: Precast Concrete Boat Ramp	85	L.F.	_____	_____
-----	--	----	------	-------	-------

UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

8B.	Boat Launch: Cast-in-Place Concrete Fixed Pier	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

9B.	Boat Launch: Floating Docks, Piles, and Appurtenances	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

10B.	Boat Launch: ADA Compliant Gangway	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

\_\_\_\_\_

**PART B SUBTOTAL AMOUNT:** \_\_\_\_\_

**PART B SUBTOTAL AMOUNT IN WORDS:** \_\_\_\_\_

\_\_\_\_\_



## **PART C – FISHING PIER CONSTRUCTION**

*Funding provided by the U.S. Fish and Wildlife Service, Sport Fish Restoration Program administered by the Connecticut Department of Energy and Environmental Protection (DEEP)*

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
1C.	<u>Provisional Item:</u> Test Pits	20	C.Y.	_____	_____

UNIT PRICE IN WORDS: \_\_\_\_\_

2C.	<u>Provisional Item:</u> Rock Excavation & Disposal	20	C.Y.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

3C*.	<u>Provisional Item</u> Gravel Fill	100	C.Y.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

4C*.	Processed Gravel Base	175	C.Y.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

5C*.	<u>Provisional Item</u> ¾" Crushed Stone	50	C.Y.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
6C.	Temporary Paving for Trench: Local Road	100	S.Y.	_____	_____

UNIT PRICE IN WORDS: \_\_\_\_\_

7C.	Permanent Pavement Replacement: Local Road	160	S.Y.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

8C*.	Two Course Bituminous Concrete	220	Ton	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

9C.	Concrete Sidewalk, Ramps, and Curbs	1,300	S.F.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

10C.	Topsoil, Seed, Fertilize, and Mulch	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

11C.	<u>Provisional Item:</u> Erosion Control Matting	50	S.Y.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
12C.	Water Quality Basin	L.S.	L.S.	_____	_____

UNIT PRICE IN WORDS: \_\_\_\_\_

13C.	Cast-in-Place Concrete Housekeeping Pads	125	S.F.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

14C.	Pavement Markings & Signing	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

15C.	Site Amenities	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

16C.	Timber Sign Surround	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

17C.	Electrical: New Service Conduit, Trenching, Backfill, Wire, Meter, And Eversource Coordination	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
18C.	Electrical: Enclosure, Concrete Base, and Appurtenances	L.S.	L.S.	_____	_____

UNIT PRICE IN WORDS: \_\_\_\_\_

19C.	Electrical: Site Lighting and Camera Conduit, Handholes, Trenching, and Backfill	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

20C.	Electrical: Sight Lighting Fixtures, Poles, Wiring, And Bases	7	EA.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

21C.	Electrical: Emergency Call Station, Concrete Base, and Conduits	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

22C.	Fishing Pier: Construction Staging, Water Access, and Barge	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
23C.	Fishing Pier: Timber Piles, Structural Elements, and Concrete Abutment	L.S.	L.S.	_____	_____

UNIT PRICE IN WORDS: \_\_\_\_\_

24C.	Fishing Pier: Pressure Treated Timber Decking	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

25C.	Fishing Pier: Guiderail, Posts, And Cables	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

26C.	Fishing Pier: Amenities	L.S.	L.S.	_____	_____
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UNIT PRICE IN WORDS: \_\_\_\_\_

**PART C SUBTOTAL AMOUNT:** \_\_\_\_\_

**PART C SUBTOTAL AMOUNT IN WORDS:** \_\_\_\_\_

**TOTAL BID AMOUNT (SUM OF PARTS “A”, “B” AND “C”)**

**PART “A” SUBTOTAL AMOUNT:** \_\_\_\_\_

**PART “B” SUBTOTAL AMOUNT:** \_\_\_\_\_

**PART “C” SUBTOTAL AMOUNT:** \_\_\_\_\_

**TOTAL BID AMOUNT:** \_\_\_\_\_

**TOTAL BID AMOUNT IN WORDS:** \_\_\_\_\_

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

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

Provisional items are delineated in the bid form. Quantities for provisional items may or may not be used in whole or in part at the discretion of the Owner. This shall in no way affect the established contract unit prices. All bid unit prices for provisional items shall be added to establish the total bid amount.

**This contract is to be awarded as outlined in Article 19 of the Instructions to Bidders.** This contract is to be awarded to that responsible Bidder whose total bid is the lowest number of dollars for the above items.

## **ARTICLE 6 – TIME OF COMPLETION**

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within the number of calendar days indicated in the Instructions to Bidders and Agreement.
- 6.02 Bidder accepts the provisions of the Instructions to Bidders and the Agreement as to liquidated damages.

## **ARTICLE 7 – ATTACHMENTS TO THIS BID**

- 7.01 The following documents are submitted with and made a condition of this Bid:
- A. Required Bid security in the form of a Bid Bond, bank money order or Certified Check (circle type of security provided);
  - B. Statement of Bidders Qualifications
  - C. List of Proposed Subcontractors;
  - D. List of Proposed Suppliers;
  - E. Non-Discrimination in Employment Statement;
  - F. Non-Collusion Affidavit of Prime Bidder;
  - G. Certificate as to Corporate Principal;
  - H. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;
  - I. Contractor's License No.: \_\_\_\_\_ [or] Evidence of Bidder's ability to obtain a State Contractor's License and a covenant by Bidder to obtain said license within the time for acceptance of Bids;
  - M. CHRO – Bidder Contract Compliance Monitoring Report;
  - N. A Form W-9

## **ARTICLE 8 – DEFINED TERMS**

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

## ARTICLE 9 – BID SUBMITTAL

9.01 This Bid is submitted by:

If Bidder is:

### **An Individual**

Name (typed or printed): \_\_\_\_\_

By: \_\_\_\_\_  
(Individual's signature)

Doing business as: \_\_\_\_\_

### **A Partnership**

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

By: \_\_\_\_\_  
(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed): \_\_\_\_\_

### **A Corporation**

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

State of Incorporation: \_\_\_\_\_

Type (General Business, Professional, Service, Limited Liability): \_\_\_\_\_

By: \_\_\_\_\_  
(Signature -- attach evidence of authority to sign)

Name (typed or printed): \_\_\_\_\_

Title: \_\_\_\_\_  
(CORPORATE SEAL)

Attest \_\_\_\_\_

Date of Qualification to do business in Connecticut is \_\_\_\_/\_\_\_\_/\_\_\_\_.



**A Joint Venture**

Name of Joint Venture: \_\_\_\_\_

First Joint Venturer Name: \_\_\_\_\_ (SEAL)

By: \_\_\_\_\_  
(Signature of first joint venture partner - attach evidence of authority to sign)

Name (typed or printed): \_\_\_\_\_

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

Second Joint Venturer Name: \_\_\_\_\_ (SEAL)

By: \_\_\_\_\_  
(Signature of second joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): \_\_\_\_\_

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

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

9.02 Bidder's Business Address \_\_\_\_\_

\_\_\_\_\_

Phone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

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

SUBMITTED on \_\_\_\_\_, 20\_\_ \_\_.

## **STATEMENT OF BIDDER'S QUALIFICATIONS**

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

1. Name of Bidder:
2. Permanent main office address:
3. When organized:
4. If a corporation, where incorporated:
5. How many years have you been engaged in the contracting business under your present firm or trade name?
6. General character of work performed by your company:
7. Have you ever failed to complete any work awarded to you? If so, where and why?
8. Have you ever defaulted on a contract? If so, where and why?
9. List projects similar to this that your organization completed within the last 5 years? The contractor shall attach a summary of such work that identifies:
  - Name of Owner
  - Date of Work
  - Contract Amount
  - Brief Description of Work
10. Experience in construction work similar in importance to this project.



## **PROPOSED SUBCONTRACTORS**

THE BIDDER SHALL STATE THE NAMES OF ALL THE SUBCONTRACTORS THAT HE PROPOSES TO USE. ATTACH ADDITIONAL SHEETS IF NEEDED.

If none, write "None" \_\_\_\_\_  
.....

\*Description of Work \_\_\_\_\_

Proposed Subcontractor, Name \_\_\_\_\_

Address \_\_\_\_\_  
.....

\*Description of Work \_\_\_\_\_

Proposed Subcontractor, Name \_\_\_\_\_

Address \_\_\_\_\_  
.....

\*Description of Work \_\_\_\_\_

Proposed Subcontractor, Name \_\_\_\_\_

Address \_\_\_\_\_  
.....

\*Insert description of work and subcontractors' names as may be required.

This is to certify that all names of the above-mentioned subcontractors are submitted with full knowledge and consent of the respective parties.

The Bidder warrants that none of the proposed subcontractors have any conflict of interest as respects this contract.

Bidder \_\_\_\_\_  
(Fill in Name)

By \_\_\_\_\_  
(Signature and Title)

## **PROPOSED SUPPLIERS**

THE BIDDER SHALL STATE THE NAMES OF PROPOSED MATERIAL SUPPLIERS FOR THE PROJECT. ATTACH ADDITIONAL SHEETS IF NEEDED.

If none, write "None" \_\_\_\_\_

\*Description of Material \_\_\_\_\_

Proposed Supplier, Name \_\_\_\_\_

Address \_\_\_\_\_

\*Description of Material \_\_\_\_\_

Proposed Supplier, Name \_\_\_\_\_

Address \_\_\_\_\_

\*Description of Material \_\_\_\_\_

Proposed Supplier, Name \_\_\_\_\_

Address \_\_\_\_\_

\*Insert description of work and suppliers names as may be required.

This is to certify that all names of the above-mentioned suppliers are submitted with full knowledge and consent of the respective parties.

The Bidder warrants that none of the proposed suppliers have any conflict of interest as respects this contract.

Bidder \_\_\_\_\_  
(Fill in Name)

By \_\_\_\_\_  
(Signature and Title)

## **NON-COLLUSION AFFIDAVIT OF PRIME BIDDER**

State of \_\_\_\_\_ )  
 ) ss.  
County of \_\_\_\_\_ )

\_\_\_\_\_, being first duly sworn, deposes and says that:

- (1) He is (owner, partner, officer, representative or agent) of \_\_\_\_\_, the Bidder that has submitted the attached bid;
- (2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
- (3) Such Bid is genuine and is not a collusive or sham Bid;
- (4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from Bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Owner or any person interested in the proposed Contract; and
- (5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) \_\_\_\_\_

\_\_\_\_\_  
(Title)

Subscribed and sworn to before me  
this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_.

\_\_\_\_\_  
(Title)

My Commission expires \_\_\_\_\_, 20 \_\_\_\_.

---

### **Town of Montville**

Town Boat Launch Improvements &  
Fishing Pier Construction



**CLA Engineers, Inc.**

Civil • Structural • Survey

## **NON-DISCRIMINATION IN EMPLOYMENT**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss

\_\_\_\_\_, being first duly sworn, deposes and says that:

(1) He is (owner, partner, officer, representative, or agent), of \_\_\_\_\_  
\_\_\_\_\_, the bidder that has submitted the attached bid;

(2) Said bidder (has \_\_\_\_\_) (has not \_\_\_\_\_) previously performed work subject to the President's Executive Order No. 11246, or any preceding similar Executive Order.

Signed \_\_\_\_\_

\_\_\_\_\_  
Title

Subscribed and Sworn to before me

this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_.

\_\_\_\_\_  
Title

My Commission expires \_\_\_\_\_, 20 \_\_\_\_.

## **CERTIFICATE AS TO CORPORATE PRINCIPAL**

I, \_\_\_\_\_, certify that I am the Secretary of the corporation named as Principal in the within bond; that \_\_\_\_\_, who signed the said bond on behalf of the Principal was then \_\_\_\_\_ of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was his duly signed, sealed, and attested to for and in behalf of said corporation by authority of this governing body.

(Corporate Seal)

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



**COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES**  
**CONTRACT COMPLIANCE REGULATIONS**  
**NOTIFICATION TO BIDDERS**

(Revised 09/3/15)

The contract to be awarded is subject to contract compliance requirements mandated by [Sections 4a-60](#) and [4a-60a](#) of the Connecticut General Statutes; and, when the awarding agency is the State, [Sections 46a-71\(d\)](#) and [46a-81i\(d\)](#) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at [Section 46a-68j-21 through 43](#) of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by [Sections 4a-60](#) and [46a-71\(d\)](#) of the Connecticut General Statutes.

According to [Section 46a-68j-30\(9\)](#) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to “aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials.” “Minority business enterprise” is defined in [Section 4a-60](#) of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: “(1) Who are active in daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of [Section 32-9n](#).” “Minority” groups are defined in [Section 32-9n](#) of the Connecticut General Statutes as “(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4) Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . .” An individual with a disability is also a minority business enterprise as provided by [Section 4a-60g](#) of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of [Section 46a-68j-21\(11\)](#) of the Contract Compliance Regulations.

The awarding agency will consider the following factors when reviewing the bidder’s qualifications under the contract compliance requirements:

- (a) the bidder’s success in implementing an affirmative action plan;
- (b) the bidder’s success in developing an apprenticeship program complying with [Sections 46a-68-1 to 46a-68-17](#) of the Administrative Regulations of Connecticut State Agencies, inclusive;
- (c) the bidder’s promise to develop and implement a successful affirmative action plan;
- (d) the bidder’s submission of employment statistics contained in the “Employment Information Form”, indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
- (e) the bidder’s promise to set aside a portion of the contract for legitimate minority business enterprises. [See Section 46a-68j-30\(10\)\(E\)](#) of the Contract Compliance Regulations.

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**INSTRUCTIONS AND OTHER INFORMATION**

The following **BIDDER CONTRACT COMPLIANCE MONITORING REPORT** must be completed in full, signed, and submitted with the bid for this contract. The contract awarding agency and the Commission on Human Rights and Opportunities will use the information contained thereon to determine the bidders compliance to [Sections 4a-60](#) and [4a-60a](#) CONN. GEN. STAT., and [Sections 46a-68j-23](#) of the Regulations of Connecticut State Agencies regarding equal employment opportunity, and the bidder’s good faith efforts to include minority business enterprises as subcontractors and suppliers for the work of the contract.

**1) Definition of Small Contractor**

[Section 4a-60g](#) CONN. GEN. STAT. defines a small contractor as a company that has been doing business under the same management and control and has maintained its principal place of business in Connecticut for a one year period immediately prior to its application for certification under this section, had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year, and at least fifty-one percent of the ownership of which is held by a person or persons who are active in the daily affairs of the company, and have the power to direct the management and policies of the company, except that a nonprofit corporation shall be construed to be a small contractor if such nonprofit corporation meets the requirements of subparagraphs (A) and (B) of subdivision [4a-60g](#) CONN. GEN. STAT.

## 2) Description of Job Categories (as used in Part IV Bidder Employment Information) (Page 2)

**MANAGEMENT:** Managers plan, organize, direct, and control the major functions of an organization through subordinates who are at the managerial or supervisory level. They make policy decisions and set objectives for the company or departments. They are not usually directly involved in production or providing services. Examples include top executives, public relations managers, managers of operations specialties (such as financial, human resources, or purchasing managers), and construction and engineering managers.

**BUSINESS AND FINANCIAL OPERATIONS:** These occupations include managers and professionals who work with the financial aspects of the business. These occupations include accountants and auditors, purchasing agents, management analysts, labor relations specialists, and budget, credit, and financial analysts.

**MARKETING AND SALES:** Occupations related to the act or process of buying and selling products and/or services such as sales engineer, retail sales workers and sales representatives including wholesale.

**LEGAL OCCUPATIONS:** In-House Counsel who is charged with providing legal advice and services in regards to legal issues that may arise during the course of standard business practices. This category also includes assistive legal occupations such as paralegals, legal assistants.

**COMPUTER SPECIALISTS:** Professionals responsible for the computer operations within a company are grouped in this category. Examples of job titles in this category include computer programmers, software engineers, database administrators, computer scientists, systems analysts, and computer support specialists

**ARCHITECTURE AND ENGINEERING:** Occupations related to architecture, surveying, engineering, and drafting are included in this category. Some of the job titles in this category include electrical and electronic engineers, surveyors, architects, drafters, mechanical engineers, materials engineers, mapping technicians, and civil engineers.

**OFFICE AND ADMINISTRATIVE SUPPORT:** All clerical-type work is included in this category. These jobs involve the preparing, transcribing, and preserving of written communications and records; collecting accounts; gathering and distributing information; operating office machines and electronic data processing equipment; and distributing mail. Job titles listed in this category include telephone operators, bill and account collectors, customer service representatives, dispatchers, secretaries and administrative assistants, computer operators and clerks (such as payroll, shipping, stock, mail and file).

**BUILDING AND GROUNDS CLEANING AND MAINTENANCE:** This category includes occupations involving landscaping, housekeeping, and janitorial services. Job titles found in this category include supervisors of landscaping or housekeeping, janitors, maids, grounds maintenance workers, and pest control workers.

**CONSTRUCTION AND EXTRACTION:** This category includes construction trades and related occupations. Job titles found in this category include boilermakers, masons (all types), carpenters, construction laborers, electricians, plumbers (and related trades), roofers, sheet metal workers, elevator installers, hazardous materials removal workers, paperhangers, and painters. Paving, surfacing, and tamping equipment operators; drywall and ceiling tile installers; and carpet, floor and tile installers and finishers are also included in this category. First line supervisors, foremen, and helpers in these trades are also grouped in this category.

**INSTALLATION, MAINTENANCE AND REPAIR:** Occupations involving the installation, maintenance, and repair of equipment are included in this group. Examples of job titles found here are heating, ac, and refrigeration mechanics and installers; telecommunication line installers and repairers; heavy vehicle and mobile equipment service technicians and mechanics; small engine mechanics; security and fire alarm systems installers; electric/electronic repair, industrial, utility and transportation equipment; millwrights; riggers; and manufactured building and mobile home installers. First line supervisors, foremen, and helpers for these jobs are also included in the category.

**MATERIAL MOVING WORKERS:** The job titles included in this group are Crane and tower operators; dredge, excavating, and lading machine operators; hoist and winch operators; industrial truck and tractor operators; cleaners of vehicles and equipment; laborers and freight, stock, and material movers, hand; machine feeders and offbearers; packers and packagers, hand; pumping station operators; refuse and recyclable material collectors; and miscellaneous material moving workers.

**PRODUCTION WORKERS:** The job titles included in this category are chemical production machine setters, operators and tenders; crushing/grinding workers; cutting workers; inspectors, testers sorters, samplers, weighers; precious stone/metal workers; painting workers; cementing/gluing machine operators and tenders; etchers/engravers; molders, shapers and casters except for metal and plastic; and production workers.

### 3) Definition of Racial and Ethnic Terms (as used in Part IV Bidder Employment Information) (Page 3)

<p><u>White</u> (not of Hispanic Origin)-All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.</p> <p><u>Black</u> (not of Hispanic Origin)-All persons having origins in any of the Black racial groups of Africa.</p> <p><u>Hispanic</u>- All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.</p>	<p><u>Asian or Pacific Islander</u>- All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes China, India, Japan, Korea, the Philippine Islands, and Samoa.</p> <p><u>American Indian or Alaskan Native</u>- All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.</p>
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## BIDDER CONTRACT COMPLIANCE MONITORING REPORT

### PART 1 – Bidder Information

Company Name: Street Address: City & State: Chief Executive:	Bidder Federal Employer Identification Number: Or Social Security Number:
Major Business Activity: (brief description)	Bidder Identification (response optional/definitions on page 1)  -Bidder is a small contractor? Yes No -Bidder is a minority business enterprise? Yes No (If yes, check ownership category) Black Hispanic Asian American American Indian/Alaskan Native Iberian Peninsula Individual(s) with a Physical Disability Female -Bidder is certified as above by State of CT? Yes No
Bidder Parent Company: (If any)	
Other Locations in CT: (If any)	

### PART II - Bidder Nondiscrimination Policies and Procedures

1. Does your company have a written Affirmative Action/Equal Employment Opportunity statement posted on company bulletin boards? Yes No	7. Do all of your company contracts and purchase orders contain non-discrimination statements as required by Sections 4a-60 & 4a-60a Conn. Gen. Stat.? Yes No
2. Does your company have the state-mandated sexual harassment prevention in the workplace policy posted on company bulletin boards? Yes No	8. Do you, upon request, provide reasonable accommodation to employees, or applicants for employment, who have physical or mental disability? Yes No
3. Do you notify all recruitment sources in writing of your company's Affirmative Action/Equal Employment Opportunity employment policy? Yes No	9. Does your company have a mandatory retirement age for all employees? Yes No
4. Do your company advertisements contain a written statement that you are an Affirmative Action/Equal Opportunity Employer? Yes No	10. If your company has 50 or more employees, have you provided at least two (2) hours of sexual harassment training to all of your supervisors? Yes No N/A
5. Do you notify the Ct. State Employment Service of all employment openings with your company? Yes No	11. If your company has apprenticeship programs, do they meet the Affirmative Action/Equal Employment Opportunity requirements of the apprenticeship standards of the Ct. Dept. of Labor? Yes No N/A
6. Does your company have a collective bargaining agreement with workers? Yes No 6a. If yes, do the collective bargaining agreements contain non-discrimination clauses covering all workers? Yes No	12. Does your company have a written affirmative action Plan? Yes No If no, please explain.
6b. Have you notified each union in writing of your commitments under the nondiscrimination requirements of contracts with the state of CT? Yes No	13. Is there a person in your company who is responsible for equal employment opportunity? Yes No If yes, give name and phone number:

1. Will the work of this contract include subcontractors or suppliers? Yes No

1a. If yes, please list all subcontractors and suppliers and report if they are a small contractor and/or a minority business enterprise. (defined on page 1 / use additional sheet if necessary)

1b. Will the work of this contract require additional subcontractors or suppliers other than those identified in 1a. above? Yes No

#### PART IV - Bidder Employment Information

Date:

JOB CATEGORY*	OVERALL TOTALS	WHITE (not of Hispanic origin)		BLACK (not of Hispanic origin)		HISPANIC		ASIAN or PACIFIC ISLANDER		AMERICAN INDIAN or ALASKAN NATIVE	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Management											
Business & Financial Ops											
Marketing & Sales											
Legal Occupations											
Computer Specialists											
Architecture/Engineering											
Office & Admin Support											
Bldg/ Grounds Cleaning/Maintenance											
Construction & Extraction											
Installation , Maintenance & Repair											
Material Moving Workers											
Production Occupations											
TOTALS ABOVE											
Total One Year Ago											
FORMAL ON THE JOB TRAINEES (ENTER FIGURES FOR THE SAME CATEGORIES AS ARE SHOWN ABOVE)											
Apprentices											
Trainees											

\*NOTE: JOB CATEGORIES CAN BE CHANGED OR ADDED TO (EX. SALES CAN BE ADDED OR REPLACE A CATEGORY NOT USED IN YOUR COMPANY)

## PART V - Bidder Hiring and Recruitment Practices

(Page 5)

1. Which of the following recruitment sources are used by you? (Check yes or no, and report percent used)				2. Check (X) any of the below listed requirements that you use as a hiring qualification  (X)		3. Describe below any other practices or actions that you take which show that you hire, train, and promote employees without discrimination
SOURCE	YES	NO	% of applicants provided by source			
State Employment Service					Work Experience	
Private Employment Agencies					Ability to Speak or Write English	
Schools and Colleges					Written Tests	
Newspaper Advertisement					High School Diploma	
Walk Ins					College Degree	
Present Employees					Union Membership	
Labor Organizations					Personal Recommendation	
Minority/Community Organizations					Height or Weight	
Others (please identify)					Car Ownership	
					Arrest Record	
					Wage Garnishments	

Certification (Read this form and check your statements on it CAREFULLY before signing). I certify that the statements made by me on this BIDDER CONTRACT COMPLIANCE MONITORING REPORT are complete and true to the best of my knowledge and belief, and are made in good faith. I understand that if I knowingly make any misstatements of facts, I am subject to be declared in non-compliance with Section 4a-60, 4a-60a, and related sections of the CONN. GEN. STAT.

(Signature)	(Title)	(Date Signed)	(Telephone)
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## **V. AGREEMENT AND BOND FORMS**

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1420 King Street, Alexandria, VA 22314-2794  
(703) 684-2882  
[www.nspe.org](http://www.nspe.org)

American Council of Engineering Companies  
1015 15th Street N.W., Washington, DC 20005  
(202) 347-7474  
[www.acec.org](http://www.acec.org)

American Society of Civil Engineers  
1801 Alexander Bell Drive, Reston, VA 20191-4400  
(800) 548-2723  
[www.asce.org](http://www.asce.org)

Associated General Contractors of America  
2300 Wilson Boulevard, Suite 400, Arlington, VA 22201-3308  
(703) 548-3118  
[www.agc.org](http://www.agc.org)

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# AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

THIS AGREEMENT, made this the \_\_\_\_ day of \_\_\_\_\_ 2025, by and between Town of Montville, Connecticut acting herein through Leonard G. Bunnell Sr., Mayor, hereinafter called “OWNER” and \_\_\_\_\_ *to be determined* \_\_\_\_\_ an *individual, a partnership, a corporation* doing business at \_\_\_\_\_ *to be determined* \_\_\_\_\_ hereinafter called the “CONTRACTOR”.

## ARTICLE 1 – WORK

- 1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: **Improvements and reconstruction of the existing Town boat launch, and floating docks, construction of a new timber fishing pier, and all site works as depicted on the Contract Drawings.**

## ARTICLE 2 – THE PROJECT

- 2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows: **Town Boat Launch Improvements & Fishing Pier Construction.**

## ARTICLE 3 – ENGINEER

- 3.01 The Project has been designed by CLA Engineers, Inc. (Engineer), which is to act as Owner’s representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

## ARTICLE 4 – CONTRACT TIMES

- 4.01 *Time of the Essence*
- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.
- 4.02 *Days to Achieve Substantial Completion and Final Payment*
- A. The Work shall be substantially completed by within **180** days after the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions and completed and ready for final payment in accordance with Paragraph

14.07 of the General Conditions within **240** days after the date when the Contract Times commence to run.

- B. The time of completion shall exclude the time period from each December 1 through the following March 31 (the “winter shutdown period”) in accordance with DOT Form 819 Section 1.08.07. The Contractor shall install temporary stabilization measures over any disturbed areas, and shall be required to maintain the site stability and temporary measures in a stable and safe condition for traffic throughout the duration of the shutdown. There shall be no raised structures left in the roadway. The Contractor shall also be responsible for maintaining erosion & sedimentation control measures and disturbed earth slopes in stable condition throughout the duration of the shutdown. This work shall be completed at no additional expense to the Owner. The Contractor shall be required to return to the site on or before April 1<sup>st</sup> of the following year to complete the project. The Contractor may perform work during the “winter shutdown period” if weather conditions allow; there shall be no charge to the Contract Time for work performed during this period. There shall be no additional expense to the Owner for work during the “winter shutdown period”. The Contractor shall maintain all unit prices as outlined in the Bid form through the winter shutdown period and for the duration of the contract.

#### 4.03 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner **\$1,000.00** for each day that expires after the time specified in Paragraph 4.02 above for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner **\$1,000.00** for each day that expires after the time specified in Paragraph 4.02 above for completion and readiness for final payment until the Work is completed and ready for final payment.

### ARTICLE 5 – CONTRACT PRICE

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

- A. For all Work other than Unit Price Work, a lump sum of: \$ Not Applicable

All specific cash allowances are included in the above price in accordance with Paragraph 11.02 of the General Conditions.



- B. For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the actual quantity of that item:

UNIT PRICE WORK

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
-------------	--------------------	-----------------	-------------	-------------------	---------------

(to be determined by bid)

Total of Bid Unit Prices (Unit Price Work): \$ \_\_\_\_\_

The Bid prices for Unit Price Work set forth as of the Effective Date of the Agreement are based on estimated quantities. As provided in Paragraph 11.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in Paragraph 9.07 of the General Conditions.

**ARTICLE 6 – PAYMENT PROCEDURES**

**6.01 Submittal and Processing of Payments**

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

**6.02 Progress Payments; Retainage**

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the Last day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below. All such payments will be measured by the schedule of values established as provided in Paragraph 2.07.A of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements.
1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with Paragraph 14.02 of the General Conditions.
    - a. 95 percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and

- b. 0 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 98 percent of the Work completed, less such amounts as Engineer shall determine in accordance with Paragraph 14.02.B.5 of the General Conditions and less 200 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

#### 6.03 *Final Payment*

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions, Owner shall pay the remainder of the Contract Price (with the exception of 2 percent that shall be held by the Owner for a 6 month period) as recommended by Engineer as provided in said Paragraph 14.07. The 2 percent retainage shall be released by the Owner after 6 months if final work has remained in acceptable condition.

### **ARTICLE 7 – INTEREST**

- 7.01 All moneys not paid when due as provided in Article 14 of the General Conditions shall bear interest at the rate of 0 percent per annum.

### **ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS**

- 8.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:
  - A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
  - B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
  - C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
  - D. Not Applicable
  - E. Contractor has considered the information known to Contractor; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences,

and procedures of construction expressly required by the Contract Documents; and (3) Contractor's safety precautions and programs.

- F. Based on the information and observations referred to in Paragraph 8.01.E above, Contractor does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- J. The Contractor and all subcontractors will comply with Executive Order No. Three, Executive Order No. Sixteen and Executive Order No. Seventeen, Office of Federal Contract Compliance Programs (OFCC) Executive Order No. 11246, Executive Order 12549 and CGS 31-53a, and federal regulation 2 CFR 200.216 as amended.
- K. The Contractor has familiarized themselves with and shall comply the **Build America, Buy America** Requirements outlined in the Contract Documents and shall comply with said requirements.
- L. Non-Discrimination and Affirmative Action Provisions
  - (A) (1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, status as a veteran, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut; and the contractor further agrees to take affirmative action to ensure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, status as a veteran, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved; (2) The contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with

- regulations adopted by the Commission on Human Rights and Opportunities; (3) The contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) The contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to sections 46a-56, 46a-68e, 46a-68f and 46a-86; and (5) The contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor as relate to the provisions of this section and section 46a-56.
- (B) The contractor agrees and warrants that he or she will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on the project.
- (C) For the purposes of this section, "contract" includes any extension or modification of the contract, "contractor" includes any successors or assigns of the contractor, "marital status" means being single, married as recognized by the state of Connecticut, widowed, separated or divorced, and "mental disability" means one or more mental disorders, as defined in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders", or a record of or regarding a person as having one or more such disorders. For the purposes of this section, "contract" does not include a contract where each contractor is (1) a political subdivision of the state, including, but not limited to, a municipality, unless the contract is a municipal public works contract or quasi-public agency project contract, (2) any other state, as defined in section 1-267, (3) the federal government, (4) a foreign government, or (5) an agency of a subdivision, state or government described in subdivision (1), (2), (3) or (4) of this subsection.
- (D) For the purposes of this section, "minority business enterprise" means any small contractor or supplier of materials fifty-one per cent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) Who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise, and (3) who are members of a minority, as such term is defined in subsection (a) of section 32-9n of the Connecticut General Statutes; and "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations. "Good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements.
- (E) The contractor shall develop and maintain adequate documentation, in a manner

prescribed by the Commission on Human Rights and Opportunities, of its good faith efforts.

- (F) The contractor shall include the provisions of subsections (a) and (b) of this section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the state, and in every subcontract entered into in order to fulfill any obligation of a municipal public works contract or contract for a quasi-public agency project, and such provisions shall be binding on a subcontractor, vendor or manufacturer, unless exempted by regulations or orders of the Commission on Human Rights and Opportunities. The contractor shall take such action with respect to any such subcontract or purchase order as the commission may direct as a means of enforcing such provisions, including sanctions for noncompliance in accordance with section 46a- 56; provided, if such contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the commission regarding a state contract, the contractor may request the state of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the state and the state may so enter.

## **ARTICLE 9 – CONTRACT DOCUMENTS**

### **9.01 *Contents***

#### **A. The Contract Documents consist of the following:**

1. This Agreement (pages 1 to \_\_, inclusive).
2. Performance bond (pages \_\_\_\_\_ to \_\_\_\_\_, inclusive).
3. Payment bond (pages \_\_\_\_\_ to \_\_\_\_\_, inclusive).
4. Instructions to Bidders (pages 1 to 14, inclusive)
5. General Conditions (pages 1 to 48, inclusive).
6. Supplementary Conditions (pages 1 to 13, inclusive).
7. Specifications as listed in the table of contents of the Project Manual.
8. Drawings consisting of 26 sheets with each sheet bearing the following general title:  
Town Boat Launch Improvements & Fishing Pier Construction.
9. Addenda (numbers \_\_\_\_\_ to \_\_\_\_\_, inclusive).
10. Exhibits to this Agreement (enumerated as follows):
  - a. Contractor's Bid (pages \_\_\_\_\_ to \_\_\_\_\_, inclusive).

- b. Documentation submitted by Contractor prior to Notice of Award (pages \_\_\_\_\_ to \_\_\_\_\_, inclusive).
- 11. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
  - a. Notice to Proceed (pages \_\_\_\_\_ to \_\_\_\_\_, inclusive).
  - b. Work Change Directives.
  - c. Change Orders.
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

## **ARTICLE 10 – MISCELLANEOUS**

### **10.01 *Terms***

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

### **10.02 *Assignment of Contract***

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

### **10.03 *Successors and Assigns***

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

### **10.04 *Severability***

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract

Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

#### 10.05 *Contractor's Certifications*

A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement. Counterparts have been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or have been identified by Owner and Contractor or on their behalf.

This Agreement will be effective on \_\_\_\_\_ (which is the Effective Date of the Agreement).

OWNER:

Town of Montville \_\_\_\_\_

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

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

Attest: \_\_\_\_\_

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

Address for giving notices:

Town of Montville \_\_\_\_\_

310 Norwich – New London Turnpike \_\_\_\_\_

Montville, Connecticut 06382 \_\_\_\_\_

CONTRACTOR

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

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

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: \_\_\_\_\_

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

Address for giving notices:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

License No.: \_\_\_\_\_

(Where applicable)

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

Agent for service of process:

\_\_\_\_\_



## PERFORMANCE BOND

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

---

CONTRACTOR (*Name and Address*):

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

OWNER (*Name and Address*):

**Town of Montville  
310 Norwich – New London Turnpike  
Montville, Connecticut 06382**

### CONTRACT

Effective Date of Agreement:

Amount:

Description (*Name and Location*): **Town Boat Launch Improvements & Fishing Pier Construction**

### BOND

Bond Number:

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

Amount:

Modifications to this Bond Form:

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

### CONTRACTOR AS PRINCIPAL

### SURETY

\_\_\_\_\_  
Contractor's Name and Corporate Seal

\_\_\_\_\_  
Surety's Name and Corporate Seal

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

By: \_\_\_\_\_  
Signature (Attach Power of Attorney)

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_  
Signature

Attest: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

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

Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.

1. If Contractor performs the Contract, Surety and Contractor have no obligation under this Bond, except to participate in conferences as provided in Paragraph 2.1.
2. If there is no Owner Default, Surety's obligation under this Bond shall arise after:
  - 2.1 Owner has notified Contractor and Surety, at the addresses described in Paragraph 9 below, that Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with Contractor and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Contractor, and Surety agree, Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Contractor Default; and
  - 2.2 Owner has declared a Contractor Default and formally terminated Contractor's right to complete the Contract. Such Contractor Default shall not be declared earlier than 20 days after Contractor and Surety have received notice as provided in Paragraph 2.1; and
  - 2.3 Owner has agreed to pay the Balance of the Contract Price to:
    1. Surety in accordance with the terms of the Contract; or
    2. Another contractor selected pursuant to Paragraph 3.3 to perform the Contract.
3. When Owner has satisfied the conditions of Paragraph 2, Surety shall promptly, and at Surety's expense, take one of the following actions:
  - 3.1 Arrange for Contractor, with consent of Owner, to perform and complete the Contract; or
  - 3.2 Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
  - 3.3 Obtain bids or negotiated proposals from qualified contractors acceptable to Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and contractor selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to Owner the amount of damages as described in Paragraph 5 in excess of the Balance of the Contract Price incurred by Owner resulting from Contractor Default; or
  - 3.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:
    1. After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or
    2. Deny liability in whole or in part and notify Owner citing reasons therefor.
4. If Surety does not proceed as provided in Paragraph 3 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 3.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.
5. After Owner has terminated Contractor's right to complete the Contract, and if Surety elects to act under Paragraph 3.1, 3.2, or 3.3 above, then the responsibilities of Surety to Owner shall not be greater than those of Contractor under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To the limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:

- 5.1 The responsibilities of Contractor for correction of defective Work and completion of the Contract;
- 5.2 Additional legal, design professional, and delay costs resulting from Contractor's Default, and resulting from the actions of or failure to act of Surety under Paragraph 3; and
- 5.3 Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Contractor.

6. Surety shall not be liable to Owner or others for obligations of Contractor that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Owner or its heirs, executors, administrators, or successors.

7. Surety hereby waives notice of any change, including changes of time, to Contract or to related subcontracts, purchase orders, and other obligations.

8. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located, and shall be instituted within two years after Contractor Default or within two years after Contractor ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

9. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the address shown on the signature page.

10. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### 11. Definitions.

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

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

Surety Agency or Broker:

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

## PAYMENT BOND

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

CONTRACTOR (*Name and Address*):

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

OWNER (*Name and Address*):

**Town of Montville  
310 Norwich – New London Turnpike  
Uncasville, Connecticut 06382**

CONTRACT

Effective Date of Agreement:

Amount:

Description (*Name and Location*): **Town Boat Launch Improvements & Fishing Pier Construction**

BOND

Bond Number:

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

Amount:

Modifications to this Bond Form:

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

**CONTRACTOR AS PRINCIPAL**

**SURETY**

\_\_\_\_\_  
Contractor's Name and Corporate Seal (Seal)

\_\_\_\_\_  
Surety's Name and Corporate Seal (Seal)

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

By: \_\_\_\_\_  
Signature (Attach Power of Attorney)

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_  
Signature

Attest: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

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

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.
2. With respect to Owner, this obligation shall be null and void if Contractor:
  - 2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and
  - 2.2 Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and Surety (at the addresses described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens, or suits to Contractor and Surety, and provided there is no Owner Default.
3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.
4. Surety shall have no obligation to Claimants under this Bond until:
  - 4.1 Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.
  - 4.2 Claimants who do not have a direct contract with Contractor:
    1. Have furnished written notice to Contractor and sent a copy, or notice thereof, to Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials or equipment were furnished or supplied, or for whom the labor was done or performed; and
    2. Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which Contractor had indicated the claim will be paid directly or indirectly; and
    3. Not having been paid within the above 30 days, have sent a written notice to Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.
5. If a notice by a Claimant required by Paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.
6. Reserved.
7. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety.
8. Amounts owed by Owner to Contractor under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work.
9. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
10. Surety hereby waives notice of any change, including changes of time, to the Contract or to related

subcontracts, purchase orders, and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Paragraph 4.1 or Paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### 15. Definitions

15.1 Claimant: An individual or entity having a direct contract with Contractor, or with a first-tier subcontractor of Contractor, to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

15.2 Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

15.3 Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract, or to perform and complete or otherwise comply with the other terms thereof.

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

Surety Agency or Broker:

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

# **VI. STANDARD GENERAL CONDITIONS** **OF THE CONSTRUCTION CONTRACT**

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## TABLE OF CONTENTS

	<b>Page</b>
Article 1 – Definitions and Terminology.....	1
1.01 Defined Terms .....	1
1.02 Terminology .....	4
Article 2 – Preliminary Matters.....	5
2.01 Delivery of Bonds and Evidence of Insurance .....	5
2.02 Copies of Documents .....	5
2.03 Commencement of Contract Times; Notice to Proceed.....	5
2.04 Starting the Work .....	5
2.05 Before Starting Construction.....	5
2.06 Preconstruction Conference; Designation of Authorized Representatives .....	6
2.07 Initial Acceptance of Schedules .....	6
Article 3 – Contract Documents: Intent, Amending, Reuse.....	6
3.01 Intent .....	6
3.02 Reference Standards .....	6
3.03 Reporting and Resolving Discrepancies .....	7
3.04 Amending and Supplementing Contract Documents .....	7
3.05 Reuse of Documents.....	8
3.06 Electronic Data .....	8
Article 4 – Availability of Lands; Subsurface and Physical Conditions; Hazardous Environmental Conditions; Reference Points	8
4.01 Availability of Lands.....	8
4.02 Subsurface and Physical Conditions .....	8
4.03 Differing Subsurface or Physical Conditions .....	9
4.04 Underground Facilities .....	10
4.05 Reference Points.....	11
4.06 Hazardous Environmental Condition at Site .....	11
Article 5 – Bonds and Insurance .....	12
5.01 Performance, Payment, and Other Bonds.....	12
5.02 Licensed Sureties and Insurers.....	13
5.03 Certificates of Insurance.....	13
5.04 Contractor’s Insurance .....	13
5.05 Owner’s Liability Insurance.....	14
5.06 Property Insurance.....	14
5.07 Waiver of Rights .....	15
5.08 Receipt and Application of Insurance Proceeds .....	16
5.09 Acceptance of Bonds and Insurance; Option to Replace .....	16
5.10 Partial Utilization, Acknowledgment of Property Insurer.....	17
Article 6 – Contractor’s Responsibilities.....	17
6.01 Supervision and Superintendence .....	17
6.02 Labor; Working Hours .....	17
6.03 Services, Materials, and Equipment.....	17
6.04 Progress Schedule.....	18
6.05 Substitutes and “Or-Equals” .....	18
6.06 Concerning Subcontractors, Suppliers, and Others .....	20
6.07 Patent Fees and Royalties.....	21
6.08 Permits .....	21
6.09 Laws and Regulations .....	21
6.10 Taxes.....	22
6.11 Use of Site and Other Areas.....	22



6.12	Record Documents .....	22
6.13	Safety and Protection.....	22
6.14	Safety Representative .....	23
6.15	Hazard Communication Programs.....	23
6.16	Emergencies .....	23
6.17	Shop Drawings and Samples.....	24
6.18	Continuing the Work .....	25
6.19	Contractor's General Warranty and Guarantee .....	25
6.20	Indemnification.....	26
6.21	Delegation of Professional Design Services.....	26
Article 7	Other Work at the Site .....	27
7.01	Related Work at Site.....	27
7.02	Coordination .....	27
7.03	Legal Relationships .....	27
Article 8	Owner's Responsibilities .....	28
8.01	Communications to Contractor .....	28
8.02	Replacement of Engineer .....	28
8.03	Furnish Data .....	28
8.04	Pay When Due.....	28
8.05	Lands and Easements; Reports and Tests.....	28
8.06	Insurance.....	28
8.07	Change Orders .....	28
8.08	Inspections, Tests, and Approvals.....	28
8.09	Limitations on Owner's Responsibilities.....	28
8.10	Undisclosed Hazardous Environmental Condition .....	29
8.11	Evidence of Financial Arrangements.....	29
8.12	Compliance with Safety Program .....	29
Article 9	Engineer's Status During Construction .....	29
9.01	Owner's Representative .....	29
9.02	Visits to Site.....	29
9.03	Project Representative.....	29
9.04	Authorized Variations in Work.....	29
9.05	Rejecting Defective Work.....	30
9.06	Shop Drawings, Change Orders and Payments.....	30
9.07	Determinations for Unit Price Work.....	30
9.08	Decisions on Requirements of Contract Documents and Acceptability of Work .....	30
9.09	Limitations on Engineer's Authority and Responsibilities .....	31
9.10	Compliance with Safety Program .....	31
Article 10	Changes in the Work; Claims .....	31
10.01	Authorized Changes in the Work.....	31
10.02	Unauthorized Changes in the Work.....	31
10.03	Execution of Change Orders .....	31
10.04	Notification to Surety .....	32
10.05	Claims .....	32
Article 11	Cost of the Work; Allowances; Unit Price Work.....	33
11.01	Cost of the Work .....	33
11.02	Allowances .....	35
11.03	Unit Price Work.....	35
Article 12	Change of Contract Price; Change of Contract Times.....	36
12.01	Change of Contract Price .....	36
12.02	Change of Contract Times .....	36

12.03	Delays .....	37
Article 13 – Tests and Inspections; Correction, Removal or Acceptance of Defective Work .....		37
13.01	Notice of Defects .....	37
13.02	Access to Work .....	37
13.03	Tests and Inspections.....	37
13.04	Uncovering Work .....	38
13.05	Owner May Stop the Work .....	38
13.06	Correction or Removal of Defective Work .....	39
13.07	Correction Period .....	39
13.08	Acceptance of Defective Work .....	40
13.09	Owner May Correct Defective Work.....	40
Article 14 – Payments to Contractor and Completion.....		40
14.01	Schedule of Values .....	40
14.02	Progress Payments.....	40
14.03	Contractor’s Warranty of Title.....	42
14.04	Substantial Completion .....	43
14.05	Partial Utilization.....	43
14.06	Final Inspection .....	44
14.07	Final Payment .....	44
14.08	Final Completion Delayed .....	45
14.09	Waiver of Claims.....	45
Article 15 – Suspension of Work and Termination.....		45
15.01	Owner May Suspend Work.....	45
15.02	Owner May Terminate for Cause .....	45
15.03	Owner May Terminate For Convenience .....	46
15.04	Contractor May Stop Work or Terminate.....	46
Article 16 – Dispute Resolution.....		47
16.01	Methods and Procedures .....	47
Article 17 – Miscellaneous.....		47
17.01	Giving Notice .....	47
17.02	Computation of Times.....	47
17.03	Cumulative Remedies .....	48
17.04	Survival of Obligations .....	48
17.05	Controlling Law .....	48
17.06	Headings .....	48

## ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

### 1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
  2. *Agreement*—The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
  3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
  4. *Asbestos*—Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
  5. *Bid*—The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
  6. *Bidder*—The individual or entity who submits a Bid directly to Owner.
  7. *Bidding Documents*—The Bidding Requirements and the proposed Contract Documents (including all Addenda).
  8. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid security of acceptable form, if any, and the Bid Form with any supplements.
  9. *Change Order*—A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.
  10. *Claim*—A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
  11. *Contract*—The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
  12. *Contract Documents*—Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
  13. *Contract Price*—The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*—The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any; (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.
15. *Contractor*—The individual or entity with whom Owner has entered into the Agreement.
16. *Cost of the Work*—See Paragraph 11.01 for definition.
17. *Drawings*—That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
18. *Effective Date of the Agreement*—The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
19. *Engineer*—The individual or entity named as such in the Agreement.
20. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
21. *General Requirements*—Sections of Division 1 of the Specifications.
22. *Hazardous Environmental Condition*—The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto.
23. *Hazardous Waste*—The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
24. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
25. *Liens*—Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
26. *Milestone*—A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
27. *Notice of Award*—The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
28. *Notice to Proceed*—A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.
29. *Owner*—The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
30. *PCBs*—Polychlorinated biphenyls.
31. *Petroleum*—Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
32. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*—The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
34. *Project Manual*—The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
35. *Radioactive Material*—Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
36. *Resident Project Representative*—The authorized representative of Engineer who may be assigned to the Site or any part thereof.
37. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
38. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
39. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
40. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
41. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.
42. *Specifications*—That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
43. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.
44. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
45. *Successful Bidder*—The Bidder submitting a responsive Bid to whom Owner makes an award.
46. *Supplementary Conditions*—That part of the Contract Documents which amends or supplements these General Conditions.
47. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or Subcontractor.
48. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

49. *Unit Price Work*—Work to be paid for on the basis of unit prices.
50. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
51. *Work Change Directive*—A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

## 1.02 Terminology

A. The words and terms discussed in Paragraph 1.02.B through F are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

### B. *Intent of Certain Terms or Adjectives:*

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

### C. *Day:*

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

### D. *Defective:*

1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
  - a. does not conform to the Contract Documents; or
  - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
  - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

### E. *Furnish, Install, Perform, Provide:*

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
  3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
  4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

## **ARTICLE 2 – PRELIMINARY MATTERS**

### **2.01     *Delivery of Bonds and Evidence of Insurance***

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

### **2.02     *Copies of Documents***

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

### **2.03     *Commencement of Contract Times; Notice to Proceed***

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

### **2.04     *Starting the Work***

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

### **2.05     *Before Starting Construction***

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

as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.07 *Initial Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
  - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
  - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
  - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

**ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE**

3.01 *Intent*

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

3.02 *Reference Standards*

- A. Standards, Specifications, Codes, Laws, and Regulations
  - 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.



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

### 3.03 *Reporting and Resolving Discrepancies*

#### *A. Reporting Discrepancies:*

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

#### *B. Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
  - a. the provisions of any standard, specification, manual, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference in the Contract Documents); or
  - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

### 3.04 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:
  1. A Field Order;
  2. Engineer's approval of a Shop Drawing or Sample (subject to the provisions of Paragraph 6.17.D.3); or
  3. Engineer's written interpretation or clarification.

### 3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions; or
2. reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.

B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

### 3.06 *Electronic Data*

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

## **ARTICLE 4 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS**

### 4.01 *Availability of Lands*

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

### 4.02 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site; and
2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the “technical data” contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such “technical data” is identified in the Supplementary Conditions. Except for such reliance on such “technical data,” Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:

1. the completeness of such reports and drawings for Contractor’s purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any “technical data” or any such other data, interpretations, opinions, or information.

#### 4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed either:

1. is of such a nature as to establish that any “technical data” on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
2. is of such a nature as to require a change in the Contract Documents; or
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

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

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

C. *Possible Price and Times Adjustments:*

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor’s cost of, or time required for, performance of the Work; subject, however, to the following:
  - a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
  - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:
  - a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
  - b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or
  - c. Contractor failed to give the written notice as required by Paragraph 4.03.A.
3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, neither Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

#### 4.04 *Underground Facilities*

- A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
  1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data provided by others; and
  2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
    - a. reviewing and checking all such information and data;
    - b. locating all Underground Facilities shown or indicated in the Contract Documents;
    - c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction; and
    - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.
- B. *Not Shown or Indicated:*
  1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

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

#### 4.05 *Reference Points*

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

#### 4.06 *Hazardous Environmental Condition at Site*

- A. *Reports and Drawings:* The Supplementary Conditions identify those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at the Site.
- B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
  1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
  2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
  3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.
- D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 4.06.E.

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

## **ARTICLE 5 – BONDS AND INSURANCE**

### **5.01     *Performance, Payment, and Other Bonds***

- A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.
- B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed each bond.

- C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

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

5.03 *Certificates of Insurance*

- A. Contractor shall deliver to Owner, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.
- B. Owner shall deliver to Contractor, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.
- C. Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- D. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor.
- E. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.

5.04 *Contractor's Insurance*

- A. Contractor shall purchase and maintain such insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:
1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
  2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
  3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
  4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:
    - a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

- b. by any other person for any other reason;
- 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
- 6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

- 1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, be written on an occurrence basis, include as additional insureds (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;
- 2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
- 3. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;
- 4. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);
- 5. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and
- 6. include completed operations coverage:
  - a. Such insurance shall remain in effect for two years after final payment.
  - b. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 *Owner's Liability Insurance*

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

5.06 *Property Insurance*

- A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
- 1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee;



2. be written on a Builder's Risk "all-risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage (other than that caused by flood), and such other perils or causes of loss as may be specifically required by the Supplementary Conditions.
  3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
  4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
  5. allow for partial utilization of the Work by Owner;
  6. include testing and startup; and
  7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other loss payee to whom a certificate of insurance has been issued.
- B. Owner shall purchase and maintain such equipment breakdown insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee.
- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other loss payee to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.
- D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.
- E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under this Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

#### 5.07 *Waiver of Rights*

- A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or loss payees thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies

and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

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

#### 5.08 *Receipt and Application of Insurance Proceeds*

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

#### 5.09 *Acceptance of Bonds and Insurance; Option to Replace*

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

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

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

**ARTICLE 6 – CONTRACTOR’S RESPONSIBILITIES**

6.01 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

6.02 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner’s written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.
- B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

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

6.05 *Substitutes and "Or-Equals"*

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.
1. *"Or-Equal" Items:* If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:
    - a. in the exercise of reasonable judgment Engineer determines that:
      - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
      - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole; and
      - 3) it has a proven record of performance and availability of responsive service.
    - b. Contractor certifies that, if approved and incorporated into the Work:
      - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
      - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
  2. *Substitute Items:*
    - a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.
    - b. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

- c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented by the General Requirements, and as Engineer may decide is appropriate under the circumstances.
  - d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
    - 1) shall certify that the proposed substitute item will:
      - a) perform adequately the functions and achieve the results called for by the general design,
      - b) be similar in substance to that specified, and
      - c) be suited to the same use as that specified;
    - 2) will state:
      - a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time,
      - b) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
      - c) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;
    - 3) will identify:
      - a) all variations of the proposed substitute item from that specified, and
      - b) available engineering, sales, maintenance, repair, and replacement services; and
    - 4) shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change.
- B. *Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.
- C. *Engineer's Evaluation:* Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by a Change Order in the case of a substitute and an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.
- D. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- E. *Engineer's Cost Reimbursement:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for

evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

- F. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

6.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.
- B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.
- C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:
1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity; nor
  2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.
- E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.
- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as a loss payee on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) for all losses and

damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

#### 6.07 *Patent Fees and Royalties*

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

#### 6.08 *Permits*

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

#### 6.09 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

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

6.11 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas:*

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

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

- D. *Loading Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 *Record Documents*

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

6.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:



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

6.14 *Safety Representative*

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

6.15 *Hazard Communication Programs*

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

6.16 *Emergencies*

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

6.17 *Shop Drawings and Samples*

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

1. *Shop Drawings:*

- a. Submit number of copies specified in the General Requirements.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples:*

- a. Submit number of Samples specified in the Specifications.
- b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Submittal Procedures:*

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

D. *Engineer's Review:*

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. *Resubmittal Procedures:*

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

6.18 *Continuing the Work*

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

6.19 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on representation of Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
  2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
1. observations by Engineer;
  2. recommendation by Engineer or payment by Owner of any progress or final payment;
  3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
  4. use or occupancy of the Work or any part thereof by Owner;

5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;
6. any inspection, test, or approval by others; or
7. any correction of defective Work by Owner.

6.20 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
  1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
  2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

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

concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

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

## **ARTICLE 7 – OTHER WORK AT THE SITE**

### **7.01     *Related Work at Site***

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

### **7.02     *Coordination***

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

### **7.03     *Legal Relationships***

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's wrongful actions or inactions.
- C. Contractor shall be liable to Owner and any other contractor under direct contract to Owner for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's wrongful action or inactions.

## **ARTICLE 8 – OWNER'S RESPONSIBILITIES**

### **8.01     *Communications to Contractor***

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

### **8.02     *Replacement of Engineer***

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

### **8.03     *Furnish Data***

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

### **8.04     *Pay When Due***

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

### **8.05     *Lands and Easements; Reports and Tests***

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

### **8.06     *Insurance***

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

### **8.07     *Change Orders***

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

### **8.08     *Inspections, Tests, and Approvals***

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

### **8.09     *Limitations on Owner's Responsibilities***

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

8.10 *Undisclosed Hazardous Environmental Condition*

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

8.11 *Evidence of Financial Arrangements*

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

8.12 *Compliance with Safety Program*

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

**ARTICLE 9 – ENGINEER'S STATUS DURING CONSTRUCTION**

9.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents.

9.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

- A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

- A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a

Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

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

9.06 *Shop Drawings, Change Orders and Payments*

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

9.07 *Determinations for Unit Price Work*

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

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

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



9.09 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to the Resident Project Representative, if any, and assistants, if any.

9.10 *Compliance with Safety Program*

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

**ARTICLE 10 – CHANGES IN THE WORK; CLAIMS**

10.01 *Authorized Changes in the Work*

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

10.02 *Unauthorized Changes in the Work*

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

10.03 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

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

#### 10.04 *Notification to Surety*

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

#### 10.05 *Claims*

- A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.
- B. *Notice:* Written notice stating the general nature of each Claim shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Times shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).
- C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:
  1. deny the Claim in whole or in part;
  2. approve the Claim; or
  3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.
- D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.
- E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

- F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

## **ARTICLE 11 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK**

### **11.01    *Cost of the Work***

- A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 11.01.B, and shall include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
  2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
  3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.
  4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
  5. Supplemental costs including the following:
    - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
    - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
    - c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.
- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A.

C. *Contractor's Fee:* When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

## 11.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances:*
  - 1. Contractor agrees that:
    - a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
    - b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance:*
  - 1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

## 11.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:
  - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
  - 2. there is no corresponding adjustment with respect to any other item of Work; and
  - 3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

## ARTICLE 12 – CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

### 12.01 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or
  2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or
  3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).
- C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:
1. a mutually acceptable fixed fee; or
  2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
    - a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;
    - b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;
    - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 12.01.C.2.a and 12.01.C.2.b is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;
    - d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
    - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
    - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

### 12.02 *Change of Contract Times*

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

- B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

#### 12.03 *Delays*

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

### **ARTICLE 13 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK**

#### 13.01 *Notice of Defects*

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

#### 13.02 *Access to Work*

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

#### 13.03 *Tests and Inspections*

- A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;
  2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in Paragraph 13.04.C; and
  3. as otherwise specifically provided in the Contract Documents.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.
- E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation.
- F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

#### 13.04 *Uncovering Work*

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

#### 13.05 *Owner May Stop the Work*

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



for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

- A. Promptly after receipt of written notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).
- B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
  - 1. repair such defective land or areas; or
  - 2. correct such defective Work; or
  - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
  - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

### 13.08 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and for the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

### 13.09 *Owner May Correct Defective Work*

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

## **ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION**

### 14.01 *Schedule of Values*

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

### 14.02 *Progress Payments*

#### *A. Applications for Payments:*

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed

by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

**B. Review of Applications:**

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
  - a. the Work has progressed to the point indicated;
  - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and any other qualifications stated in the recommendation); and
  - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
  - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or
  - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
  - a. to supervise, direct, or control the Work, or
  - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
  - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

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

*C. Payment Becomes Due:*

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

*D. Reduction in Payment:*

- 1. Owner may refuse to make payment of the full amount recommended by Engineer because:
  - a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
  - b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
  - c. there are other items entitling Owner to a set-off against the amount recommended; or
  - d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.
- 2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor remedies the reasons for such action.
- 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1 and subject to interest as provided in the Agreement.

14.03 *Contractor's Warranty of Title*

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

#### 14.04 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the tentative certificate to Owner, notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will, within said 14 days, execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.
- E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the tentative list.

#### 14.05 *Partial Utilization*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
  - 1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 14.04.A through D for that part of the Work.
  - 2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
  - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

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

#### 14.06 *Final Inspection*

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

#### 14.07 *Final Payment*

##### A. *Application for Payment:*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:
  - a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.6;
  - b. consent of the surety, if any, to final payment;
  - c. a list of all Claims against Owner that Contractor believes are unsettled; and
  - d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

##### B. *Engineer's Review of Application and Acceptance:*

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

##### C. *Payment Becomes Due:*

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's

recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor.

14.08 *Final Completion Delayed*

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

14.09 *Waiver of Claims*

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

**ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION**

15.01 *Owner May Suspend Work*

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

15.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will justify termination for cause:
1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);
  2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
  3. Contractor's repeated disregard of the authority of Engineer; or
  4. Contractor's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

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

15.03 *Owner May Terminate For Convenience*

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

15.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within



30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

## **ARTICLE 16 – DISPUTE RESOLUTION**

### **16.01    *Methods and Procedures***

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

## **ARTICLE 17 – MISCELLANEOUS**

### **17.01    *Giving Notice***

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended; or
  2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

### **17.02    *Computation of Times***

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

17.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

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

17.05 *Controlling Law*

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

17.06 *Headings*

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

## **VII. SUPPLEMENTARY CONDITIONS**

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (No. C-700, 2007 Edition) and other provisions of the Contract Documents as indicated below. All provisions that are not so amended or supplemented remain in full force and effect.

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

#### TABLE OF CONTENTS

	Page
SC-1.01.A.3	1
SC-1.01.A.9	1
SC-2.03.A	1
SC-4.02	1
SC-4.07	1
SC-5.01	2
SC-5.04	2
SC-6.05.C	4
SC-6.06	5
SC-6.10	5
SC-6.11.B	5
SC-6.11.C	5
SC-6.16	6
SC-13.02	6
SC-14.02.A.3	6
SC-14.02.A.4	7
SC-14.02.A.5	7
SC-14.02E	7
SC-15.02.B	8
SC-17.05	8
SC-18	8
SC-19	9
SC-20	9
SC-21	10
SC-22	10
SC-23	10
SC-24	11
SC-25	11
SC-26	11
SC-27	12
SC-28	12
SC-29	13
SC-30	13
SC-31	13

**SC-1.01.A.3. Add the following language to the end of Paragraph 1.01.A.3:**

The Application for Payment form to be used on this Project is EJCDC No. C-620 or AIA Document G720. The Owner must approve all Applications for Payment before payment is made.

**SC-1.01.A.9. Add the following language to the end of Paragraph 1.01.A.9:**

The Change Order form to be used on this Project is EJCDC No. C-941 or a form provided by or otherwise acceptable to the Owner. Owner's approval is required before Change Orders are effective.

**SC-2.03.A. Delete Paragraphs 2.03.A in its entirety and insert the following:**

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

**SC-4.02. Add the following new paragraphs immediately after Paragraph 4.02.B:**

- C. In the preparation of Drawings and Specifications, Engineer relied upon the following reports of exploration and tests of subsurface conditions at the Site:
  - 1. Soil boring logs included on the Contract Drawings.

**SC-4.07. Add the following new section immediate after Paragraph 4.06.I:**

**4.07 Archeological Finds / Significantly Important Archeological Resources**

- A. For the Contractor's information, the Engineers have no information suggesting that the Project sites are of archeological significance.
- B. Should the Contractor or Engineer discover evidence of remains, such as stone masonry building foundations, bones or other items of archaeological significance, Contractor shall report these findings to 1. Owner, 2. Local Historical Society, 3. State Historic Preservation Office (860) 256-2761, and 4. Resident Engineer or Inspector, and shall exercise the utmost care to ensure that these areas remain undisturbed. Contractor shall allow recovery of such finds by the authorities, shall not remove such artifacts under penalty of law, and shall prevent constriction or private vehicles from crossing over these areas. In addition, when directed by the Engineer, cover these areas with 1-ft common fill to the limits directed by the Engineer. Be advised that graves and any associated human remains are protected by Connecticut State law (C.G.S. Section 10-388 and 10-390). Any possible human skeletal remains must be reported to the State Archaeologist (860) 486-5248 and the State's Chief

Medical Examiner (860) 679-3980 immediately upon discovery. If the State Archaeologist is unavailable, please contact the State Historic Preservation Office at the number above for immediate assistance.

**SC-5.01. Add the following new paragraph immediately after Paragraph 5.01.C:**

- D. 100% Performance and 100% Payment bonds are required of the successful bidder. This bond shall cover all aspects of the specification and shall be delivered to the Purchasing Agent prior to the issuance of a purchase order. Bonds must meet the following requirements: Corporation - must be signed by an official of the corporation above their official title and the corporate seal must be affixed over the signature; Firm or Partnership - must be signed by all the partners and indicate they are “doing business as”; Individual - must be signed by the owner and indicated as “Owner”. The surety company executing the bond or countersigning must be licensed in Connecticut and an official of the surety company must sign the bond with the corporate seal affixed over their signature. Signatures of two witnesses for both the principal and the surety must appear on the bond. Power of attorney for the official signing the bond for the surety company must be submitted with the bond. The Performance and Payment Bonds will be returned upon completion and acceptance of the job.

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

- C. Contractor/Vendor will agree to maintain insurance coverages in force at all times during which work/services are to be performed in accordance with the requirements of the **“Insurance Requirements”** section of this Project Manual.

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

1. During Bidding. The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, or “or-equal” materials and equipment as defined in paragraph 6.05 of the General Conditions, or those substitute materials and equipment approved by the Engineer and identified by Addendum. The materials and equipment described in the Bidding Documents establish a standard of required type, function, and quality to be met by any proposed substitute or “or-equal” item. Request for Engineer’s clarification of materials and equipment considered “or-equal” prior to the Effective Date of the Agreement must be received by the Engineer at least 5 days prior to the date for receipt of Bids. No item of material or equipment will be considered by Engineer as a substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids. Each request shall conform to the requirements of Paragraph 6.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon the Bidder. Engineer’s decision of approval or disapproval of a proposed item will be final. If Engineer

approves any proposed substitute item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

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

- 6.06.H: The Contractor shall not award work valued at more than fifty (50%) percent of the Contract Price to Subcontractor(s), without prior written approval of the Owner.
- 6.06.I: The apparent low bidder (within 5 days of the bid opening) shall submit to the Owner a list of all proposed subcontractors. Subcontractors shall be submitted by the low bidder and evaluated by the Owner in accordance with article 12 of the Instructions to Bidders.

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

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

**SC-6.11.B. Add the following language at the end of paragraph 6.11.B:**

The materials or refuse or other debris used in the construction of the work, shall be legally disposed away from the site in such manner so that will not endanger or interfere with persons or the work being performed.

**SC-6.11.C. Delete Paragraphs 6.11.C in its entirety and insert the following:**

*C. Cleaning:*

1. The Contractor shall exercise every precaution and means to prevent and control dust arising out of all construction operations from becoming a nuisance to abutting property owners or surrounding neighborhoods. Pavements adjoining the pipe trench shall be kept broomed off and washed clean of excess materials wherever and whenever directed. Repeated daily dust control treatment shall be provided to satisfactorily prevent the spread of dust until permanent pavement repairs are made and until earth stockpiles have been removed, and all construction operations that might cause dust

- have been completed. No extra payment will be made for dust control measures, compensation shall be considered to be included in the prices stipulated for the appropriate items as listed in the bid.
2. In case the Contractor fails or neglects to promptly remove all surplus materials, tools, and incidentals after backfilling, leaving the street or surrounding area clean and free of debris, and do the required repaving when ordered, the Owner may, after 24 hours notice, cause the work to be done and the cost thereof deducted from any payment due to the Contractor.
  3. After the work is completed, the pipes, manholes, and structures shall be carefully cleaned free of debris and dirt, broken masonry, and mortar, and left in first class condition, ready to use. All temporary or excess materials shall be disposed of off-site and the work left broom clean, to the satisfaction of the Owner.
  4. Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

**SC-6.16. Add a new paragraph immediately after Paragraph 6.16.A:**

- B. The Contractor is required to provide the Owner with a telephone number which can be used during emergencies, 24 hours per day, seven days per week, to reach the Contractor.

**SC-13.02. Add a new paragraph immediately after Paragraph 13.02.A:**

- B. The Contractor shall allow access to the site and project records by the Connecticut Department of Energy and Environmental Protection (DEEP) and/or authorized Federal and State representatives.

**SC-14.02.A.3. Delete paragraph 14.02.A.3 in its entirety and insert the following:**

3. The amount of retainage with respect to progress payments will be as stipulated in the Instructions to Bidders. No payments will be made that would deplete the retainage, place in escrow any funds that are required for retainage, or invest the retainage for the benefit of the Contractor.

**SC-14.02.A.4. Add the following new Paragraph after Paragraph 14.02.A.3:**

4. The Application for Payment form to be used on this Project is EJCDC No. C-620 or AIA Document G720. The Owner must approve all Applications for Payment before payment is made.



**SC-14.02.A.5. Add the following new Paragraph after Paragraph 14.02.A.4:**

5. The Contractor and all Subcontractors must submit weekly Connecticut Certified Payroll Forms in accordance with the requirements set forth in **“Prevailing Wage Requirements & Rates”** with each Application for Payment. Applications for Payment will not be processed until all of the required signed certified payrolls forms from the Contractor and all Subcontractors have been submitted to the Owner.

**SC-14.02.E. Add the following new Paragraph after Paragraph 14.02.D.3:**

*E. CGS 49.41a - Enforcement of Payment by General Contractor to Subcontractor and Subcontractor to his Subcontractors*

- a. The general contractor, within thirty days after payment to the contractor by the state or a municipality, shall pay any amounts due any subcontractor, whether for labor performed or materials furnished, when the labor or materials have been included in a requisition submitted by the contractor and paid by the state or a municipality; (2) each subcontractor shall pay any amounts due any of its subcontractors, whether for labor performed or materials furnished, within thirty days after such subcontractor receives a payment from the general contractor which encompasses labor or materials furnished by such subcontractor.
- b. Each payment requisition submitted in accordance with the requirements of subsection (a) of this section, except for any such payment requisition submitted pursuant to a contract administered by or in conjunction with the Department of Transportation, shall include a statement showing the status of all pending construction change orders, other pending change directives and approved changes to the original contract or subcontract. Such statement shall identify the pending construction change orders and other pending change directives, and shall include the date such change orders and directives were initiated, the costs associated with their performance and a description of any work completed. As used in this section, "pending construction change order" or "other pending change directive" means an authorized directive for extra work that has been issued to a contractor or a subcontractor.
- c. If payment is not made by the general contractor or any of its subcontractors in accordance with such requirements, the subcontractor shall set forth his claim against the general contractor and the subcontractor of a subcontractor shall set forth its claim against the subcontractor through notice by registered or certified mail. Ten days after the receipt of that notice, the general contractor shall be liable to its subcontractor, and the subcontractor shall be liable to its subcontractor, for interest on the amount due and owing at the rate of one per cent per month. In addition, the general contractor, upon written demand of its subcontractor, or the subcontractor, upon written demand of its subcontractor, shall be required to place funds in the amount of the claim, plus interest

- of one per cent, in an interest-bearing escrow account in a bank in this state, provided the general contractor or subcontractor may refuse to place the funds in escrow on the grounds that the subcontractor has not substantially performed the work according to the terms of his or its employment. In the event that such general contractor or subcontractor refuses to place such funds in escrow, and the party making a claim against it under this section is found to have substantially performed its work in accordance with the terms of its employment in any arbitration or litigation to determine the validity of such claim, then such general contractor or subcontractor shall pay the attorney's fees of such party.
- d. No payment may be withheld from a subcontractor for work performed because of a dispute between the general contractor and another contractor or subcontractor.
  - e. This section shall not be construed to prohibit progress payments prior to final payment of the contract and is applicable to all subcontractors for material or labor whether they have contracted directly with the general contractor or with some other subcontractor on the work.

**SC-15.02.B. Delete the word “seven” from the second line and insert the word “ten” in its place.**

**SC-17.05 Add a new paragraph immediately after Paragraph 17.05.A:**

- B. Contractors shall observe and comply with all Federal, State and local laws, ordinances and regulations. Contractors shall indemnify and save harmless the Town, all of its officers, agents and servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation or negligence whether by the bidder, his employees, his consultant and/or their employees.

**SC-18 Add a new Article 18, “STREET AND SIDEWALK ACCESS,” after Article 17.**

**18.01 *Streets and Sidewalks to be Kept Open***

- A. The Contractor shall at all times keep the streets and highways in which he may be working open for pedestrian and vehicular traffic. If in the opinion of the Owner, the interest of abutters and the public requires it, the Contractor shall bridge or construct planking across trenches at street crossings and roads or private ways. The Contractor shall conduct his work in such a manner as the Owner may direct from time to time. No sidewalk shall be obstructed where it is possible to avoid it.
- B. As required or directed by the Owner, the Contractor shall install in selected locations suitable plank crossings, substantially built and reinforced to sustain vehicular traffic across excavations. No separate payment will be made for this work, the cost of which shall be included in the prices stipulated for the appropriate items in the work as listed in the bid.

#### 18.02 *Emergency Access*

- A. The Contractor shall provide all necessary emergency vehicle crossings at principal intersections or ways usually traveled by emergency apparatus with provisions for the apparatus so it can travel along the line of the pipe installations.
- B. If it becomes necessary at any time to temporarily barricade a street or cause detours to be put up, or rerouting of traffic, the Fire and Police Departments, Board of Education, and ambulance company shall be notified by the Contractor, and their consent obtained before any such action is initiated.

#### 18.03 *Bus Line Interference*

- A. Whenever it may be necessary to interfere with any bus lines, notice shall be given to the corporation owning the same, and reasonable time will be given to said corporation to arrange the schedule for operation of the bus line, as it may be necessary.

#### **SC-19 Add a new Article 19, “TEMPORARY POWER,” after Article 18.**

- 19.01 The Contractor shall make all the necessary arrangements with the power company for providing temporary electric power for his use. All unauthorized sources of power, such as from neighboring homes, shall be prohibited.

#### **SC-20 Add a new Article 20, “BLASTING,” after Article 19.**

#### 20.01 *Approvals*

- A. The approval of the Owner shall first be obtained before blasting is permitted. Before any explosive, such as dynamite or detonator caps are stored or used, the Contractor shall contact the Fire Department of the Town of Montville for instructions relative to the regulations for possession and use of explosives in the Town of Montville, Connecticut. The Contractor shall obtain all required permits, or licenses for possession and use of explosives to be used on the site or sites of construction.
- B. If blasting is proposed the Contractor must acquire approval from the utilities companies with infrastructure located within the project area.

#### 20.02 *Requirements*

- A. The Contractor shall also be responsible for the explosive materials at all times; for the keeping of records regarding the explosives open at all times to inspection by the Police and Fire Departments of the Town of Montville, Connecticut; for the storage of explosive materials in a secure manner away from all tools, overnight or for any length of time at the

site or sites of construction; for the keeping of only such quantity of explosive material as may be needed for the work underway; for the immediate reporting to the Police and Fire Departments of the Town of Montville, Connecticut of all unaccounted for explosive materials; for completely, adequately and carefully covering all blasts with suitable blasting mats in such a manner to prevent damage to landscape features, structures, facilities, privately owned and all other properties and surrounding objects and in a manner that will prevent injury to persons.

- B. Unless specifically permitted, no blasting shall be done between the hours of sunset and sunrise on any day and no blasting will be allowed on Sundays or legal holidays.
- C. Receptacles especially constructed for use in the storage of explosives shall be provided for the storage of explosives and they shall be proof against bullets, fire or other conditions which might cause explosions of the contents. When the need for explosives is ended, all such materials remaining on the job shall be promptly removed from the premises.

**SC-21 Add a new Article 21, “CONTRACTOR TO CHECK DIMENSIONS AND SCHEDULES,” after Article 20.**

21.01 The Contractor will be required to check all dimensions and quantities shown on the drawings or schedules given to him by the Owner, and shall notify the Owner of all errors therein which he may discover by examining and checking the same. The Contractor shall not take advantage of any error or omissions in these specifications, drawings, or schedules. The Owner will furnish all instructions should such error or omissions be discovered, and the Contractor shall carry out such instructions as if originally specified.

**SC-22 Add a new Article 22, “PROTECTION OF TREES,” after Article 21.**

22.01 The Contractor shall take special care to preserve and protect from injury all trees located along the lines of construction, and no such trees shall be cut down, trimmed, or otherwise cut unless called for on the Plans or without permission from the Owner.

**SC-23 Add a new Article 23, “LIGHTS, BARRIERS, WATCHMEN AND INDEMNITY,” after Article 22.**

- A The Contractor shall erect and maintain such barriers, lighting, warning lights, danger warning signals, and signs that will prevent accidents during the construction work and protect the work and insure the safety of personnel and the public at all times and places; the Contractor shall indemnify and protect the Owner and the Engineer in every respect from injury or damage whatsoever caused by any act of neglect by the contractor or his subcontractors, or their servants or agents, including any claims arising out of failure to erect and maintain sufficient railing or fence as required by Section 13A-111 Connecticut General Statutes from claims or defect in violation of 12A-14q Connecticut General Statutes.

- B The fact that the Department of Public Works may retain control of the premises, or that it or its agents may take action to erect or maintain railings or fences shall not relieve the Contractor's obligations hereunder.
- C In addition to the above, when and as necessary, or when required by the Owner, the Contractor shall post sign and employ watchmen or flagmen for the direction of traffic at the site and for excluding at all times unauthorized persons from the work site.
- D The Contractor shall be responsible for excluding at all times from the land within the easement areas, all persons not directly connected with the work.

**SC-24 Add a new Article 24, "NIGHTWORK," after Article 23.**

- A Nightwork, or work on Saturdays, Sundays, or legal holidays requiring the presence of an engineer or inspector, will not be permitted except as designated by the Owner in case of an emergency. Should it be necessary for the Owner to operate an organization for continuous nightwork or for emergency nightwork, the lighting, safety and other facilities which are deemed necessary shall be provided by the Contractor. Compensation for this work shall be considered as having been included in the prices stipulated for the appropriate items of work as listed in the bid, and no extra compensation will be paid by the Owner.

**SC-25 Add a new Article 25, "TRAFFIC CONTROL," after Article 24.**

- A. The Contractor shall schedule and perform his work so as to cause minimum interference to traffic and to safeguard all highways and traffic therein, and to cause absolutely no interference to fire and emergency vehicles. Construction equipment and materials shall be located as to not endanger the work or obstruct traffic.
- B. Every reasonable means shall be made to reduce, to a minimum, interference with and inconvenience to business concerns on account of the construction work.
- C. The Contractor shall provide and maintain all signs, barricades, and traffic control equipment that may be required for the satisfactory performance of providing traffic control.

**SC-26 Add a new Article 26, "LENGTH OF TRENCH TO BE OPENED," after Article 25.**

- A. The length of trench opened at any time from the point where ground is being broken to complete backfill and also the amount of space in the streets or public and private lands occupied by equipment or supplies, shall not exceed the length or space considered reasonably necessary and expedient by the Owner. In determining the length of the open trench or spaces for equipment, material, and supplies and other necessities, the Owner will consider the nature of the lands or streets where work is being done, types and methods of

construction and equipment being used, inconvenience to the public or to private parties, possible dangers and other matters. All work must be constructed with a minimum of inconvenience and danger to all parties concerned.

- B. Whenever the trench obstructs pedestrians and vehicular traffic, or any public or private property, the Contractor shall take such means as is necessary to maintain such traffic and access. Until such time as the work may have attained sufficient strength to support backfill, or if for any reason it is not expedient to backfill the trench immediately, the Contractor shall construct and maintain suitable plank crossings and bridge crossings to carry essential traffic in or to the street or property in question, as specified or directed.
- C. Suitable lights, signs, and such required items to direct traffic shall be furnished and maintained by the Contractor.
- D. The Contractor shall keep streets free from obstructions, debris, and all other materials. The Owner may, at any time, order the removal of any such material from the work area - and should the Contractor fail to do so within 24 hours after such notice of removal of the same, the Owner may cause the material, debris, or other matter to be removed by some other such persons as he may employ, at the Contractor's expense. The cost thereof may be deducted from any payments due the Contractor under this contract. In special cases where public safety demands, the Owner may remove such materials without prior notice.

**SC-27 Add a new Article 27, "CONTRACTOR TO LAYOUT WORK," after Article 26.**

- A. The Owner will establish such general reference points as in his judgment will enable the Contractor to proceed with the work. The Contractor, at his own expense, shall provide all materials and equipment and such qualified helpers as the Owner may require for setting the general reference points and shall protect and preserve all stakes, benches, and other markers used to identify the reference points. The Contractor shall lay out all the Contract work from the above and shall be responsible for the accuracy of all lines, grades, and measurements. He will be required to employ at no extra expense to the Owner, a Connecticut registered land surveyor or registered professional engineer who shall perform all layout work for the construction of the Contract work, including all lines, grades, and measurements.

**SC-28 Add a new Article 28, "EXISTING UTILITIES OR CONNECTIONS," after Article 27.**

- A. The location of existing underground pipes, conduits, and structures as shown has been collected from the best available sources and the Owner together with his agents, does not imply or guarantee the data and information in connection with underground pipes, conduits, structures, and such other parts, as to their completeness, nor their locations as indicated. The contractor shall assume that there are existing water, gas, and other utility

connections to each and every building en-route, whether they appear on the drawings or not. Any expense and/or delay occasioned by utilities and structures or damage thereto, including those not shown, shall be the responsibility of the Contractor, at no additional expense to the Owner.

- B. Before proceeding with construction operations, the Contractor shall make such supplemental investigations, including exploratory excavations by hand digging, as he deems necessary to uncover and determine the exact locations of utilities and structures and shall have no claims for damages due to encountering subsurface structures or utilities in locations other than those shown on the drawings, or which are made known to the Contractor prior to construction operations. The Contractor shall be responsible and liable for all damages to existing utilities and structures.

**SC-29 Add a new Article 29, “FIRE AND POLICE NOTIFICATION,” after Article 28.**

- A. If it becomes necessary at any time to temporarily barricade a street or cause detours to be put up, or rerouting of traffic, the Fire and Police Departments, SEAT, Board of Education, and American Ambulance shall be notified by the Contractor, and their consent obtained before any such action is initiated.

**SC-30 Add a new Article 30, “CLEANING FINISHED WORK AND THE SITE,” after Article 29.**

- A. After the work is completed, the pipes, manholes, and structures shall be carefully cleaned free of debris and dirt, broken masonry, and mortar, and left in first class condition, ready to use. All temporary or excess materials shall be disposed off-site and the work left broom clean, to the satisfaction of the Owner.
- B. In completing his operations, the Contractor shall immediately remove all surplus material, tools, and other property belonging to him, leaving the entire street or surroundings free and clean and in good order, at no additional expense to the Owner. The Contractor shall exercise special care in keeping the rights-of-way and private lands upon which work is performed free and clean of all debris, and shall remove all tools and other property when they are not in use.

**SC-31 Add a new Article 31, “LICENSING REQUIREMENTS,” after Article 30.**

31.01 The following are licensing requirements for the State of Connecticut to perform water installations and repairs:

- A. All Electrical work shall be performed by the Connecticut licensed Electrician.

## **VIII. TECHNICAL SPECIFICATIONS**



## INDEX TO TECHNICAL SPECIFICATIONS

SECTION	TITLE
1.00	General Requirements
1.02	Mobilization
2.01	Maintenance & Protection of Traffic
2.03	Work On Or Near Private Property
2.04	Dewatering, Control and Diversion of Water
2.06	Calcium Chloride For Dust Control
2.08	Clearing and Grubbing
2.09	Sedimentation and Erosion Control
2.10	Test Pits
2.18	Selective Demolition
2.20	Project Sign
3.01	General Excavation
3.02	Trench Earth Excavation & Backfill
3.03	Rock Excavation & Disposal
3.04	Gravel Fill
3.05	Removal of Pavement
3.07	Processed Gravel Base
3.08	Gravel / Sand Pipe or Conduit Bedding
3.10	Crushed Stone
3.12	Traffic Bound Gravel Surface
4.01	Temporary Pavement Replacement for Trench
4.02	Permanent Pavement Replacement for Trench
4.06	Two Course Bituminous Concrete Pavement
4.08	Concrete Sidewalks, Driveways, Ramps, and Curbs
8.01	Topsoil, Seed, Fertilize & Mulch
8.02	Erosion Control Matting
8.03	Water Quality Basin
9.02	Cast-in-Place Concrete House Keeping Pads
9.16	Painted Pavement Markings and Signage
9.20	Site Amenities
9.26	Timber Sign Surround
12.00	Boat Launch Work Measurement and Payment
12.01	Remove and Dispose of Wood Piles
12.02	Precast Concrete Boat Ramp
12.03	Cast-in-Place Concrete Fixed Pier
12.10	Floating Docks, Piles, and Appurtenances
12.15	ADA Compliant Gangway
14.05	Cast-in-Place Reinforced Concrete
16.00	Electrical Work Measurement and Payment
16.010	Electrical General Requirements

16.012	Conduit
16.015	Site Lighting
16.123	Wire and Cable
16.140	Electrical Devices
16.170	Grounding and Bonding
16.195	Identification
16.470	Electrical Service / Service Cabinet / Panelboards
16.475	Overcurrent Protection Devices
16.600	Emergency Call Station
16.800	Testing
35.00	Fishing Pier Work Measurement and Payment
35.01	Fishing Pier
35.05	Construction Staging, In-Water Access, and Barges

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**Town of Montville**

Town Boat Launch Improvements &  
Fishing Pier Construction



**CLA Engineers, Inc.**

Civil • Structural • Survey

SECTION 1.00  
GENERAL REQUIREMENTS

1.01 SUMMARY OF WORK

1.01.1 Description:

The work required under this contract generally includes but is not limited to the following:

1. Mobilizing to the site and providing provisions for maintenance and protection of vehicular and pedestrian traffic.
2. Removal & disposal of existing abandoned timber piles located within the Thames River.
3. Reconstruction of the existing Town boat launch and fixed pier.
4. Furnish and install new floating docks, ramps, and timber piles.
5. Construct the parking lot, sidewalk, and site improvements as depicted on the Contract Drawings.
6. Construct the timber fishing pier.
7. Provide a new electrical service, service cabinet, conduits, and site lighting as required.
8. Provide conduit for future security cameras (cameras and wiring by others)
9. Provide and maintain all erosion and sedimentation control, coffer dams, and dewatering measures as needed to perform the work.
10. All surface restoration, including the roadway pavement (temporary & permanent) and turf re-establishment, and water quality basin plantings.

The contractor shall purchase, provide, and install all materials (temporary and permanent) and equipment necessary to complete the work specified in Contract Documents.

The entire work provided for in these technical specifications and on the Drawings shall be constructed and finished in every respect in a good workmanlike and substantial manner. It is not intended that the Drawings shall show every detail piece of material or equipment, but such parts and pieces as may be in accordance with the best practices and regulatory requirements, even though not shown, shall be furnished and installed. All materials and equipment shall be new unless specifically stated otherwise in these Contract Documents.

1.01.2 Location of Site:

The work site for this contract is located at 55 Dock Road, Uncasville, Connecticut 06382, as shown on the Contract Drawings.

1.01.3 Work Sequence

Work shall be sequenced so as to allow for uninterrupted flow of existing utilities. The contractor shall conform to the sequences of work as outlined in the Construction Drawings and

Specifications. Variations or modifications to the work sequences shall be submitted in writing to the Engineer prior to construction, for their approval.

The contractor shall coordinate work with adjacent utility owners as outlined in the Construction Drawings and Specifications, where appropriate, or as required by the Owner.

All costs associated with sequencing of work and coordination shall be included in the bid prices for other items.

The Contractor shall submit a construction schedule and modify it from time to time as need arises. The Construction schedule shall be based on the specified completion time. The Construction Schedule shall show the order of work including such significant tasks as construction of lines, connections, backfill and compaction, leakage tests, temporary and permanent restoration. The Construction Schedule shall be submitted for the Owner's approval prior to start of Construction and updated at the time of submitting each request for progress payment.

All completed pipelines, mainlines, service connections, conduits, and other appurtenances etc. shall be tested as work progresses and in order to ensure this, the Contractor shall arrange for testing equipment to be on site prior to the commencement of pipe laying as needed.

#### 1.01.4 Survey Assistance:

Furnish helpers on an as needed basis to assist the Engineer in checking work.

#### 1.01.5 Project Coordination

The work included in these Contract Documents is to be performed under the responsibility of a single prime contract. The Contractor is responsible for the coordination of all the work, whether performed by its own personnel or its subcontractor, and will maintain such procedures as necessary to keep its workman and suppliers informed of project progress so as not to unnecessarily delay completion of the Work.

#### 1.01.6 Standard Specifications

The Standard Specifications for Roads, Bridges, and Incidental Construction, Supplement Form 819, dated 2024 of the State of Connecticut, as specifically referenced to in the Technical Specifications, shall apply and be considered a part of this specification as though it were bound herein. The Standard Specification is available from:

[https://portal.ct.gov/dot/business/manuals?language=en\\_US](https://portal.ct.gov/dot/business/manuals?language=en_US)

SECTION 1.02  
MOBILIZATION

1.0 DESCRIPTION

This section shall consist of all work associated with the mobilization and demobilization of the contractor's forces and equipment necessary for performing the work required under the contract. It does not include mobilization and demobilization for specific items of work for which payment is provided elsewhere in the contract.

This section shall also include costs for required bonds, insurances and other incidental preconstruction items associated with the startup and completion of the work.

Mobilization shall include the following:

- A. Costs for performance and payment bonds.
- B. Costs for insurances.
- C. Provide, maintain, and remove temporary sanitary facilities.
- D. Establishing and removing temporary staging areas, lay down areas, and offices if needed.
- E. Any and all startup costs, removal costs, transportations costs, or costs or fees associated with mobilizing equipment or personnel to the project site and off the project site at the completion of work.

4.0 MEASUREMENT AND PAYMENT

The cost of this work shall be measured and paid for as a lump sum for "Mobilization" and shall include all fees, materials, equipment, tools, and labor incidental to the completion of this item.

SECTION 2.01  
MAINTENANCE AND PROTECTION OF TRAFFIC

1.0 DESCRIPTION

**The Town Boat Launch will be closed to the public for the duration of construction. The Contractor shall install and maintain signs and barricades as required and outlined on the Contract Drawings for this closure.**

**An abutting property has an access easement through the work area to Dock Road. The contractor shall maintain safe suitable access through the work area for the abutting property owners' purposes. Barrels, barricades, signage, and other necessary measures shall be used to allow traffic to pass through the construction site to and from the abutting property.**

The Contractor shall maintain traffic in the project area to the satisfaction of the Owner. The Contractor must maintain pedestrian and vehicular traffic and permit access to businesses, factories, residences, and intersecting streets. Where detours will be required, the Owner may require the Contractor to submit a proposed detour plan for all portions of the work to the Owner. This submittal shall be made at least seven days prior to commencing construction. It shall be the sole responsibility of the Contractor to keep the Local Agencies (including but not limited to the Police and Fire Departments) prewarned at least 72 hours in advance of changes in traffic patterns due to reduction of pavement widths or closing of streets. The Contractor shall supply, install, maintain, adjust, move, relocate, and store all signs, suitably lighted barricades, traffic cones and traffic delineators, as necessary to carry out the traffic routing plan and maintain vehicular and pedestrian traffic. All of this work shall meet with the requirements of the State of Connecticut, Local Agencies and the Owner.

The Contractor shall furnish, light, and maintain such signs as may be directed, or may be necessary for the safe regulation, or convenience of traffic. Said signs shall be adequate for the regulation, safety and convenience of traffic. The Contractor shall provide, erect, and maintain suitably lighted barricades, warning lights, etc., as needed, or as directed in order to keep people, animals and vehicles from excavations, obstacles, etc. Traffic signs shall be designed and installed in accordance with MUTCD where applicable. The Contractor shall be required to employ trafficmen and take other such reasonable means of precautions as the Owner may direct, or as may be needed to prevent damage or injury to persons, vehicles, or other property, and to minimize the inconvenience and danger to the public by his construction operations. He shall arrange his operations to provide access to properties along the street including temporary bridges to driveways, and provide access to fire hydrants, manholes, gate boxes, or other utilities. Whenever any trench obstructs traffic in or to any public street, private driveway, or property entrance, the Contractor shall take such steps as required to maintain necessary traffic and access including temporary bridging if required. The Contractor shall confine his occupancy of public or traveled

ways to the smallest space compatible with the efficient and safe performance of the work contemplated by the contract.

The Contractor shall observe and obey all local and state laws, ordinances, regulations and permits in relation to the obstruction of streets and highways, keeping passageways open and protecting traffic where there may be danger from blasting or other construction activities.

Suitable lighted barriers or barricades shall be furnished by the Contractor and put up and maintained at all times during the night or daytime, around all open ditches, trenches, excavations, or other work potentially dangerous to traffic. Such barricades shall be securely supported and braced at least 3 feet high above the ground. Barricades shall be placed on all sides and throughout the entire length and width of all open ditches, trenches, excavations, or other work which must be barred to the general public. Barricades shall be properly painted to the satisfaction of the Owner in order to retain a high degree of visibility to vehicular and pedestrian traffic.

Suitably lighted barricades shall be defined as barricades lit by flashers in accordance with this paragraph or other lighting methods approved by the Owner in lieu thereof. Flashers shall be placed along the entire length of the barricades at an interval no greater than 8 feet, center to center. Flashers shall be power operated, lens directed, enclosed light units which shall provide intermittent light from 70 to 120 flashes per minute, with the period of light emittance occurring not less than 25 percent of each on-off cycle, regardless of temperature. The emitted light shall be yellow in color and the area of light on at least one face of the unit shall be not less than 12 square inches. The discernible light shall be bright enough to be conspicuously visible during the hours of darkness at a minimum distance of 800 feet from the unit under normal atmospheric conditions. For units which beam light in one or more directions, the foregoing specifications shall apply 10 degrees or more to the side and 5 degrees or more above and below the photometric axis.

The Contractor shall furnish and securely fasten flashing units to signs, barricades, and other objects in such numbers and for such lengths of time as are required for the maintenance and protection of traffic, or as the Engineer may order. The flasher shall be in operation during all hours between sunset and sunrise, and during periods of low visibility. The Contractor shall maintain, relocate and operate barricades and flashers throughout the life of the contract. No special payment will be made for barricades or flashers.

Should the Contractor or his employees neglect to set out and maintain barricades or lights, as required in these specifications, the Owner immediately, and without notice, may furnish, install and maintain barricades or lights. The cost thereof shall be borne by the Contractor any may be deducted from any amount due or to become due to the Contractor under this contract.

If the Contractor's operations or occupancy of any public street or highway, or the uneven surfaces over any trenches being maintained by the Contractor shall interfere with the removal or sanding of snow or ice by the public authorities or adjoining land owners, in an ordinary manner with regular highway equipment, the Contractor shall be required to perform such services for the public authorities or adjoining owners without charge. If the Contractor fails to do so, he shall reimburse

the said authorities or adjoining owners for any additional cost to them for doing such occasioned by conditions arising from the Contractor's operations, occupancy, or trench surfaces, together with any damage to the equipment of said parties by those conditions, or claims of any parties for damage or injury or loss by reason of failure to remove snow or ice or to sand icy spots under these conditions.

#### 4.0 MEASUREMENT AND PAYMENT

"Maintenance and Protection of Traffic" will be paid monthly in proportion to the amount of work done as determined by the Owner. Said payments will be a proportionate amount of the Lump Sum Price bid for the Maintenance and Protection of which shall include all costs for furnishing lighted barricades and traffic protection devices and for labor, equipment and services involved in the erecting, maintaining, moving, adjusting, relocating and storing of signs, flashers, lights, barricades, traffic cones, traffic delineators and other devices furnished by the Contractor, as well as the cost of all labor and equipment involved in the maintenance of traffic lanes and detours ordered or included in the approved scheme for maintenance of traffic. Sufficient signing for all approved detours shall be erected to adequately guide traffic around construction.

The use of flagman by the Contractor to control the movements of his own vehicles (owned, rented or contracted for, or those delivering materials and equipment), for the protection of said vehicles, his workmen or other traffic shall not be measured for payment separately, but shall be included in the Lump Sum Price for the Item "Maintenance and Protection of Traffic".

Connecticut D.O.T. certified traffic control flagman if required during any portion of the work shall be included as part of this lump sum item which price shall include all compensation, insurance, benefits, vehicles and any other cost or liability incidental to the furnishing of the certified flagman ordered.

The Contractor will be required under the Contract Lump Sum Price for "Maintenance and Protection of Traffic" to maintain and protect the traffic throughout the entire duration of the contract. No claim for additional payment due to unusual construction conditions encountered or delay caused by the Contractor or other outside agencies shall be considered.



SECTION 2.03  
WORK ON OR NEAR PRIVATE PROPERTY

1.0 DESCRIPTION

The work under this Section includes the protection of private property and the restoration of areas near or on private property.

Every effort shall be made to protect private or public property during construction. All damaged areas shall be replaced in kind by the Contractor at no additional cost to the Owner.

2.0 MATERIALS

All materials not specifically described in other Sections, but required for work included in this Section, shall be new, first quality of their respective kinds, and subject to the approval of the Owner.

3.0 CONSTRUCTION METHODS

All areas affected by the construction outside of the work limits shall be repaired to the complete satisfaction of the Owner. This work shall also include the reinstallation of all mailboxes, signs, and posts that may be affected during construction. Should these items become damaged by the construction, the Contractor shall replace the damaged items at no additional cost to the Owner.

4.0 MEASUREMENT AND PAYMENT

No separate measurement or payment shall be made for this item and all costs in connection there with shall be included in other contract items.

SECTION 2.04  
DEWATERING, CONTROL AND DIVERSION OF WATER

1.0 DESCRIPTION

The work covered under this Section includes furnishing all labor, equipment and materials, and performing all operations in connection with the dewatering, control and diversion of water, and all other operations necessary to maintain in a dry condition all excavation and work areas of this Contract.

The Contractor shall be solely responsible for protecting the work area from damage from damage or failure during construction. The Contractor shall be responsible for performing all required dewatering in such a manner as to prevent injury to persons or public health, or damage to existing facilities of the work in progress.

The Contractor shall provide a flood contingency plan as called for on the Contract Drawings.

2.0 MATERIALS

The Contractor shall be responsible for providing, maintaining, operating and removing all dewatering, and other facilities, including all pumping and appurtenant equipment, required to maintain in a dry condition the areas in which construction of this Contract is to be conducted. Materials shall be as shown on the Contract Drawings and as follows:

- A. Hay bales and silt fence shall be as called for on the Plans.
- B. Crushed stone as required shall be No. 3 stone in accordance with M.01.02 of the Standard Specifications.
- C. Stone for Riprap shall conform to the requirements of Article M.12.02 of the Standard Specifications.
- D. Geotextile silt bags for pump discharges shall be ACF Heavy Duty Dirtbag® 55 or approved equal.
- E. Sandbags shall be sized by the Contractor and shall be suitable to divert water as needed during construction.
- F. Any pumps needed to dewater excavations or for other dewatering activities for the project shall be as determined by the Contractor.

- G. Alternate materials for coffer dam construction may be considered. Materials must be submitted to the Engineer for review and approval. Alternate material must remain within the project footprint as depicted on the Contract Drawings.

### 3.0 CONSTRUCTION METHODS

**Dewatering and control and diversion of water activities shall conform to the requirements of the State of CT DEEP 2024 Connecticut Guidelines for Soil Erosion and Sediment Control Manual.**

#### A. DEWATERING EXCAVATIONS:

The excavations for work required under this Contract are to some extent below existing ground water levels. The Contractor shall provide, operate and maintain all pumps, drains, well points, screens or any facility necessary for the control, collection and disposal of all surface and subsurface water encountered in the performance of the Contract work. All excavations shall be performed in the dry.

Any damage to existing facilities or new work resulting from the failure of the Contractor to maintain the work areas in a dry condition shall be repaired by the Contractor, as directed by the Owner, at no additional expense to the Owner. Pumping shall be continuous where specified or directed, or as necessary to protect the work and to maintain satisfactory progress.

The Contractor's pumping and dewatering operation shall be carried out in such a manner that no loss of ground will occur. All pipelines or structures not stable against up-lift during construction or prior to completion shall be thoroughly braced or otherwise protected against movement or damage.

Water being disposed of by the pumping and dewatering operations shall be disposed of in such a manner to avoid injury to persons or public or private property, or to the work completed or in progress. Dewatering shall be accomplished by approved methods which have a successful record of dewatering similar excavations and subsurface conditions similar to those expected to be encountered in the work.

#### B. DIVERSION OF WATER:

The Contractor shall be responsible for providing and maintaining all ditching, grading, sheeting and bracing, pumping and appurtenant work for the temporary diversion of water courses and protection from flooding as necessary to permit the construction of work in the dry.

Upon completion of the Contract work, the Contractor shall remove all temporary construction and shall do all necessary earthwork and grading to restore the area disturbed to their original condition or to such other condition as indicated or directed by the Owner.

Water shall not be permitted to flow into or through excavations in which work is underway or had been partially completed. The Contractor shall not restrict or close off the natural flow of water in such a way that ponding or flooding will occur, and shall at all times prevent flooding of public and private property. All damages resulting from flooding or restriction of flows shall be the sole responsibility of the Contractor, at no additional expense to the Owner.

The Contractor shall be responsible during the course of his work to provide all erosion protection and siltation prevention facilities required by the Contract and to carry out his operation by methods acceptable to the applicable local, State or Federal agencies.

#### 4.0 MEASUREMENT AND PAYMENT

The cost of this work shall be measured and paid for as a lump sum for "Dewatering, Control, and Diversion of Water" and shall include all materials, equipment, tools, and labor incidental to the completion of this item.

"Dewatering, Control, and Diversion of Water " will be paid monthly in proportion to the amount of work done as determined by the Owner. Said payments will be a proportionate amount of the Lump Sum Price bid for the Dewatering, Control, and Diversion of Water of which shall include all costs for furnishing, installing, maintaining, and monitoring all dewatering pumps, piping, valves, and appurtenances furnished by the Contractor, as well as the cost of all labor and equipment involved in dewatering, control and diversion of water throughout the duration of the project.

SECTION 2.06  
CALCIUM CHLORIDE FOR DUST CONTROL

1.0 DESCRIPTION

This item shall consist of furnishing calcium chloride and spreading it on the subgrade or in other areas of a project under construction, for the purpose of reducing dust conditions.

2.0 MATERIALS

Calcium chloride shall conform to the requirements of AASHTO M 144, except that the pellet form and the flake form shall be equally acceptable.

3.0 CONSTRUCTION METHODS

Calcium chloride shall be applied only at the locations, at such times and in the amount as may be directed by the Engineer. It shall be spread in such manner and by such devices that uniform distribution is attained over the entire area on which it is ordered placed.

4.0 MEASUREMENT AND PAYMENT

No separate measurement or payment shall be made for this item and all costs in connection there with shall be included in other contract items.

SECTION 2.08  
CLEARING AND GRUBBING

1.0 DESCRIPTION

This work shall consist of clearing the ground of trees, stumps, brush, rubbish and all objectionable material or selectively clearing trees or shrubs as needed in accordance with these specifications or as directed by the Owner. This work shall also include the clearing of the ground necessary for the construction and installation of utilities, drainage structures, or other work as outlined on the Contract Drawings. Included in this work shall be the preservation from injury or defacement of vegetation and objects designated to remain.

3.0 CONSTRUCTION METHODS

Within the excavation lines all trees shall be cut off and stumps removed and disposed of away from the site to a depth of not less than 18 inches below the finish graded surface.

In areas other than within excavation lines and where clearing is necessary for the construction and installation of various utilities, and highway appurtenances, all trees and stumps shall be cut flush with the ground; and all dead or uprooted trees, brush, roots, or otherwise objectionable material shall be removed as directed unless otherwise indicated on the plans.

Selective clearing or trimming of trees or shrub shall be performed in accordance with Section 9.52.03 of the Standard Specification.

The Contractor shall dispose of all trees, stumps, brush, etc., which have been cut by the Contractor's or Owner's forces, in a satisfactory manner away from the site.

4.0 MEASUREMENT AND PAYMENT

No separate measurement or payment shall be made for this item and all costs in connection there with shall be included in other contract items.

SECTION 2.09  
SEDIMENTATION AND EROSION CONTROL

1.0 DESCRIPTION

The work and materials required by this Section consists of the furnishing of all plant, labor, equipment and materials and in performing all operations in connection with providing and maintaining in an acceptable condition, the various erosion and sediment control devices specified below in accordance with these Specifications and as directed by the Owner.

The Contractor shall furnish all equipment, labor, materials and related work necessary for the proper execution of the intent of this Section. The Contractor shall operate and maintain and provide means and devices necessary to minimize, to the greatest extent possible, erosion within the work area of this Contract and to prevent the entrance of any silt laden runoff from the work areas into any standing or moving bodies of water on or adjacent to the Work.

The Contractor shall be responsible for the maintenance of all sedimentation and erosion control measures throughout the duration of construction and until all disturbed areas have been stabilized.

Sedimentation and erosion control measure shall be in accordance with the Contract Drawings and shall conform to the requirements of the State of CT DEEP 2002 Connecticut Guidelines for Soil Erosion and Sediment Control Manual.

2.0 MATERIALS

Materials for sedimentation and erosion control measures shall be in accordance with Section 2.19 of the Standard Specification, the Contract Drawings, and the following:

Filter fabric fence shall conform to the requirements of the Standard Specification, Section 7.55.02.

Hay bales shall conform to the requirements of the Standard Specification, Article 2.19.02.

3.0 CONSTRUCTION METHODS

Installation of sedimentation and erosion control measures shall be in accordance with 2.19 of the Standard Specification, the Contract Drawings, and the following:

All sediment and erosion control devices shall be properly installed, in a manner acceptable to the Owner, as necessary to minimize erosion within the work area of this contract and to prevent the entrance of any silt laden runoff from the work areas into any standing or moving bodies of water on or adjacent to the work, or as directed by the Owner.

The filter fabric fence shall be installed as recommended by the manufacturer. The bottom of the fabric shall be buried by either digging a six (6") inch on the ground and placing six inches of soil on the fence fabric. All erosion control devices shall be removed when ordered by the Owner after the regulated disturbed area has been reestablished. The Contractor's attention is called to particular notes on the drawings regarding erosion and sedimentation control and coordination with public agencies.

#### 4.0 MEASUREMENT AND PAYMENT

The cost of this work shall be paid for as a lump sum for "Sedimentation and Erosion Control" and shall include all materials, equipment, tools, and labor incidental to the completion of this item.



## SECTION 2.10 TEST PITS

### 1.0 DESCRIPTION

The work under this Section shall be the excavation of test pits by the Contractor where it may be necessary to locate or examine soils, groundwater, drains, pipes, rock, public utilities, subsurface structures, or any other obstacles or conditions. Unless otherwise specified or ordered by the Owner, test pits will be done by the Contractor.

This work shall consist of the satisfactory removal of all materials including water, within the limits of the test pit as necessary. This work shall also include the satisfactory stockpiling, disposal of surplus or unsuitable material, backfilling and compacting of the test pit with suitable material as approved by the Owner. This work shall be done where shown on the Contract Drawings or where directed by the Owner. All work shall be done in conformance with the Applicable Safety Code.

### 2.0 MATERIALS

The Contractor shall coordinate the excavation of all test pits with the respective utility owners having facilities in the vicinity of the location of test pits. If so desired by the respective utility owners, all or part of the work under this item may be accomplished by their crews and/or supervised by them. The Contractor shall give sufficient notice to the respective utility owners to afford reasonable time for coordination.

Test pit excavation and backfill shall comply with the applicable provisions of the Item "Trench Earth Excavation and Backfill" and shall have neat, clean cut and vertical sides.

The Contractor shall measure and record the size, configuration, exact horizontal and vertical location of all utilities, pipes or other obstacles uncovered in the various pits dug under this Section.

The Owner shall be notified well in advance of excavation so that he also may make the necessary measurements to locate all objects within test pits.

Excavation of test pits shall be accomplished by such means as are required to ensure that underground utilities or structures as may be encountered are not damaged. It shall be the Contractor's sole responsibility for any damages incurred during the excavation operations. Any such damages shall be repaired or replaced by him (if permitted) to the satisfaction of the Owner/Responsible Agency at the Contractor's own expense. Where the repair and replacement must be done by the Owner/Responsible Agency any and all costs thereof shall be borne by the Contractor.

Where an existing pavement has been removed for the test pit excavation, the surface shall be restored in accordance with the Owner's directions.

In all other areas, the surface of test pit areas shall be restored to a condition equal or better than original as directed by the Owner.

#### 4.0 MEASUREMENT AND PAYMENT

Excavation for test pits will be measured for payment by the Owner and shall be the actual length, width and depth of the excavation within the limits ordered/approved by the Owner. Pavement or base removed under other items of work will not be measured for payment a second time as "Test Pits". Water removed is never measured for payment.

Test pits will only be measured for payment where:

1. The location of the pit is such that said pit will never be incorporated into any excavation being dug for proposed work under this Contract.
2. The test pit will ultimately be within the limits of an excavation required for proposed work under this Contract, but said pit must be backfilled for safety and other reasons, as approved by the Owner prior to the excavation reaching the location of the pit.
3. If any pit is not backfilled and subsequently incorporated into the excavation, said pit will not be measured for payment under the Item "Test Pits" but shall be measured under the appropriate excavation Item.
4. Test pits dug by the respective utility owner will not be measured for payment.

"Test Pits" measured as provided above shall be paid at the contract unit price bid per cubic yard for "Test Pits", which price shall include the excavation of all materials as required. Included in the unit price bid for Test Pits will be excavated sheeting, shoring, dewatering, backfill, compacting and the restoration of the surface of the "Test Pit" and all other materials, equipment, tools, labor and work incidental to or necessary for the completion of the work.

Where a utility owner or company elects to perform all or part of the work under this Section, no payment shall be made to either the Contractor or the participating utility for work performed by the utility under this Section, nor shall any time lost due to poor coordination by the Contractor be charged against the Project.

## SECTION 2.18 SELECTIVE DEMOLITION

### 1.0 DESCRIPTION

This section requires the selective removal and off-site disposal of the existing fixed pier, timber piles, boat ramp, pavements, and all other appurtenances as shown on the Contract Drawings.

Condition of Structures: Owner assumes no responsibility for actual condition of items or structures to be demolished.

Protections: Provide temporary barricades and other forms of protection as required to protect general public from injury due to selective demolition work. Protect from damage, surrounding areas, stream banks & channels, and all items to remain in place.

Damages: Promptly repair damages caused to adjacent facilities by demolition work at no cost to Owner.

Traffic: Conduct selective demolition operations and debris removal in a manner to ensure minimum interference with adjacent occupied or used facilities.

Environmental Controls: Use water sprinkling, temporary enclosures, and other suitable methods to limit dust and dirt rising and scattering in air to lowest practical level. Comply with governing regulations pertaining to environmental protection. Do not use water when it may create hazardous or objectionable conditions such as ice, flooding, and pollution.

Utility Services: Maintain existing utilities indicated to remain. Keep in service and protect against damage during demolition operations. Do not interrupt utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to governing authorities. The Contractor shall be responsible for all costs and coordination for temporary relocation of utilities if needed, including overhead wires, utility poles, and all associated equipment and supports.

### 2.0 EXECUTION:

Inspection: Prior to commencement of selective demolition work, inspect areas in which work will be performed. Photograph existing conditions of structure surfaces, equipment, or surrounding properties that could be misconstrued as damage resulting from selective demolition work; file with Owner's representative prior to starting work

Preparation: Provide shoring, bracing, or support to prevent movement, settlement, or collapse of structures to be demolished and adjacent facilities to remain. Cease operations and notify Owner

immediately if safety of structure appears to be endangered. Take precautions to support structure until determination is made for continuing operations.

Protect equipment from soilage or damage.

Demolition: Perform selective demolition work in a systematic manner. Provide services for effective air and water pollution controls as required by local authorities having jurisdiction.

Disposal of Demolished Materials: Remove debris, rubbish, and other materials resulting from demolition operations from site. Transport and legally dispose off site. If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling, and protection against exposure or environmental pollution. Burning of removed materials is not permitted on project site.

Cleanup and Repair: Upon completion of demolition work, remove tools, equipment, and demolished materials from site. Remove protections and leave areas clean.

Repair demolition performed in excess of that required. Return structures and surfaces to remain to condition existing prior to commencement of selective demolition work. Repair adjacent construction or surfaces soiled or damaged by selective demolition work

### 3.0 CONSTRUCTION METHODS

All work shall conform to the requirements of section 5.03 of the Standard Specifications, Removal and Alterations of Existing Bridge Structures.

### 4.0 MEASUREMENT AND PAYMENT

No separate measurement or payment shall be made for this item and all costs in connection there with shall be included in other contract items.

SECTION 2.20  
PROJECT SIGN

1.0 DESCRIPTION

The contractor shall erect a sign at the project identifying the project and indicating:

**“Funding provided by the U.S. Fish and Wildlife Service, Sport Fish Restoration Program administered by the Connecticut Department of Energy and Environmental Protection (DEEP)”**

The project sign shall be erected prior to the start of any construction work. The sign shall be furnished, erected, and maintained by the Contractor at a location designated by the engineer. The names of the Commissioner of DEEP of the State of Connecticut as shown on the sign shall be kept current and shall be revised with 30 days of such notice to the Contractor that a change has occurred, at no cost to the Owner. The Project name, Town name and name of the mayor shall be included. The logo for the State of Connecticut DEEP shall be included

After project completion the Contractor shall be required to remove and dispose of the project sign and support posts and restore any disturbed areas to their original conditions.

2.0 MATERIALS

The sign shall be constructed of ¾” minimum thickness exterior plywood (A-B) or APA high density overlay plywood (HDO). All fasteners shall be of a rustproof nature. The sign face background shall consist of at least three (3) coats of white outdoor enamel paint. The sign shall be fastened securely in an upright position and maintained in a location on the construction site clearly visible to the public and to visitors to the site.

3.0 CONSTRUCTION METHODS

The Contractor shall provide a sign proof for review and approval prior to fabrication.

Treated wood columns shall be secured 4’-0” into grade minimum.

4.0 MEASUREMENT AND PAYMENT

No separate measurement or payment shall be made for this item and all costs in connection there with shall be included in other contract items.

SECTION 3.01  
GENERAL EXCAVATION

1.0 DESCRIPTION

The work covered under this Section shall consist of the removal of all materials, not included in other Sections, required to accomplish the work indicated within the work limits. The Contractor shall remove all existing pavements, sidewalks, curbs, bases, subbase, earth, rock, etc., and all other material necessary for reconstruction of street sections shown on the Drawings or as directed by the Owner. Also included is the disposal of surplus material or unsuitable material, removal of old foundations, concrete or masonry walls, slabs and other structures. When unsuitable material has to be excavated below the subgrade, the excavation shall be backfilled and compacted up to the subgrade with material as ordered by the Owner.

Any quantities of rock excavation encountered as defined and classified by the Owner in accordance with the Section entitled "Rock Excavation and Disposal" and of boulders one (1) cubic yard or greater in volume, will not be included in the quantities to be paid for under General Excavation.

3.0 CONSTRUCTION METHODS

Construction methods shall conform to the applicable provision of Article 2.02.03 for reconstruction of paved areas. The word "general" shall be substituted for the word "roadway". At all limits of construction, the existing pavement shall be saw cut.

4.0 MEASUREMENT AND PAYMENT

No separate measurement or payment shall be made for this item and all costs in connection therewith shall be included in other contract items.

SECTION 3.02  
TRENCH EARTH EXCAVATION AND BACKFILL

1.0 DESCRIPTION

A. WORK INCLUDED:

The work covered under this Section includes:

1. Performing all operations of excavating, backfilling, compacting, grading and all other work necessary for the construction of pipelines, structures, and appurtenant work in accordance with the Drawings and Specifications.
2. Installation of sheeting and shoring as required.
3. Excavation of pavements and surplus and unsuitable materials, and disposal in approved locations, away from the site.
4. Protection of existing pipelines, utilities, structures and new work.
5. Compaction of trench bottoms, backfills and subgrades.

B. DEFINITIONS:

1. Earth excavation shall mean the excavation, removal, stockpiling and/or satisfactory disposal away from the site of all materials other than rock, ledge, or topsoil within the limits set forth or as directed.
2. Materials to be excavated shall include organic and inorganic silts, peat, clays, sand, gravel; pavement; cobbles and boulders less than 1 cubic yard in volume; soft or disintegrated rock; brick and concrete masonry; and all other obstructions not included in other sections.
  - a. Materials unsuitable for use as backfill are defined as organic matter, silt, peat or any combination thereof having unsuitable in-situ bearing properties; and all materials that are too loose or saturated to provide satisfactory bearing when used for backfill.
  - b. If unsuitable material is encountered at the depths indicated on the Drawings for bottom limit of excavation, the Contractor shall immediately notify the Owner and shall not proceed further until instructions are given.

## 2.0 MATERIALS

### A. TREES AND SHRUBBERY:

1. Existing trees and shrubbery to remain shall be protected from injury.
2. Except as otherwise directed, cutting and trimming of existing trees will not be permitted.
3. All existing trees to remain and any which may be damaged by construction operations shall be boxed and protected, and all such protection shall be maintained until completion of the work.

### B. EXISTING UTILITIES

1. Excavation and backfill operations shall be done in such a manner as to prevent cave-ins of excavations or the undermining, damage, or disturbing of existing utilities and structures or of new work.
2. Any excavation improperly backfilled or where settlement occurs shall be reopened to the depth required, then refilled with new materials and compacted and the surface restored to the required grade and condition, at no additional cost to the Owner.
3. **The Contractor shall "Call-Before-You-Dig" (811) at least 72 hours prior to any excavation.**

### C. PROPERTY:

Any damage due to excavation, backfilling, or settlement of the backfill, or injury to persons or damage to property occurring as a result of such damage, shall be the responsibility of the Contractor. All costs to repair such damage, in a manner satisfactory to the Owner, shall be borne by the Contractor, at no additional cost to the Owner.

## 3.0 CONSTRUCTION METHODS

### A. SURFACE PREPARATION:

1. Existing pavements and base courses shall be cut and removed to obtain sound, vertical edges at the lines indicated for trenching.
2. The Contractor shall remove and dispose of the existing pavements in the course of his work. Care shall be taken so that existing pavement material is not mixed with excavated material to be used for backfill.



3. The Contractor shall protect existing pavements and base courses which are to remain, and repair any damage caused by excavations at no expense to the Owner.
4. Existing pipelines, utilities and structures shall be protected by the Contractor so that no damage occurs during excavation operations.
5. All material shall be kept a safe distance back from the edge of excavation to avoid overloading of the sides of excavation and prevent slides or cave-ins.

**B. CONTROL OF WATER:**

1. All excavations shall be kept dry at all times, and all construction work shall be performed in the dry, unless otherwise authorized or directed by the Owner. See section entitled "Dewatering Control and Diversion of Water" for the specific requirements governing dewatering of excavations.
2. Grading shall be accomplished to prevent surface water from flowing into excavations.
3. Accumulated water shall be removed by pumping or other approved methods.
4. The pipelines shall not be used for trench draining.
5. The work shall be protected from flooding at all times.
6. Any material which becomes unsuitable as a result of the Contractor's lack of dewatering or improper dewatering shall be removed by the Contractor and replaced with earth borrow, as directed and approved by the Owner at no additional expense to the Owner.

**C. EXECUTION:**

**The contractor shall submit to the Owner for approval, a list of equipment to be used for trench compaction. Trench compaction shall be accomplished with an 8-10 ton (min.) Ho-Pack or other method to be approved by the Owner prior to the start of construction.**

The Contractor shall:

1. Excavate to the lines and grades shown on the Drawings. Excavations shall be accurately graded to allow satisfactory construction of the work.
2. Immediately after excavation to the indicated trench bottom, compact exposed bottom surface with two (2) passes of an approved plate-type vibrating compactor.
3. Trench bottom shall again be thoroughly compacted just prior to the installation of pipelines.

4. Perform manual excavation adjacent to and below existing structures and utilities to prevent disturbance of or damage to the existing structures and utilities.
5. Provide temporary support to existing subsurface utilities as approved by the respective utility companies or to other facilities adjacent to or cross through excavation at no additional expense to the Owner.
6. Take all necessary measures to prevent lateral movement or settlement of the existing structures or work in progress.
7. Provide sheeting and shoring in all locations where required to maintain excavations in a safe condition and to meet all safety regulations.
  - a. The Owner may order additional sheeting and shoring where in his opinion safety regulations are being violated or the excavation is not in a safe condition.
  - b. There will be no additional payment for providing sheeting, shoring or trenching box.
  - c. No excessive trench widths will be allowed to avoid the use of sheeting.
  - d. Shoring and bracing shall be left in place as directed by the Owner to maintain stability as backfilling progresses.
8. If an excavation is made deeper or wider than that shown on the Drawings, unless directed in writing by the Owner, there will be no extra payment for such unauthorized excavation. Backfill of all unauthorized excavations shall be made by the Contractor with either selected materials from excavations or from earth borrow, as directed by the Owner, and at no expense to the Owner.

### 3.2 BACKFILLING

#### A. PREPARATION:

1. The Contractor shall:
  - a. Complete all excavation and pipe laying operations.
  - b. Perform all required tests before backfilling.
  - c. Encase pipe in concrete as required by the Engineer.

- d. Begin backfilling as soon as practical with approved backfill material or earth borrow as directed.

## B. EXECUTION:

1. All backfill placed in trenches containing non concrete encased pipe below a level 12 inches above the top shall be placed in layers not exceeding 4 inches in loose depths. This material shall be excavated material (except as authorized), compactable, not frozen and free from clods of earth stones larger than 2 inches in diameter or unsuitable materials. This backfill shall be termed Selected Backfill and shall be deposited uniformly on both sides of the duct and shall be thoroughly compacted by tamping under and on each side of the pipe to provide uniform support around the pipe, free from voids.
2. The balance of backfill in all trenches and excavations shall be compactable materials as approved, not frozen and without stones larger than 8 inches in their greatest dimension. It shall be spread in layers not exceeding 12 inches in loose depth, and each layer shall be compacted by at least 4 passes of an approved plate-type vibratory compactor. All trench backfilling shall be carefully placed to avoid disturbance of new work and if existing structures. The moisture content of backfill shall be such that proper compaction will be obtained. Puddling or jetting of backfill with water will not be permitted.
3. Backfilling against masonry or concrete shall only be done when approved. Backfilling against concrete other than encased pipelines within 7 days after placement will not be allowed. Symmetrical backfill loading adjacent to structures shall be maintained. During backfilling and compacting operations, care should be exercised so that equipment used will not overload the structures. Backfill adjacent to structures shall be placed in layers not more than 9 inches in loose depth, and each layer thoroughly compacted with at least 4 passes of an approved plate-type vibratory compactor.
4. The Owner shall check all pipelines during backfilling operations for displacement. Poor alignment and displaced or defective pipes shall be corrected or replaced at no additional cost to the Owner.

## 3.3 COMPLETION

1. After backfilling excavation, the Contractor shall maintain the filled surface in good condition, with a smooth level, leaving adjacent surfaces undisturbed. Any subsequent settling shall be immediately repaired by the Contractor and such maintenance shall be provided by the Contractor for the remainder of the Contract, at no additional expense to the Owner.
2. The finished surfaces of filled excavations shall be compacted, and reasonably smooth and free from surface irregularities. Subgrade upon which either topsoil is to be placed or pavements are to be constructed shall be maintained in a satisfactory condition until

the finish courses are placed. The storage or stockpiling of materials on finished subgrade will not be permitted.

3. Prior to paving upon the subgrade, all soft or unsuitable material shall be removed and replaced with suitable material from excavation or earth borrow, as approved by the Owner. All low sections, holes, or depressions shall be brought to the required grade with approved material. The entire subgrade shall be shaped to line, grade and cross section and thoroughly compacted.
4. All unsuitable material or backfill material in excess of the amount required for the satisfactory completion of backfill operations shall be removed and disposed of by the Contractor off the site.

#### 4.0 MEASUREMENT AND PAYMENT

Payment for earth excavation for pipelines, appurtenances and structures shall be included in the prices bid for those sections referring to pipe and appurtenances and shall not be measured for payment. Earth excavation shall be all earth excavation required for the installation of all work to the designed grade under the piping, manholes and structures. (Designed depth or grade is equal to 12" below pipes and structures).

Where ordered by the OWNER, excavation in excess of the designed depth shall be paid for by the Contract Unit Price per cubic yard referred to as "Trench Excavation and Backfill in Excess of Design Depth". In pipeline trenches, and services measurement shall be the depth greater than designed grade and width, according to the Contract Drawings centered on the pipe. In excavation for structures, measurement shall be the depth greater than designed grade and structure width plus two feet.

It is the intent that no separate payment will be made for any earth excavation on the project except for "Trench Excavation and Backfill in Excess of Design Depth", "Test Pit Excavation" or "Gas Trench Work". Payment for all other excavation and appurtenant or associated work is considered to be included in the price of the pipelines, services, appurtenances and structures.

Any quantities of rock excavation encountered in trench work as defined and classified by the Owner in accordance with the section entitled "Rock Excavation and Disposal" and of boulders one (1) cubic yard or greater in volume, will be paid for under the appropriate item.

Backfill of material utilizing borrow as defined under the section entitled "Gravel Fill" shall not be measured or paid for under the above item.

SECTION 3.03  
ROCK EXCAVATION AND DISPOSAL

1.0 DESCRIPTION

The work covered under this Section includes the furnishing of all labor, equipment and materials, and performing all operations in connection with rock excavation and subsequent gravel refill as indicated on the drawings, and all incidental work in accordance with the drawings and specifications, and as directed. The work shall also include providing and compacting gravel bedding from off-site sources for refilling depressions resulting from removal of boulders; the satisfactory removal and disposal of the excavated rock materials; and the protection of existing pipelines, structures and appurtenant facilities, and the contract work.

2.0 MATERIALS

Rock excavation shall include the excavation, removal and disposal of all boulders and detached rock fragments 1 cubic yard or more in volume; and all ledge rock, the removal of which, in the opinion of the Owner, can be accomplished only by drilling and splitting mechanically or by hand or by blasting. Boulders of less than 1 cubic yard in volume, and all soft or disintegrated rock which can be removed without the manipulation noted above, shall be classified as "Trench Earth Excavation"

Where boulders are exposed on the sides of or in the bottom of excavations, they shall be wholly or partially removed, as specified or directed. Boulders shall be removed to not less than the lateral trench width indicated, not less than 12 inches outside structure walls, and to not less than 12 inches below the underside of pipes.

Unauthorized excavations in rock, or excavations made beyond or below the indicated or directed limits, shall be refilled with compacted gravel bedding, as directed by and at no expense to the Owner.

Whenever rock is encountered, it shall be stripped of the overlying material in sections as directed by the Owner. Drilling through the existing overburden and blasting prior to stripping will be allowed only at locations approved in advance by the Owner.

Rock excavation for future connections:

Whenever provisions for a future connection are placed in the sewer lines or structure in an area of rock excavation, the rock shall be removed from a distance of at least 2 feet or more as directed, horizontally from the end of the pipe or branch stub and in the direction of the future connection.

If directed by the Owner, the Contractor shall also drill a hole in rock not less than 3 feet but not more than 5 feet beyond the outer limit of his excavation and to a point lower than the level of the branch and shall explode a charge therein adequate to shatter the rock sufficiently to permit its subsequent removal by others when any future connection is made. The Contractor will be allowed

the equivalent of 1/2 cubic yard of rock excavation for such additional drilling and blasting at the location of each future connection so treated.

### 3.0 CONSTRUCTION METHODS

Blasting within 20 feet of existing utilities shall be allowed only when approved by the utility companies and shall be performed by an experienced blasting subcontractor using small charges and delays.

Where blasting is permitted by the Owner, the Contractor shall take every precaution to protect persons, property and the work. The Contractor, shall conduct all blasting operations so that at no time shall the peak particle velocity, as monitored at selected locations, exceed 2.0 inches per second or such lower limits as may be established by regulatory authorities, utility and/or property Owner. Blasting operations shall comply with all Federal state and local regulations, and requirements of the Owners of utilities adjacent to the work area and to any further regulations which the Owner may deem necessary in this respect. The Contractor shall be held liable for all injury to persons the damage to property and the work caused by blast or explosion.

Rock encountered within areas where blasting is not permitted shall be removed by drilling and splitting mechanically or by hand, or by any other approved method not requiring the use of explosives. No separate payment will be made for such methods, and all associated costs shall be included in the contract unit price bid for rock excavation.

Backfilling of Rock Trench shall be done in accordance with the Section "Trench Earth Excavation and Backfill". All excavated material, suitable for backfilling and in excess of the requirements for earth excavation, shall be used to backfill rock excavated areas.

Blasting must be accomplished in accordance with the provision set forth in the current edition of the "Manual on Storage, Transportation and Use of Explosives and Blasting Agents," available from the State Fire Marshal's Office.

### 4.0 MEASUREMENT AND PAYMENT

Where rock is encountered, it shall be uncovered but not excavated until measurements have been made by the Engineer, unless in the opinion of the Owner satisfactory measurements can be made in some other manner.

Rock excavation and disposal will be measured in cubic yards in its original position, prior to excavation, computed to a depth of twelve inches below the new pipe, new conduit or new structure or as directed in writing by the Owner. If rock excavation is directed to be performed to less than the payment width and/or depth indicated, the Contractor will be paid only for the actual quantities of rock so directed. The measurement will not include unauthorized excavations.

Boulders or detached rock fragments which are 1 cubic yard or more in volume will be measured individually, and the volume computed from the average dimensions taken in three representative directions.

Additional material from off-site sources needed as backfill shall be measured for payment as specified under "Gravel Fill".

Measurement of rock excavation for purposes of payment shall be as follows, regardless of the actual amount of rock removed.

Rock excavation in trenches shall be measured to a width, according to the "trench width" designated on the Contract Drawings, centered on the pipe from the original surface of the rock to a plane one foot below the underside of the conduit/pipeline. If the rock does not extend the full width or depth of the trench, only the actual amount of rock removed within the described measurement lines shall be allowed.

In excavation for structures, rock excavation shall be measured as having sides located twelve (12) inches beyond the outside of the manhole structure to the original surface of the rock.

The unit prices for payment under this Section shall include full compensation for all labor, materials, tools and equipment required for rock excavation and placing of the excavated material in spoil banks or elsewhere, as required.

Payment for rock excavation shall be by the cubic yard, measured as described above.

## SECTION 3.04

### GRAVEL FILL

#### 1.0 DESCRIPTION

This material shall be used to replace unsuitable backfill material as specified in Section 3.02 of these contract specifications, and elsewhere as indicated on the plans, required by the specifications or as ordered by the Engineer. It shall consist of gravel conforming to the requirements of these specifications.

#### 2.0 MATERIALS

Gravel fill shall conform to the requirements of Article M.02.01 of the Standard Specifications.

#### 3.0 CONSTRUCTION METHODS

Gravel shall be placed and compacted in accordance with Article 3.04.03 of the Standard Specifications.

#### 4.0 MEASUREMENT AND PAYMENT

Gravel fill will be measured in place after compaction by the Engineer. It shall be placed as directed by the Engineer.

The pay limits for gravel fill shall be as specified on the Contract Drawings. No payment will be made for gravel fill outside the specified payment limits.

This item is for replacement of excavated rock, for replacement of excavated material deemed unsuitable for refill by the Owner, and for miscellaneous fill where directed by the Owner.

Payment for this item will be the contract unit price per cubic yard bid for "Gravel Fill", which price shall include all materials, tools, equipment, labor and incidental work for providing, placing and compacting gravel fill as specified.



SECTION 3.05  
REMOVAL OF PAVEMENT

1.0 DESCRIPTION

Pavement removal shall consist of the satisfactory removal of pavements as required for construction of improvements under this contract. It shall include asphalt, bituminous concrete pavements and bases as required by the contract or as directed by the Engineer.

3.0 CONSTRUCTION METHODS

Pavement shall be cut to neat lines as required by the contract drawings, or as directed by the Engineer. Pavement shall be excavated to the dimension shown on the plan. Excavated material shall be disposed of as directed by the Engineer and in the same manner as described for surplus material elsewhere in these specifications. No sections or pieces of pavement shall be used in trench backfill and pavement shall be kept separate from other excavated material.

4.0 MEASUREMENT AND PAYMENT

No separate measurement or payment shall be made for this item and all costs in connection there with shall be included in other contract items.

SECTION 3.07  
PROCESSED GRAVEL BASE

1.0 DESCRIPTION

The Contractor shall furnish and place processed gravel base to the compacted thickness shown on the contract drawings and to supplement the Cold Reclaimed Asphalt base material, prior to placement of permanent pavement.

The processed gravel base shall be placed on the prepared existing subgrade or blended with the Cold Reclaimed Asphalt base material prior to placing of the pavement.

2.0 MATERIALS

Gravel base shall conform to the requirements of Subarticle M.05.01,1, M.05.01-2, M.05.01-3 of the Standard Specifications.

3.0 CONSTRUCTION METHODS

Gravel base shall be placed and compacted in accordance with Article 3.04.03 of the Standard Specification.

4.0 MEASUREMENT AND PAYMENT

The quantity measured for payment under this Section will be the number of cubic yards of processed gravel satisfactorily furnished, placed, compacted, and graded to as indicated or directed, measured in place. Contractor shall provide verification for quantity used with trucking slips or other acceptable method.

No payment shall be made for processed gravel placed outside the specified payment limits.

Payment for processed gravel base shall be made at the contract unit price per cubic yard for compacted gravel base placed to the lines and grade specified. "Processed Gravel", said price to include all costs of furnishing and placement of processed gravel base, preparation of subgrade and all other materials, labor and equipment necessary to satisfactorily complete the work.

SECTION 3.08  
GRAVEL / SAND PIPE OR CONDUIT BEDDING

1.0 DESCRIPTION

The work under this item shall consist of the furnishing, placing and compacting of gravel pipe or conduit bedding in accordance with these Specifications and the details shown on the Contract Drawings at the locations shown thereon or as directed by the Engineer.

2.0 MATERIALS

Bedding shall be provided from off-site sources in the quantities required for completion of the work and shall be as approved by the Owner.

Gravel bedding shall be gravel conforming to the requirements of Article M.02.01 of the Standard Specifications.

Sand bedding shall consist of well graded sand, or sandy soil in accordance with Article M.08.03.1 of the Standard Specification. All of the material shall pass the 3/8" sieve and not more than 10 percent passing the #200 sieve.

When groundwater is encountered crushed stone in accordance with these specifications may be used with prior approval from the Engineer.

3.0 CONSTRUCTION METHODS

Bedding shall be placed in accordance with the details and at the locations indicated on the Contract Drawings or as directed by the Engineer. It shall be placed carefully and evenly on both sides of the structure/pipe/conduit being cushioned.

It shall be deposited in layers not over 6 inches thick and each layer shall be thoroughly compacted to not less than 95% of the specified ASTM maximum dry density before the addition of other layers.

All percentages of compaction specified herein shall be related to the maximum dry density as established by Method D ASTM Designation D1557-70 and verified in the field by ASTM Designation D1556-68, D2167-66, or an approved Nuclear density testing device. Prior to placing, at least one (1) laboratory test shall be made on a representative sample of each of the fill and backfill materials proposed to be furnished for the earthwork operations; to determine gradation and moisture-density characteristics. These tests will be made by a testing laboratory selected by the Owner and at the Owner's expense.

Field density tests to determine the actual in-place densities being attained will be made at the Owner's expense and in sufficient quantity to determine that the required compaction is being

attained. All retesting necessitated by failure of the backfill to comply with the minimum percent of compaction shall be performed by a laboratory selected by the Owner and the re-testing cost will be paid for by the Contractor.

#### 4.0 MEASUREMENT AND PAYMENT

No separate measurement or payment shall be made for this item and all costs in connection therewith shall be included the appropriate piping unit price for which this item is being provided.

### SECTION 3.10

#### CRUSHED STONE

#### 1.0 DESCRIPTION

The Contractor shall furnish and place all crushed stone as directed by the Engineer.

#### 2.0 MATERIALS

Crushed Stone shall be 3/4 inch in size conforming to the requirements of Article M.01.01 and No. 6 crushed stone gradation table of M.01.02-2 of the Standard Specifications. Crushed stone shall be free from dust, foreign matter and organic material.

#### 3.0 CONSTRUCTION METHODS

Crushed Stone Bedding shall be placed in accordance with the details and at the locations indicated on the Contract Drawings or as directed by the Engineer. It shall be placed carefully and evenly on both sides of the structure/pipe/conduit being cushioned.

It shall be deposited in layers not over 6 inches thick and each layer shall be thoroughly compacted to not less than 95% of the specified ASTM maximum dry density before the addition of other layers.

#### 4.0 MEASUREMENT AND PAYMENT

Crushed stone will be measured in place after compaction. It shall be placed as directed by the Engineer.

Payment for this item will be made at the Contract unit price per cubic yard bid for "Crushed Stone", which price shall include all materials, tools, equipment, labor and incidental work for providing, placing and compacting crushed stone as specified.

SECTION 3.12  
TRAFFIC-BOUND GRAVEL SURFACING

1.0 DESCRIPTION

The Contractor shall furnish and place traffic bound gravel surface to the compacted thickness shown on the contract drawings.

2.0 MATERIALS

Traffic-bound gravel surface shall conform to the requirements of Section M.02.03 of the Standard Specification.

3.0 CONSTRUCTION METHODS

Traffic-bound gravel surface shall be placed and compacted in accordance with Article 3.04.03 of the Standard Specification.

4.0 MEASUREMENT AND PAYMENT

No separate measurement or payment shall be made for this item and all costs in connection there with shall be included in other contract items.

SECTION 4.01  
TEMPORARY PAVEMENT REPLACEMENT FOR TRENCH

1.0 DESCRIPTION

Pavement which has been removed for the installation of utilities and appurtenances or other underground installations shall be replaced immediately upon the completion of the trench backfilling and compaction with temporary pavement, placed on the designated thickness of compacted gravel base in accordance with the limits and to the dimensions shown on the contract drawings, specified herein, or as directed by the Engineer.

Temporary pavement shall remain in place until trench settlement is complete for a minimum of 30 days, unless otherwise directed by the Owner.

**Temporary pavement shall be placed at the end of every work week, daily on steep slopes (greater than 5%), or as designated by the owner.**

**Processed gavel base must be installed at the time of temporary paving.**

2.0 MATERIALS

Bituminous concrete shall conform to the requirements of Section M.04.02 of the Standard Specifications for HMA S0.5.

Processed gravel base is specified in Section 3.07 of these Contract Specifications.

3.0 CONSTRUCTION METHODS

Temporary pavement shall be placed on the specified thickness processed gravel base. Temporary pavement shall have a compacted thickness as noted above, to the limits shown on the contract drawings, specified herein or as directed by the Engineer.

Pavement shall be placed in accordance with the applicable provisions of Section 4.06 of the Standard Specifications.

**Processed gavel base must be installed at the time of temporary paving.**

4.0 MEASUREMENT AND PAYMENT

This work shall be measured for payment by the actual number of square yards, installed to the specified thickness within the pavement payment limits. The pavement payment limits are specified on the Contract Drawings. Temporary pavement installed outside the payment limits will not be measured for payment and only the actual number of square yards, installed to the specified

thickness within the pavement payment limits will be measured for payment. Subbase will not be measured for payment under this item.

Work under this Item will be paid for at the Contract unit prices per square yard for "Temporary Paving for Trench: Local Road", completed in place and accepted. These Contract unit prices shall include the cost of the bituminous material, maintenance of the construction to include the additional materials and labor required due to settlement, and all other materials, tools, equipment, labor and work necessary for or incidental to the completion of the item.

Overlap or redundant temporary paving from one day to the next caused by the contractor's misjudgment as to the amount of trench work to be completed in one day will not be measured for payment.

Payment for processed gravel base is specified under the respective sections for these items in these Contract Specifications.



SECTION 4.02  
PERMANENT PAVEMENT REPLACEMENT FOR TRENCH

1.0 DESCRIPTION

Permanent Pavement Replacement shall consist of the bituminous concrete trench repair for local roads, constructed on the compacted thickness processed gravel base in the locations and in accordance with the details shown on the Contract drawings or as directed by the Owner.

2.0 MATERIALS

1. Tack coat shall consist of RC-O oil.
2. Bituminous concrete binders and surface courses shall conform to Article M.04.02-2 of the Standard Specifications for the classes specified on the Contract Drawings.
3. Processed gravel base is specified in Section 3.07 of these Contract Specifications.

3.0 CONSTRUCTION METHODS

Temporary pavement shall be removed, **the existing pavement cut back from the edge of the disturbed trench as called for on the Contract Drawings** in straight lines parallel to the edges of the roadway using approved power tools, and the processed gravel base placed and compacted as specified in these Contract Specifications and in accordance with the details shown on the Contract Drawings.

Tack coat shall be applied to the edge of existing pavement where it meets the new pavement.

Local Roads: The four (4") inch compacted thickness bituminous pavements shall be placed in 2 lifts, in accordance with the requirements of Article 4.06.03 of the Standard Specification.

4.0 MEASUREMENT AND PAYMENT

This work shall be measured for payment by the actual number of square yards, installed to the specified thickness within the pavement payment limits. The pavement payment limits are specified on the Drawings. Permanent pavement installed outside the payment limits will not be measured for payment and only the actual number of square yards, installed to the specified thickness within the pavement payment limits will be measured for payment. Subbase will not be measured for payment under this item.

Payment for Permanent Pavement Replacement shall be made at the Contract unit price per square yard for "Permanent Pavement Replacement: Local Road". Said price shall include all costs of preparation of existing and temporary pavement, binder coat, furnishing and placement of

bituminous concrete and all other materials, labor and equipment necessary to satisfactorily complete the work. The unit price shall include the cost of replacing line striping, raising utility boxes and structures including sanitary or storm sewer appurtenances to the finish grade of the road, and includes the cost of resetting manhole and catch basin frames and covers installed under this contract.

Payment for processed gravel base and temporary pavement replacement is specified under the respective sections for these items in these Contract Specifications.

SECTION 4.06  
TWO COURSE BITUMINOUS CONCRETE

1.0 DESCRIPTION

The work under this Section shall be the construction of a 4" thick, two-course bituminous concrete pavement and multiple course bituminous concrete surfacing as shown on the Contract Drawings.

2.0 MATERIALS

The materials for the bituminous concrete mixture, sources of supply, formula for mix, mix tolerances, approval of mix formula and the control of the mixture shall conform to the requirements of Article M.04 of the Standard Specification.

- a. Bituminous concrete surface course shall conform to Article M.04, HMA S0.375.
- b. Bituminous concrete base course shall conform to Article M.04, HMA S0.5.
- c. Tack coat shall consist of CSS-1H oil.

3.0 CONSTRUCTION METHODS

Bituminous concrete shall be placed in accordance with Article 4.06.03.

The existing pavement shall be saw cut back 1 foot from the edge of the disturbed pavement or as directed on the plans or in the field, in a straight line using approved power tools, tack coat shall be applied to the edge of existing pavement where it meets the new pavement to be placed.

Contact surfaces of curbing, gutters, manholes, etc., shall be painted with a thin uniform coat of hot asphalt cement, or asphalt cement, or asphalt cement dissolved in naphtha, just before the material is placed against them.

All pavement surfaces that have been in place longer than five calendar days shall receive a tack coat between courses. The surface shall be swept clean and tack coated with CSS-1H at .035 gals. per square yard.

3.1 QUALITY ASSURANCE

The Owner or his authorized representative shall have access at any time to all parts of the producing plant for:

- 1) Inspection of the condition and operations of the plant and laboratory.
- 2) Confirmation of the adequacy of equipment in use.
- 3) Verification of the character and portions of the mixture.
- 4) Determination of temperatures being maintained in the preparation of the mixtures.

5) Inspection of incidental related procedures.

#### 4.0 MEASUREMENT AND PAYMENT

This work shall be measured for payment by the number of tons of the pavement installed to the specified thickness shown on the Drawings and as specified and within the pavement limits.

"Two Course Bituminous Concrete", measured as provided above, will be paid for at the Contract unit price bid per ton of two course bituminous concrete completed and accepted in place, which price shall include all materials, equipment, tools, labor and work incidental thereto.

**The Contractor shall include in the cost of this construction all resetting to grade existing or newly constructed catch basins, manholes, grates, frames, covers, valve boxes, access covers, and other items which normally must have a fixed relationship to finished grade.**

The Contractor shall include in the cost of this item sweeping and tack coating between courses, as required. All surfaces that have been in place longer than five calendar days shall receive a tack coat. No separate payment shall be made for tack coating.

The Contractor shall include in the cost of this item saw cutting of all bituminous concrete pavements and providing tack coat along all cut edges.

SECTION 4.08  
CONCRETE SIDEWALKS, DRIVEWAYS, RAMPS, AND CURBS

1.0 DESCRIPTION

The work under this section shall be the construction of new concrete sidewalks, and of the replacement or extension of existing sidewalks damaged or removed by construction under other work of this Contract. They shall be constructed on a gravel base course at the locations and to the dimensions and details shown on the contract drawings or as ordered by the Owner.

2.0 MATERIALS

**2.1 CONCRETE**

Materials for this work shall conform to the requirements of Article M.03.01 of the Standard Specification. Sidewalks and pedestrian ramps shall be Class "PCC04462" Concrete. Concrete shall have a minimum compressive strength of 4,400 psi at 28 days.

**2.2 EXPANSION JOINT**

Performed Expansion Joint Filler shall comply with the provisions of ASTM D 1751 (AASHTO M 213).

**2.3 ADMIXTURES**

Air-entraining admixtures shall conform to Article M.03.01 of the Standard Specifications.

**2.4 GRAVEL**

Gravel for the base course shall conform to Article M.02.01 of the Standard Specifications for gravel fill.

**2.5 REINFORCEMENT**

Reinforcement where indicated on the Contract Drawings shall conform to the requirements of Article M.06.01 of the Standard Specifications.

**2.6 EPOXY**

Epoxy for dowels shall be Hilti H-150, or approved equal

**2.7 BONDING AGENT**

Bonding agent on saw cut surfaces shall be Sika Armatcc 110 bonding or approved equal.

**2.8 CONCRETE WATER & SALT BARRIER**

**Saltguard WB deep penetrating water & salt barrier, or approved equal.**

## 2.9 DETECTABLE WARNING STRIPS

Detectable warning strips shall conform to the details shown on the Contract Drawing and to the requirements of sections 4.7.7 and 4.29 of the ADA Standards for Accessible Design.

## 3.0 CONSTRUCTION METHODS

Installation of concrete sidewalks shall follow the applicable portions of Article 9.21.03 of the Standard Specification

Concrete sidewalks shall be cured and protected in conformity with the requirements of Article 4.01.03 for concrete pavement.

**After concrete has cured for a minimum of 14 days, all exposed concrete surfaces shall be sealed with Saltguard WB deep penetrating water & salt barrier, or approved equal installed per the manufacturer's recommendations. Adjustments to the cure duration may be made with prior approval from the Engineer and Manufacturer.**

## 4.0 MEASUREMENT AND PAYMENT

This work will be measured for payment by the actual number of square feet of completed and accepted concrete sidewalk, ramps, aprons, and integral curbs to the thickness and width shown on the contract drawings.

Any sidewalks, driveways, driveway ramps and/or pedestrian ramps which during the course of construction are damaged by negligent operations of the Contractor shall be repaired or replaced by the Contractor at his own expense as directed by the Engineer. Said repairs/replacements will not be measured for payment.

Saw cutting and removal of existing sidewalk, excavation, backfilling and disposal of removed concrete or other surplus material will be paid for under this item.

Gravel Base: This work will not be measured for payment, but the cost shall be considered as included in the price bid for the sidewalk, driveway, driveway ramp or pedestrian ramp.

Reinforcement: This material will not be measured for payment but the cost included in the price bid for the sidewalk, driveway, driveway ramp or pedestrian ramp.

Concrete Sealer: This material will not be measured for payment but the cost included in the price bid for the sidewalk, driveway, driveway ramp or pedestrian ramp.

This work will be paid for at the contract unit price per square foot for "Concrete Sidewalk, Ramps, and Curbs" complete in place, which price shall include all gravel base, concrete, expansion joints,

reinforcement, curing and all materials, equipment, tools, labor and work incidental to or necessary for the completion of the work.

**The contractor shall include in the cost of this construction all resetting to grade existing or newly constructed grates, frames, covers, water gates, valve boxes, access covers, and other items which normally must have a fixed relationship to finished grade.**

SECTION 8.01  
TOPSOIL, SEED, FERTILIZE AND MULCH

1.0 DESCRIPTION

This work shall consist of placing topsoil, furnishing topsoil when required, fertilizing, seeding and mulching all areas disturbed by the work and the Contractor's operations.

2.0 MATERIALS

Materials for this work shall conform to the following requirements:

**2.01 TOPSOIL**

Topsoil excavated from the project shall be used whenever possible. Topsoil supplied by the Contractor shall conform to the requirement of Article M.13.01-1.

Pervious topsoil mix shall conform to the requirements outlined on the Contract Drawings.

**2.02 FERTILIZER**

Fertilizer shall conform to the requirement of Article M.13.03.

**2.03 MULCH**

Mulch shall conform to Article M.13.05-1 and shall be hay or wood fiber.

**2.04 SEED MIXTURE**

Seed mixture for seeding shall conform to the specifications outlined on the Contract Drawings.

3.0 CONSTRUCTION METHODS

All topsoil excavated from the project shall be used. When, in the opinion of the Engineer, sufficient topsoil is not available, the Contractor shall supply topsoil from other sources. The areas on which topsoil is to be placed shall be graded to a reasonable true surface. Topsoil shall then be spread and shaped to the lines and grades shown on the plans, or as directed by the Owner. The depth shown on the plans to which the topsoil is to be placed is that required after settlement of the material has taken place. All stones, roots, debris, sod, weeds and other undesirable material shall be removed. After shaping and grading, all trucks and other equipment shall be excluded from the topsoil area to prevent excessive compaction. The Contractor shall perform such work as required to provide a friable surface for seed germination and plant growth prior to seeding. During hauling and spreading operations, the Contractor shall immediately remove any material dumped or spilled on pavement.



It shall be the Contractor's responsibility to restore to the line, grade and surface all eroded areas with approved material and to keep topsoiled areas in acceptable condition until the completion of the construction work.

The areas to be seeded shall be made friable and receptive to seeding by approved methods which will not disrupt the line and grade of the slope surface. In no event will seeding be permitted on hard or crusted soil surface. All areas shall be free from weeds taller than three (3) inches.

The normal seeding seasons shall be March 15th to June 15th and August 15th to October 15th. Seeding at other times shall be done only when ordered by the Engineer.

Areas of disturbed soil which will contribute significantly to air and stream pollution shall be established to the designated vegetative cover as soon as feasible or when directed by the Engineer.

Seed shall be uniformly applied by any ergonomically acceptable and feasible method approved by the Engineer. Seed mixture shall be applied at the rate of 200 pounds per acre. Fertilizer shall be uniformly placed at the rate of 640 pounds per acre.

All seeded areas shall be mulched with hay or, if hydroseeding is used, wood fiber. Hay shall be uniformly applied by an approved method to a placed depth of two (2) inches. Hay shall be held in place by one uniform Application of asphalt emulsion, Type SS-1, applied at the rate of 0.08 gallons per square yard. The emulsion shall have a temperature range within 50 to 120 degrees F. at the time of the application. The emulsion may be applied during or immediately after the application of the mulch. Wood fiber mulch shall be uniformly applied at the rate of one (1) tone per acre.

The Contractor shall keep all equipment and vehicular and pedestrian traffic off areas that have been seeded to prevent excessive compaction and damage to young plants.

The Contractor shall be required to replant areas damaged by water, wind, fire, equipment or pedestrian traffic when ordered by the Owner at no cost to the Owner.

Work under this item shall not be complete until all stones and debris have been removed from the seeded areas. In areas where topsoil and seeding are not required, all disturbed areas shall be neatly graded and cleared of all debris.

#### 4.0 MEASUREMENT AND PAYMENT

The cost of this work shall be measured and paid for as a lump sum completed and accepted in place for "Topsoil, Seed, Fertilizer & Mulch" which shall include all materials, equipment, tools, and labor incidental to the completion of this item.

Any excavation required to provide for the specified thickness of topsoil in the designated areas will not be measured for payment but the cost shall be included in the price bid for topsoil, seed, fertilizer and mulch.

SECTION 8.02  
EROSION CONTROL MATTING

1.0 DESCRIPTION

This work shall consist of furnishing and installing erosion control matting following loaming and seeding where called for on the plans or as specified by the Owner or Engineer.

2.0 MATERIALS

Materials for this work shall be included on the State of Connecticut DOT Qualified Product List and conform to the following requirements:

2.01 EROSION CONTROL MATTING

Materials for this work shall be included on the State of Connecticut DOT Qualified Product List and conform to the following requirements of Section 9.50.02 of the Standard Specification.

Erosion control matting shall be Class 1: Slope Protection, Type D (Slopes steeper than 3:1 – sandy soil), as outlined on the State of Connecticut DOT Qualified Product List.

Erosion control matting shall be coconut fiber, straw fiber, or a blend of the two. Matting must be 100% biodegradable, with a degradable life of 12 to 18-months.

2.02 STAPLES

Staples shall be 6” (min.) long wire staples or 6” (min.) rigid biodegradable stakes.

3.0 CONSTRUCTION METHODS

Erosion Control Matting and staples shall be installed per the manufactures recommendations and construction details shown on the plans.

Loam, seed and fertilize disturbed areas as outlined in section 8.01 of these specifications and as outlined on the plans.

Begin at the top of the slope by anchoring the blanket in a 6” deep x 6” wide trench, backfill and compact the trench after stapling.

Roll the blanket down or horizontally across the slope

The edges of parallel blankets must be stapled with approximately 2” of overlap.

When blankets must be spliced down the slope, place blankets end over end (shingle style) with approximately 4" of overlay. Staple through overlapped area, approximately 12" apart.

Staple blankets along edges and through the field of the blankets as recommended by the manufacturer.

#### 4.0 MEASUREMENT AND PAYMENT

This item will be measured by the actual number of square yards of completed and installed Erosion Control Matting, as indicated on the Drawings or as directed by the Engineer.

"Provisional Item: Erosion Control Matting" measured as provided above, will be paid for at the Contract unit price bid per square yard completed and accepted in place, which price shall include all materials, equipment, tools, excavation, labor and work incidental thereto.

SECTION 8.03  
WATER QUALITY BASIN

1.0 DESCRIPTION

This work shall consist of constructing and water quality basin as delineated on the contract drawings. Work needed for converting the temporary sediment trap to the water quality basin as outlined on the contract drawings shall be included as part of this item.

2.0 MATERIALS

Materials for pervious topsoil, seed, mulch, fertilizer, erosion control matting, and seed mixture shall conform to section 8.01 of this specification and the contract drawings.

Subgrade shall conform to the requirements of Article 2.09.03 of the Standard Specifications. Filter fabric shall conform to the requirements of Article M.08.01-26 of the Standard Specifications.

Riprap shall be of the size indicated on the contract drawings in accordance with Article M.12.02 of the Standard Specifications.

3.0 CONSTRUCTION METHODS

Installation of for the water quality basin shall generally conform to section 2.06 of the Standard Specification. Conversion of temporary sediment traps to water quality basins shall conform to the narrative included on the Contract Drawings.

Application of topsoil, seed, fertilizer and mulch shall conform to section 8.01 of these specifications.

Installation of erosion control matting shall conform to section 8.02 of these specifications

Subgrade shall be accurately shaped prior to placing of riprap in accordance with construction methods detailed in Article 2.09.03 of the Standard Specifications.

Riprap shall be placed in accordance with construction methods specified in Article 7.03.03 of the Standard Specifications

4.0 MEASUREMENT AND PAYMENT

The cost of this work shall be measured and paid for as a lump sum item for “Water Quality Basin” completed and accepted in place, which price shall include all materials including pervious topsoil,

seed, fertilizer, mulch and erosion control matting, riprap, equipment, tools, excavation, labor and work incidental thereto.

SECTION 9.02  
CAST-IN-PLACE CONCRETE HOUSEKEEPING PADS

1.0 DESCRIPTION

The work under this Section shall include the furnishing of cast-in-place concrete and reinforcing for concrete housekeeping pads for site features, or as directed by the Owner.

The concrete pads shall include:

1. Portable toilet pad
2. Bicycle rack pad
3. Trash can pads

2.0 MATERIALS

The materials for this work shall conform to the requirements of Article M.03.01 of the standard specifications and the Contract Drawings.

Reinforcing shall conform to the Contract Drawings.

3.0 CONSTRUCTION METHODS

Construction methods shall conform to Article 6.01.03 as applicable.

4.0 MEASUREMENT AND PAYMENT

Cast-in-place concrete pads shall be measured for payment by the Engineer by the number of square feet of concrete cast-in-place and accepted, which price shall include all materials, equipment, tools, labor and work incidental thereto.

"Cast-in-Place Concrete Housekeeping Pads" measured as provided above, will be paid for at the Contract unit price bid per square foot completed and accepted in place, which price shall include all materials, equipment, tools, excavation, labor and work incidental thereto.

## SECTION 9.16 PAVEMENT MARKINGS AND SIGNING

### 1.0 DESCRIPTION

This work shall consist of installing epoxy resin pavement markings, removing and reinstalling existing signage and the installation of new signage as shown on the Contract Drawings.

### 2.0 MATERIALS

Epoxy resin pavement markings shall conform to Article 12.10.02 of the Standard Specifications.

Traffic signage and sign posts shall conform to Article 12.08.02 of the Standard Specifications and the details shown on the Contract Drawings.

### 3.0 CONSTRUCTION METHODS

The installation of epoxy pavement markings shall conform to Article 12.09.03 of the Standard Specifications.

#### Epoxy resin pavement markings:

1. Parking stalls and cross-hatching shall be white, 4" wide stripes and shall conform to the dimensions and layout as shown on the Contract Drawings.

The installation of new traffic signage and the reinstallation of existing signage shall conform to Article 12.08.03 of the Standard Specifications and the details shown on the Contract Drawings.

### 4.0 MEASUREMENT AND PAYMENT

The cost of this work shall be paid for as a lump sum for "Pavement Markings & Signing" and shall include all materials, equipment, tools, and labor incidental to the completion of this item.



SECTION 9.20  
SITE AMENITIES

1.0 DESCRIPTION

The work under this Section shall include the furnishing and installation of site features including the following:

1. Trash cans
2. Bicycle rack
3. Benches

2.0 MATERIALS

The materials for this work shall conform to the details included on the Contract Drawings, or approved equals.

3.0 CONSTRUCTION METHODS

Construction methods shall conform to the manufacturer's recommendations.

4.0 MEASUREMENT AND PAYMENT

The cost of this work shall be paid for as a lump sum for “Site Amenities” and shall include all materials, equipment, tools, and labor incidental to the completion of this item.

Any costs for shipping and delivery for site amenities shall be included in the lump sum price.

## SECTION 9.26 TIMBER SIGN SURROUND

### 1.0 DESCRIPTION

The work under this section shall consist of the furnishing and installing timber surrounds and mulch surfacing for the permanent fishing pier sign area as shown on the contract drawings or at the locations directed by the Owner.

### 2.0 MATERIALS

Timbers shall conform the materials specified on the Contract Drawings, and Section M.10.02.2 of DOT Form 819.

Crushed Stone shall conform to Section M.01.02, Table M.01.02-2, no. 8

Processed Gravel shall conform to Section 3.07 of these Technical Specifications

Geotextile shall be included on the DOT Qualified Products list for use in medium survivability separation.

Mulch shall conform to Section 13.05 of the Standard Specification.

### 3.0 CONSTRUCTION METHODS

The installation of the fitness equipment surrounds shall conform to the details shown on the Contract Drawings.

### 4.0 MEASUREMENT AND PAYMENT

The cost of this work shall be measured and paid for as a lump sum for “Timber Sign Surround” and shall include all materials, equipment, tools, and labor incidental to the completion of this item.

**SECTION 12.00**  
**BOAT LAUNCH WORK MEASUREMENT & PAYMENT**

**1.0 DESCRIPTION**

The boat launch work outlined in the Contract Documents shall be measured and paid for by the following means.

**4.0 MEASUREMENT AND PAYMENT**

**Remove & Dispose of Existing Wood Piles:**

“Boat Launch: Remove & Dispose of Existing Wood Piles” will be measured as a lump sum.

Payment will be made according to the Contract lump sum price for “Boat Launch: Remove & Dispose of Existing Wood Piles” complete in place, which price shall include saw cutting or pulling the piles, removal of wood, disposal of the wood, divers, and all materials, equipment, tools and labor incidental thereto and not included in other items.

**Precast Concrete Boat Ramp:**

“Boat Launch: Precast Concrete Boat Ramp” will be measured by the linear foot along the centerline of the boat ramp and shall include the gaps between the precast panels, furnished, installed, completed, and accepted in place.

Payment will be made according to the Contract linear foot price for “Boat Launch: Precast Concrete Boat Ramp” complete and accepted in place, which price shall include dewatering, sandbag coffer dams, lifting or hoisting equipment, precast panels, hardware, fasteners, delivery charges, and all materials, equipment, tools and labor incidental thereto and not included in other items.

**Cast-in-Place Concrete Fixed Pier:**

“Boat Launch: Cast-in-Place Concrete Fixed Pier” will be measured as a lump sum furnished, installed, completed, and accepted in place.

Payment will be made according to the Contract lump sum price for “Boat Launch: Cast-in-Place Concrete Fixed Pier” complete in place, which price shall include dewatering, sandbag coffer dams, demolition of the existing structure, formwork, gravel fill, cast-in-place concrete, steel reinforcing, hardware, fasteners, and all materials, equipment, tools and labor incidental thereto and not included in other items.

**Floating Docks, Piles, and Appurtenances:**

“Boat Launch: Floating Docks, Piles, and Appurtenances” will be measured as a lump sum furnished, installed, completed, and accepted in place.

Payment will be made according to the Contract lump sum price for “Boat Launch: Floating Docks, Piles, and Appurtenances” complete in place, which price shall include piles, floating docks, barge use as needed, appurtenances, fasteners, and all materials, equipment, tools and labor incidental thereto and not included in other items.

**ADA Complinat Gangway:**

“Boat Launch: ADA Compliant Gangway” will be measured as a lump sum furnished, installed, completed, and accepted in place.

Payment will be made according to the Contract lump sum price for “Boat Launch: ADA Compliant Gangway” complete in place, which price shall include the gangways, fasteners, hardware, delivery charges, and all materials, equipment, tools and labor incidental thereto and not included in other items.

SECTION 12.01  
REMOVE AND DISPOSE OF EXISTING WOOD PILES

1.0 DESCRIPTION

The work under this section shall include the removal and disposal of the existing deteriorated wood piles located adjacent to the existing boat launch.

The buried depth of the existing piles is unknown.

3.0 CONSTRUCTION METHODS

The existing wood piles shall be located and removed. The Contractor may perform either of the following at their discretion:

1. Sawcut the existing piles at the mud line
2. Pull the entire piles from the ground using ropes, chains, and lifting equipment

The piles shall not be excavated.

The wood piles shall be removed from the site and legally disposed of offsite.

4.0 MEASUREMENT AND PAYMENT

See Section 12.00 for measurement and payment information.

## SECTION 12.02 PRECAST CONCRETE BOAT RAMP

### 1.0 DESCRIPTION

The work under this Section shall include the furnishing and installation of precast concrete boat ramp panels to the lines and dimensions outlined on the Contract Drawings.

Precast concrete boat launch panels shall be manufactured by:

- Arrow Concrete Products
- United Concrete Products
- Connecticut Precast
- Approved equal

### 2.0 MATERIALS

The precast concrete boat launch panels shall conform to the details and specifications outlined on the Contract Drawings.

Crushed stone shall conform to Section M.01.02, Gradation No. 6 of the Standard Specification.

All fasteners shall conform to Section M.06.0.03 of the Standard Specification and the Contract Drawings.

### 3.0 CONSTRUCTION METHODS

The construction area shall be dewatered for installation to occur in a dry environment. Sandbag coffer dams or approved equal shall be established as shown on the Contract Drawings. The Contractor shall size the sand bags as needed to protect the work site.

The existing bituminous concrete ramp shall be excavated and removed from the site.

The precast panels shall be installed over a minimum 12" thick layer of compacted crushed stone.

The crushed stone shall be placed evenly below the panels and shall be graded to match the slope of the proposed boat ramp.

The Contractor shall furnish lifting equipment as needed to hoist and place the precast panels.

Panels shall be placed and bolted together through the provided eye bolts. Any voids at the eye bolts shall be filled with crushed stone.

All lifting holes shall be filled with non-shrink grout.

All disturbed river bed or soil materials surrounding the boat ramp shall be raked to the edge of the panels to create a smooth transition.

#### 4.0 MEASUREMENT AND PAYMENT

See Section 12.00 for measurement and payment information.

SECTION 12.03  
CAST-IN-PLACE CONCRETE FIXED PIER

1.0 DESCRIPTION

The work under this Section shall include the demolition and removal of the existing fixed pier and the construction of a new cast-in-place concrete fixed pier to the lines and dimensions outlined on the Contract Drawings.

2.0 MATERIALS

All materials shall conform to the requirements of the Contract Drawing and Section 14.05 herein.

3.0 CONSTRUCTION METHODS

The construction area shall be dewatered for installation to occur in a dry environment. Sandbag coffer dams or approved equal shall be established as shown on the Contract Drawings. The Contractor shall size the sand bags as needed to protect the work site.

The existing fixed pier shall be demolished and removed from the site. Existing granite stone may be salvaged and reused on the site if needed.

All construction methods shall conform to the requirements of the Contract Drawing and Section 14.05 herein.

4.0 MEASUREMENT AND PAYMENT

See Section 12.00 for measurement and payment information.



SECTION 12.10  
FLOATING DOCKS, PILES, AND APPURTENANCES

1.0 DESCRIPTION

The work under this Section shall include furnishing and installing new timber pile supports for the floating docks, new floating docks and associated hardware, fasteners, and appurtenances to the dimensions outlined on the Contract Drawings.

2.0 MATERIALS

All materials shall conform to the requirements of the Contract Drawings.

Timber piles shall conform to the requirements of sheet W-2 of the Race Coastal Engineering plans.

3.0 CONSTRUCTION METHODS

Construction methods shall conform to the requirements set forth on the Contract Drawings, best management practices, and industry standards.

Construction activities must conform to all OSHA regulations and standards.

Timber piles installation shall conform to the requirements of sheet W-2 of the Race Coastal Engineering plans

4.0 MEASUREMENT AND PAYMENT

See Section 12.00 for measurement and payment information.

SECTION 12.15  
ADA COMPLIANT GANGWAY

1.0 DESCRIPTION

The work under this Section shall include furnishing and installing a new aluminum ADA compliant gangway to the dimensions outlined on the Contract Drawings.

2.0 MATERIALS

All materials shall conform to the requirements of the Contract Drawings.

3.0 CONSTRUCTION METHODS

Construction methods shall conform to the requirements set forth on the Contract Drawings, best management practices, and industry standards.

The gangway shall be prefabricated and delivered to the site. Installation shall conform to the Manufacturers recommendations.

4.0 MEASUREMENT AND PAYMENT

See Section 12.00 for measurement and payment information.

## SECTION 14.05 CAST-IN-PLACE REINFORCED CONCRETE

### 1.0 DESCRIPTION

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.
- B. State of Connecticut DOT Form 819 applies to this section as if it were bound herein.

#### 1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data, as applicable.
- B. Reinforcing Steel Certifications: Submit mill test certificates for all reinforcing steel furnished under this section, showing physical and chemical analysis. Include in chemical analysis for steel to be welded the percentages of carbon, manganese, copper, nickel, and chromium, and optionally the percentages of molybdenum and vanadium.
- C. Aggregates: Submit test reports showing compliance with specified quality and gradation.
- D. Concrete Quality Control Submittals: Submit the following information related to the quality control assurance requirements specified:
  - 1. Design Data: Submit proposed mix designs and test data before concrete operations begin. Identify for each mix submitted the method by which proportions have been selected.
    - a. For mix designs based on field experience, include individual strength test results, standard deviation, and the required average compressive strength calculations.
    - b. For mix designs based on trial mixtures, include trial mix proportions, test results, and graphical analysis and show required average compressive strength calculations.
    - c. Indicate quantity of each ingredient per cubic yard of concrete.
    - d. Indicate type and quantity of admixtures proposed or required.
  - 2. Certifications: Provide certification from manufacturers of concrete admixtures that chloride content complies with specified requirements.
  - 3. Placement Schedule: Submit concrete placement schedule prior to start of any concrete placement operations. Include location of all joints indicated on drawings, plus anticipated construction joints.
  - 4. Delivery Tickets: Submit copies of delivery tickets complying with ASTM C94 for each load of concrete delivered to the site.

5. Cold Weather Concreting: Submit, well in advance, a description of planned protective measures.
6. Hot Weather Concreting: Submit, well in advance, a description of planned protective measures.
7. Rebar Shop Drawings: Submit rebar shop drawings detailing bar size, strength, location, and quantities.

### 1.3 QUALITY ASSURANCE

- A. Codes and Standards: Comply with the following documents, except where requirements of the contract documents or of governing codes and governing authorities are more stringent:
  1. ACI 301
  2. ACI 318
  3. ACI 302
  4. CRSI Manual of Standard Practice.
  5. ACI 211.1 – Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete.
  6. ACI 211.2 - Standard Practice for Selecting Proportions for Structural Lightweight Concrete.
  7. ACI 305R – Hot Weather Concreting.
  8. ACI 306R – Cold Weather Concreting.
  9. ASTM C33 – Standard Specification for Concrete Aggregates.
- B. Testing Agency Services: Owner will engage testing agency to conduct tests and perform other services specified for quality control during construction.
- C. Source of Materials: Obtain materials of each type from the same source during the project.

### 1.4 DELIVERY, STORAGE AND HANDLING

- A. Store cementitious materials in a dry, weather tight location. Maintain accurate records of shipment and use.
- B. Store aggregates to permit free drainage and to avoid contamination with deleterious matter or other aggregates. When stockpiled on ground, discard bottom 6 inches of pile.
- C. Handle aggregates to avoid segregation.
- D. Deliver reinforcement to project site bundled and tagged with metal tags indicating bar size, lengths, and other data corresponding to information shown on the placement drawings.
- E. Store concrete reinforcement materials to prevent damage and accumulation of dirt or rust.

## 1.5 PROJECT CONDITIONS

- A. Cold Weather Concreting: Comply fully with the recommendations of ACI 306. Well in advance of proposed concreting operations, advise the engineer of proposed protective measures including, but not limited to heating of materials, heated enclosures, and insulating blankets.
- B. Hot-weather Concreting: Comply fully with the recommendations of ACI 305R. Well in advance of proposed concreting operations, advise the engineer of proposed protective measures including, but not limited to cooling of materials, placement during evening to dawn hours, fogging during finishing and curing, shading, and windbreaks.
- C. Depositing concrete underwater: Contractor shall comply with CTDOT form 816 section 6.01.03 subsection 10 – “depositing concrete underwater” and subsection 11 – “Concrete exposed to Sea Water.”

## 2.0 MATERIALS

### 2.1 FORMWORK

- A. Facing Materials:
  - 1. Unexposed finish concrete: Any standard form materials that produce structurally sound concrete.
  - 2. Exposed and textured finish concrete: Materials selected to offer optimum smooth, stain-free final appearance and minimum number of joints.
- B. Formwork Accessories:
  - 1. Form coating: Form release agent that will not adversely affect concrete surfaces or prevent subsequent application of concrete coatings.
  - 2. Metal ties: Commercially manufactured types; cone snap ties, taper removable bolt, or other type which will leave no metal closer than 1-1/2 inches from surface of concrete when forms are removed, leaving not more than a 1-inch-diameter hole in concrete surface.
  - 3. Embedded steel accessories: Galvanized where located less than 2 inches clear from galvanized reinforcing.
  - 4. Fillets: Wood or plastic fillets for chamfered corners, in maximum lengths possible.
  - 5. Isolation Material: Polystyrene insulation of required size and thickness.

## 2.2 REINFORCING MATERIALS

- A. Reinforcing Steel: ASTM A 615, Grade 60. All reinforcing for pilasters, curbs, and abutment stem walls shall be epoxy coated.
- B. Smooth dowels: ASTM A615, Grade 60, Plain billet steel free of burrs or deformations.
- C. Welded Wire Fabric: ASTM A185, cold-drawn steel, plain.
- D. Reinforcing Accessories:
  - 1. Tie wire: Black annealed type, 16-1/2 gage or heavier.
  - 2. Supports: Bar supports conforming to specifications of CRSI "Manual of Standard Practice."
    - a. Class 1 (plastic protected) at all formed surfaces which will be exposed to weather.
    - b. Class 1 (plastic protected) or Class 2 (stainless steel protected) at all formed surfaces which will be exposed to view but not to weather.
    - c. Precast concrete blocks of strength equal to or greater than specified strength of concrete or Class 3 supports equipped with sand plates, where concrete will be cast against earth. Concrete masonry units will not be accepted.

## 2.3 CONCRETE MATERIALS

- A. Portland Cement: ASTM C 150, and as follows:
  - 1. Type I, except where other type is specifically permitted or required. Type I may be replaced by Type III (high early strength) for concrete placed during cold weather.
- B. Water: Potable
- C. Aggregates: Normal weight concrete: ASTM C 33.
- D. Admixtures - General: Admixtures which result in more than 0.1 percent of soluble chloride ions by weight of cement are prohibited.
- E. Air-Entraining Mixture: ASTM C 260 and certified by manufacturer for compatibility with other mix components.
- F. Water Reducing Admixture: ASTM C 494, Type A.
- G. Water Reducing, Retarder Admixture: ASTM C 494, Type D.
- H. Water Reducing and Accelerating Admixtures: ASTM C 494, Type E.
- I. High Range Water Reducing Admixture (Super plasticizer): ASTM C 494, Type F or G.

## 2.4 MISCELLANEOUS MATERIALS AND ACCESSORIES

- A. Waterstop: 1" x 3/4" Bentonite clay continuous strip, Volclay Waterstop-RX, or equal. Install per manufacturer's specifications.

- B. Nonshrink Grout: ASTM C 1107. Type: Provide non-metallic type only. Obtain 2 day compressive strength of 3400 psi, 28-day compressive strength of 10,000 psi.
- C. Plastic Curing Membranes: 4 mil polyethylene
- D. Liquid Curing Compounds: Comply with ASTM C 309, Type I. Prior to use, verify compatibility of curing compound with floor finishes.
- E. Expansion Joint Filler: Nonextruding bituminous type: ASTM D 1751.
- F. Anchor Bolts: ASTM A307, Grade A; with ASTM A563 hex nuts and flat washers.
- G. Joint Sealant: Conform to Section 8.9 of AASHTO Standard Specifications for Highway Bridges
- H. Vapor Retarder: Clear 10-mil thick polyolefin with lapped and taped joints.

## 2.5 CONCRETE MIX DESIGN

- A. Mix Design Review: Do not begin concrete operations until proposed mixes have been reviewed by the engineer.
- B. Proportioning of Normal Weight Concrete: Comply with recommendations of ACI 211.1.
- C. Mix concrete in accordance with ACI 304. Deliver concrete in accordance with ASTM C94/C94M.
- D. Use accelerating admixture in cold weather only when approved by A/E.
- E. Use of admixtures will not relax cold weather placement requirements.
- F. Required Average Strength: For each type and strength of concrete, establish the required average strength of the design mix on the basis of either field experience or trial mixtures as specified in ACI 301, and proportion mixes accordingly. If trial mixtures method is used, employ an independent testing agency acceptable to the engineer for preparing and reporting proposed mix designs.
- G. Admixtures:
  - 1. Air Entraining Admixture: Add at rate to achieve specified air content.
  - 2. Water-reducing admixture: Add as required for placement and workability.
  - 3. Water-reducing and retarding admixture: Add as required in concrete mixes to be placed at ambient temperatures above 90 degrees F.
  - 4. Water-reducing and accelerating admixture: Add as required in concrete mixes to be placed at ambient temperatures below 50 degrees F.
  - 5. High-range water-reducing admixture (super plasticizer): Add as required to achieve a 7 inch slump for all concrete that will be placed against a form liner.
  - 6. Do not use admixtures not specified or approved.
- H. Concrete Mix Design: refer to Contract Drawings.
- I. Mix Adjustments: Provided that no additional expense to owner is involved, contractor may submit for engineer's approval requires for adjustment to approved concrete mixes when circumstances such as changed project conditions, weather, or unfavorable test results occur. Include laboratory test data substantiating specified properties with mix adjustment requests.

## 2.6 CONTROL OF MIX IN FIELD

- A. Slump: A tolerance up to 1 inch above the specified will be permitted for 1 batch in 5 consecutive batches tested. Concrete lower than that specified may be used, provided proper placing and consolidation is obtained.
  - 1. If slump upon arrival at the site is lower than 1 inch below the specified value, one addition of water with ASTM C 94 will be permitted to bring the slump within tolerance, provided that:
    - a. A positive means is available to measure the amount of water added at the site.
    - b. The specified maximum water content is not exceeded.
    - c. Not more than 45 minutes since batching has elapsed.
- B. Air Content: A tolerance of plus or minus 1½ percent of that specified will be allowed for field measurements.
- C. Do not use batches that exceed tolerances.

## 2.07 CONCRETE MIXING

- A. Transit Mixers: Mix concrete in transit mixers, complying with the requirements of ASTM C 94.
  - 1. At ambient temperatures of 85 to 90 degrees F, reduce mixing and delivery time to 75 minutes.
  - 2. At ambient temperatures above 90 degrees F, reduce mixing and delivery time to 60 minutes.

## 3.0 CONSTRUCTION METHODS

### 3.1 CONCRETE FORM PREPARATION

- A. General: Comply with requirements of ACI 301 for formwork, and as herein specified. The contractor is responsible for design, engineering, and construction of formwork, and for its timely removal.
- B. Earth Forms: Earth forms are not permitted unless shown on contract drawings or approved in writing by the Structural Engineer.
- C. Design: Design and fabricate forms for easy removal, without impact, shock, or damage to concrete surfaces or other portions of the work. Design to support all applied loads until concrete is adequately cured, within allowable tolerances and deflection limits.
- D. Construction: Construct and brace formwork to accurately achieve end results required by contract documents, with all elements properly located and free of



distortion. Provide for necessary openings, inserts, anchorages, and other features shown on otherwise required.

1. Joints: Minimize form joints and make watertight to prevent leakage of concrete. Align joints symmetrically at exposed conditions.
  2. Chamfers: Provide chamfered edges and corners at exposed locations, unless specifically indicated otherwise on the drawings.
  3. Permanent openings: Provide openings to accommodate work of other trades, sized and located accurately. Securely support items built into forms; provide additional bracing at openings and discontinuities in formwork.
  4. Temporary openings: Provide temporary openings for cleaning and inspection in most inconspicuous locations at base of forms, closed with tight-fitting panels designed to minimize appearance of joints in finished concrete work.
- E. Tolerances for Formed Surfaces: Comply with minimum tolerances established in ACI 117, unless more stringent requirements are indicated on the drawings.
- F. Release Agent: Provide either form materials with factory-applied non absorptive liner or field-applied form coating. If field-applied coating is employed, thoroughly clean and recondition formwork and reapply coating before each use. Rust on form surfaces is unacceptable.

### 3.2 REMOVAL OF FORMS AND SUPPORTS

- A. Non-Load-Bearing Formwork: Provided that concrete has hardened sufficiently that it will not be damaged, forms not actually supporting weight of concrete or weight of soffit forms may be removed after concrete has cured at not less than 50 degrees F for 24 hours. Maintain curing and protection operations after form removal.
- B. Keep supports in place until heavy loads due to construction operations have been removed.

### 3.3 PLACING REINFORCEMENT

- A. General: Comply with requirements of ACI 301 and as herein specified.
- B. Preparation: Clean reinforcement of loose rust and mill scale, soil, and other materials which adversely affect bond with concrete.
- C. Placement: Place reinforcement to achieve not less than minimum concrete coverage required for protection. Accurately position, support, and secure reinforcement to prevent displacement. Provide Class B tension lap splices complying with ACI 318 unless otherwise indicated. Do not field-bend partially embedded bars unless otherwise indicated or approved.

1. Use approved bar supports and tie wire, as required. Set wire ties to avoid contact with or penetration of exposed concrete surfaces. Tack welding of reinforcing is not permitted.
  2. Wire fabric: Install in maximum lengths possible, lapping adjoining pieces not less than one full mesh. offset end laps to prevent continuous laps in either direction, and splice laps with tie wire.
  3. Smooth Dowels: Install smooth dowels perpendicular to formed surface. Secure dowels in place prior to placement of concrete.
- D. Welding: Welding of reinforcement is not permitted, except with the Engineer's specific approval. Perform welds in accordance with AWS D1.4.

### 3.4 FIELD QUALITY CONTROL - REINFORCING STEEL

- A. Inspection of the in-place reinforcing steel and its conformance with the contract documents shall be performed by an inspection services designated by the Owner, and unless otherwise note, all costs and expenses occasioned by the employment of such inspection service shall be paid by the Owner.
- B. Inspection service to inspect all reinforcing placement for its conformance to the contract documents. If reinforcing does not conform to contract documents, then the Inspection service is to notify the contractor of non conforming items. If the contractor fails to remedy the non conforming items, then the Inspection service is to report to the Engineer, by phone and in writing, prior to the start of concrete placement.
- C. The Contractor is to cooperate with the Inspection Service and the Engineer to ensure that the reinforcing is placed properly. Contractor to notify Inspection Service and Engineer 24 hours prior to the time that reinforcing can no longer be inspected due to formwork placement or concreting operations.
- D. Contractor to rectify reinforcing placement errors that are identified by the Inspection Service and/or Engineer at no additional costs to the Owner.

### 3.5 JOINT CONSTRUCTION

- A. Construction Joints: Locate and install construction joints as indicated on drawings. If construction joints are not indicated, locate in manner which will not impair strength and will have least impact on appearance, as acceptable to the engineer.
  1. Keyways: Provide keyways not less than 1-1/2 inches deep at footings, walls and beams.
  2. Reinforcement: Continue reinforcement across and perpendicular to construction joints, unless details specifically indicate otherwise.
  3. Water stops: Provide water stops if indicated, installing to form continuous, watertight dam, with field joints fabricated in strict accordance with manufacturer's instructions.

- B. Expansion Joints: Construct expansion joints where indicated. Install expansion joint filler to full depth of concrete. Recess edge of filler to depth indicated to receive joint filler specified.

### 3.6 VAPOR RETARDER INSTALLATION

- A. General: Place vapor retarder sheet over prepared base material, aligning longer dimension parallel to direction of pour and lapped 12 inches. Seal joints with appropriate tape as per manufacturer's recommendations.

### 3.7 INSTALLATION OF EMBEDDED ITEMS

- A. General: Set anchorage devices and other items required for other work connected to or supported by cast-in-place concrete, using templates, setting drawings, and instructions from suppliers of items to be embedded. Set edge forms and intermediate screeds as necessary to achieve final elevations indicated for finished slab surfaces.

### 3.8 CONCRETE PLACEMENT

- A. Preparation: Provide materials necessary to ensure adequate protection of concrete during inclement weather before beginning of installation of concrete.
- B. Inspection: Before beginning concrete placement, inspect formwork, reinforcing steel, and items to be embedded, verifying that all such work has been completed.
- C. Placement - General: Comply with requirements of ACI 304 and as follows:
  - 1. Schedule continuous placement of concrete to prevent the formation of cold joints.
  - 2. Provide construction joints if concrete for a particular element or component cannot be place in a continuous operation.
  - 3. Deposit concrete as close as possible to its final location, to avoid segregation.
- D. Placement in Forms: Limit horizontal layers to depths which can be properly consolidated, but in no event greater than 24 inches.
  - 1. Consolidate concrete by means of mechanical vibrators, inserted vertically in freshly placed concrete in a systematic pattern at close intervals. Penetrate previously place concrete to ensure that separate concrete layers are knitted together.
  - 2. Vibrate concrete sufficiently to achieve consistent consolidation without segregation of coarse aggregate.
  - 3. Do not use vibrators to move concrete laterally.
  - 4. Vibrate against all forms to consolidate concrete and prevent honeycombing.

- E. Slab Placement: Schedule continuous placement and consolidation of concrete within planned construction joints.
  - 1. Thoroughly consolidate concrete without displacing reinforcement or embedded items, using internal vibrators, vibrating screeds, roller pipe screeds, or other means acceptable to the engineer.
  - 2. Strike off and level concrete slab surfaces, using highway straight edges, darbies, or bull floats before water can collect on surface. Do not work concrete further until finishing operations are commenced.
- F. Cold Weather Placement: Comply with recommendations of ACI 306 when air temperatures are expected to drop below 40 degrees F either during concrete placement operations or before concrete has cured.
  - 1. Do not use frozen or ice-laden materials.
  - 2. Do not place concrete on frozen substrates.
- G. Hot Weather Placement: Comply with recommendations of ACI 305R when ambient temperature before, during, or after concrete placement is expected to exceed 90 degrees F or when combinations high air temperature, low relative humidity, and wind speed are such that the rate of evaporation from freshly poured concrete would otherwise exceed 0.2 pounds per square foot per hour.
  - 1. Do not add water to approved concrete mixes under hot weather conditions.
  - 2. Provide mixing water at lowest feasible temperature, and provide adequate protection of poured concrete to reduce rate of evaporation.
  - 3. Use fog nozzle to cool formwork and reinforcing steel immediately prior to placing concrete.
- G. Depositing concrete underwater: Contractor shall comply with CTDOT form 816 section 6.01.03 subsection 10 – “depositing concrete underwater”.

### 3.9 FINISHING FORMED SURFACES

- A. Repairs, General: Repair surface defects, including tie holes immediately after removing formwork.
  - 1. Remove honeycombed areas and other defective concrete down to sound concrete, cutting perpendicular to surface or slightly undercutting. Dampen patch location and area surrounding it prior to applying bond compound or patching mortar.
  - 2. Before bonding compound has dried, apply patching mixture matching original concrete in materials and mix except for omission of coarse aggregate, and using a blend of white and normal portland cement as necessary to achieve color match. Consolidate thoroughly and strike-off slightly higher than surrounding surface.
- B. Textured Form Finish: Repair tie holes and patch defective areas to match pattern created by form construction or form liners.
- C. Unexposed Form Finish: Repair tie holes and patch defective areas. Rub down or chip off fins or other raised areas exceeding 1/4 inch in height.

- D. Exposed Form Finish: Repair and patch defective areas, with fins or other projections completely removed and smoothed.
  - 1. Smooth rubbed finish: Apply to surfaces indicated no later than 24 hours after removal of forms. Wet concrete surfaces to be finished and rub with Carborundum brick or other abrasive until uniform color and texture are achieved. Do not apply separate grout mixture.
  - 2. Contiguous unformed surfaces: Strike smooth and float to a similar texture tops of walls, horizontal offsets, and other unformed surfaces adjacent to or contiguous with formed surfaces. Continue final finish of formed surfaces across unformed surfaces, unless otherwise specifically noted.
- E. Decorative Formliners:
  - 1. Formliners shall be installed on exposed surfaces of four concrete pilasters. All finishes shall be clean and free of voids, honeycombing, and other blemishes.
  - 2. Formliner style shall be Pattern #1203 New England Drystack by Customrock Formliner.
  - 3. Formliner shall be approximately 2" thick.
  - 4. Clear, protective concrete sealant shall be installed over cured formliner. Sealant shall be weather resistant and resistant to UV rays.
  - 5. Contractor shall provide sample of sealed formliner for Owner review prior to pier construction.

### 3.10 CONCRETE CURING AND PROTECTION

- A. General:
  - 1. Prevent premature drying of freshly placed concrete, and protect from excessively cold or hot temperatures until concrete has cured.
  - 2. Provide curing of concrete by one of the methods listed and as appropriate to service conditions and type of applied finish in each case.
- B. Curing Period:
  - 1. Not less than 7 days for standard cements and mixes.
  - 2. Not less than 4 days for high early strength concrete using Type III cement.
- C. Formed Surfaces: Cure formed concrete surfaces by moist curing with forms in place for full curing period or until forms are removed.
  - 1. Keep wooden or metal forms moist when exposed to the heat of the sun.
  - 2. If forms are removed prior to completion of curing process, continue curing by one of the applicable methods specified.
- D. Surfaces Not in Contact with Forms:
  - 1. Start curing as soon as free water has disappeared, but before surface is dry. Place to protect adjacent concrete edges. Acceptable curing methods:
    - a. Curing compound: Apply at rate stated by manufacturer to conform to moisture-retention requirements specified, using second,

- immediate application to right angles first, if necessary, and reapply if damaged by rain.
- b. Curing and hardening compound: Apply one or more applications as recommended by manufacturer to achieve maximum hardness and at rate stated by manufacturer to conform to moisture-retention requirements specified.
  - c. Use curing compounds only in locations permitted or requires, and where use will not interfere with other finishes, coatings, or coverings to be applied.
- E. During and following curing period, protect concrete from temperature changes of adjacent air in excess of 5 degrees F per hour and 50 F degrees per 24 hours. Progressively adjust protective measures to provide uniform temperature changes over entire concrete surface.

### 3.11 MISCELLANEOUS CONCRETE ITEMS (AS APPLICABLE)

- A. Fill-In: Fill in holes and openings left in concrete structures left for passage of work by other trades or after such work is in place. Place such fill-in concrete to blend with existing construction, using same mix and curing compounds.

### 3.13 CONCRETE REPAIRS

- A. Perform cosmetic repairs of concrete surfaces as specified under concrete application.
- B. Perform structural repairs with prior approval of engineer for method and procedure, using epoxy-bonded systems. The engineer's approval is required for repair methods using materials other than specified.
- C. Repair existing concrete elements as specified on the Contract Drawings.

### 3.14 QUALITY CONTROL TESTING DURING CONSTRUCTION

- A. Composite Sampling, and making and curing of specimens, ASTM C 172 and ASTM C 31.
  - 1. Take samples at point of discharge.
  - 2. For pumped concrete, perform sampling and testing at the frequencies specified herein at point of delivery to pump, and perform additional sampling and testing at the same frequency at discharge from line obtained at discharge from line shall be used for acceptance of concrete.
- B. Slump: ASTM 143. One test per strength test and additional tests if concrete consistency changes. Modify testing to comply with ASTM C 94.
- C. Air Content of Normal Weight Concrete: ASTM C 173 or ASTM C 231. One test per strength test performed on normal weight concrete.
- D. Concrete Temperature:

1. Test hourly when air temperature is 40 degrees F or below.
2. Test hourly when air temperature is 90 degrees F or above.
3. Test each time a set of strength test specimens is made.

E. Compressive Strength Tests: ASTM C 39.

1. Compression Test Specimens: Mold and cure one set of 4 standard cylinders for each compressive strength test required. Mold an additional cylinder and cure on site using conditions similar to the concrete sampled, contractor shall provide a curing box for site cured concrete.
2. Testing for acceptance of potential strength of as-delivered concrete:
  - a. Obtain samples on a statistically sound, random basis.
  - b. Minimum frequency:
    - i. Once each day a given class is placed, nor less than,
    - ii. Once for each 150 yd<sup>3</sup> of each class placed each day, nor less than,
    - iii. Once for each 5000ft<sup>2</sup> of slab or wall surface area placed each day.
    - iv. When the above testing frequency would provide less than 5 strength tests for a class of concrete during the project, conduct tests from not less than 5 randomly selected batches, or from each batch if fewer than 5.
  - c. Test one specimen per set at 7 days for information unless an earlier age is required.
  - d. Test two specimens per set for acceptance of strength potential; test at 28 days unless other age is specified. The test result shall be the average of the two specimens. If one specimen shows evidence of improper sampling, molding, or testing, the test result shall be the result of the remaining specimen; if both show evidence disregard the test and contact the engineer.
  - e. Retain one specimen from each set for later testing, if required.
  - f. Strength potential of as-delivered concrete will be considered acceptable if all of the following criteria are met:
    - i. No individual test result falls below specified compressive strength by more than 500 psi.
    - ii. Not more than 10 percent of individual test results fall below specified compressive strength f'<sub>c</sub>.
    - iii. Average of any three consecutive test results equals or exceeds the specified compressive strength.
3. Testing for evaluation of field-curing:
  - a. Frequency: 1 field set of concrete specimens per day for each type of concrete poured during cold weather concreting.

- b. Mold specimens from same sample used for strength acceptance tests. Field-cure, and test at same age as for strength acceptance tests.
    - c. Evaluate construction and curing procedures and implement corrective action when strength results of field-cured specimens are less than 85 percent of test values of companion laboratory-cured specimens.
  - 4. Removal of Forms and Supports: Mold additional specimens and field cure with concrete represented; test to determine strength of concrete at proposed time of form and support removal.
- F. Test Results: Testing agency shall report test results in writing to engineer and contractor within 24 hours of test.
  - 1. Test results shall contain following data:
    - a. Project name, number, and other identification.
    - b. Name of concrete testing agency.
    - c. Date and time of sampling.
    - d. Concrete type and class.
    - e. Location of concrete batch in the completed work.
    - f. All information required by respective ASTM test methods.
  - 2. Nondestructive testing devices such as impact hammer or sonoscope may be used at engineer's option for assistance in determining probable concrete strength at various locations or for selecting areas to be cored, but such tests shall not be the sole basis for acceptance or rejection.
  - 3. The testing agency shall make additional tests of in-place concrete as directed by the engineer when test results indicate that specified strength and other concrete characteristics have not been attained.
    - a. Testing agency may conduct tests of cored cylinders complying with ASTM C 42, or tests as directed.
    - b. Cost of additional testing shall be borne by the contractor when unacceptable concrete has been verified.

#### 4.0 MEASUREMENT AND PAYMENT

No separate payment will be made for this item and all costs in connection therewith shall be included in the bid items for which the cast-in-place concrete will be used.



**SECTION 16.000**  
**ELECTRICAL WORK MEASUREMENT & PAYMENT**

**1.0 DESCRIPTION**

The electrical work outlined in the Contract Documents shall be measured and paid for by the following means.

**4.0 MEASUREMENT AND PAYMENT**

**New Service Conduit, Trenching, Backfill, Wire, Meter, and Eversource Coordination:**

“Electrical: New Service Conduit, trenching, Backfill, Wire, Meter, and Eversource Coordination” will be measured as a lump sum furnished, installed, tested, and accepted in place.

Payment will be made according to the Contract lump sum price for “Electrical: New Service Conduit, trenching, Backfill, Wire, Meter, and Eversource Coordination” complete and accepted in place, which price shall include coordinating with Eversource, furnishing and installing the conduits, wiring, bedding, handholes, meter, grounding, bonding, testing, permits, fees, and all materials, equipment, tools and labor incidental thereto and not included in other items for a complete functioning electrical system.

**Enclosure, Concrete Base, and Appurtenances:**

“Electrical: Enclosure, Concrete Base, and Appurtenances” will be measured as a lump sum furnished, installed, tested, and accepted in place.

Payment will be made according to the Contract lump sum price for “Electrical: Enclosure, Concrete Base, and Appurtenances” complete and accepted in place, which price shall include metal enclosure, concrete base, internal shelving, name plates, light, heating, cooling, panels, backboards, wiring, bedding, grounding, bonding, testing, permits, fees, and all materials, equipment, tools and labor incidental thereto and not included in other items for a complete functioning electrical system.

**Site Lighting and Camera Conduit, Handholes, Trenching, and Backfill:**

“Electrical: Site Lighting and Camera Conduit, Handholes, Trenching, and Backfill” will be measured as a lump sum furnished, installed, tested, and accepted in place.

Payment will be made according to the Contract lump sum price for “Electrical: Site Lighting and Camera Conduit, Handholes, Trenching, and Backfill” complete and accepted in place, which price shall include trenching, backfill, concrete encasement as needed, conduit, pull strings, handholes, and all materials, equipment, tools and labor incidental thereto and not included in other items for a complete functioning electrical system.

**Site Lighting Fixtures, Poles, Wiring, and Bases:**

“Electrical: Site Lighting Fixtures, Poles, Wiring, and Bases” will be measured as units for each site light assembly furnished, installed, tested, and accepted in place.

Payment will be made according to the Contract unit bid price for each “Electrical: Site Lighting Fixtures, Poles, Wiring, and Bases” complete and accepted in place, which price shall include furnishing and installing the new fixture, poles, wiring, photocells, concrete bases, testing, and all materials, equipment, tools and labor incidental thereto for complete functioning site lights.

**Emergency Call Station, Concrete Base, and Conduits:**

“Electrical: Emergency Call Station, Concrete Base, and Conduits” will be measured as a lump sum furnished, installed, tested, and accepted in place.

Payment will be made according to the Contract lump sum price for “Electrical: Emergency Call Station, Concrete Base, and Conduits” complete and accepted in place, which price shall include trenching, backfill, concrete encasement as needed, conduit, pull strings, wiring, Emergency Call Station, and all materials, equipment, tools and labor incidental thereto and not included in other items for a complete functioning Emergency Call Station.

SECTION 16.010  
ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Basic Electrical Requirements specifically applicable to Division 16 Sections, in addition to the General Requirements.

1.02 REFERENCES

- A. ANSI/NFPA 70 - National Electrical Code.
- B. NFPA- Life Safety 101: NFPA Codes- All
- C. BOCA- National Building Code
- D. Local codes and Authority Having Jurisdiction

1.03 SUBMITTALS

- A. Submit shop drawings and product data grouped to include complete submittals of related systems, products, and accessories in a single submittal.
- B. Mark dimensions and values in units to match those specified.

1.04 REGULATORY REQUIREMENTS

- A. Conform to applicable State of Conn Building Codes.
- B. Electrical: Conform to NFPA 70.
- C. Conform to Eversource (formerly CL&P) requirements

1.05 QUALIFICATIONS

- A. All electrical design and installation work shall be performed by an electrical contractor licensed to perform work in the State of Connecticut.

1.06 TERMS AND DEFINITIONS

- A. The term "provide" shall mean furnish, fabricate, complete, deliver, install and erect including all labor materials, tools, services, and expense required to complete in place, ready for operation or use under terms of the Contract Documents
- B. The term "as indicated" or "as shown" shall mean as shown or indicated on the drawings. The term "as directed" or "as selected" shall mean direction or selection by the Architect/Engineer.
- C. The term "the contractor" shall mean the entity doing the work of Division/Section.

## 1.06 INTENT

- A. It is the intention of the specifications and drawings to provide for finished work, tested and ready for operation including a new finished electrical service drop, meter, and panel sized for proposed and future uses, all in watertight exterior enclosure, tested and ready for operation.
- B. Items and services not shown on drawing, but mentioned in specification, or vice versa, necessary to render the work complete and ready for operation, shall be provided without additional cost to the Owner.
- C. The Contractor shall familiarize himself with the drawings and specifications of the other trades, particularly the architectural, structural, and mechanical trades. Work that is contingent upon the work of other trades shall be fully coordinated with the General Contractor prior to the Bid submission. Failure to properly coordinate work requirements does not relieve the Contractor from completing all work.
- D. The drawings are general layout schematics and do not show every fitting, transition, offset, etc or device mentioned within the specifications. All items necessary for proper installation, operation, and maintenance of the architectural, electrical, mechanical equipment and systems shall be included, the same as if herein specified.
- E. Prior to submission of Bid, the Contractor shall give written notice to the Architect of any materials or apparatus believed unsuitable or inadequate, in violation of any laws, ordinances, rules, or regulations of authorities having jurisdiction, and any necessary items being omitted. In the absence of such written notice, it is mutually agreed that the Contractor has included all required items in his proposal.
- F. The work required under this section includes all labor, materials, services, and equipment necessary for and reasonably incidental to the proper and complete installation of all lighting systems, power systems, and distribution systems as set forth or reasonably implied on the drawings and in specifications, notwithstanding, that each and every item necessarily involved may not be specifically mentioned.

## 1.07 WORK INCLUDED

- A. The principal items of the electrical work shall include, but are not necessarily limited to the following:
  - 1. Providing for the extension and termination of the secondary power distribution feeder to the new service cabinet. Examine existing poles on site to determine the extent of this work.
  - 2. Provide all coordination work with Eversource. All Eversource charges for this project are to be included as part of the bid proposal fee.
  - 3. Providing services, distribution panels, surge/lighting suppression, grounding and feeders.
  - 4. Providing for a complete site lighting system including conduits, fixtures, poles, lamps, controls, grounding systems, and concrete bases and concrete pads.
  - 5. Providing for all of the wiring and electrical devices.

6. Providing for the common grounding of all equipment.
7. Provision for premium time and scheduling of work as required to complete the work.
8. Providing and installing temporary light and power for the project. This includes the cost of energy.
9. Removal and proper disposal of electrical debris as required to complete the project.
10. Providing all necessary equipment for the execution of the electrical work.
11. Providing for the complete testing and certified reporting of all tests of the electrical systems.
12. Removal of the abandoned in place electrical systems components, as applies.
13. Providing for all concrete work for the execution of the project.

### PART 3 - EXECUTION

#### 3.01 EXISTING SYSTEMS

To remain- existing street lighting to remain, protect and keep operational at all times.

#### 3.02 PERMITS

- A. The Contractor shall give all necessary notices, obtain all permits and pay all state and local taxes, fees and other costs in connection with his work. He shall prepare documents, file all necessary plans and obtain all necessary approvals of all state and local departments having jurisdiction. He shall obtain and deliver all Certificates of Inspection to the Owner before requesting acceptance and final payment for the work.
- B. The Contractor shall be responsible for performing any and all inspections required by the Building Code Official and the local Fire Marshal.

#### 3.03 MEASUREMENTS

- A. All measurements shall be taken at the site; actual measurements to take precedence over scale dimensions. The contractor/electrical contractor shall make necessary field measurements to determine space requirements.

#### 3.04 COORDINATION OF WORK

- A. Coordinate the work with the work of other trades and check the drawings and specifications for the work of other trades to assure proper location of the materials and equipment provided. **Prepare coordination drawings as necessary.** Verify all power requirements for ratings and compatibility for equipment supplied by others but to be connected by the contractor.
- B. Closely schedule the work so that the work will be installed at the proper time without delaying the completion of the project.

- C. Where the work will be installed in close proximity to the work of other trades, or where there is evidence that the work will interfere with the work of other trades, arrange space conditions to make a satisfactory adjustment. If the work is installed before coordinating with other trades, make necessary changes to the work to correct the condition without additional cost to the owner.
- D. Prepare complete set of drawings showing all necessary slab openings and structural supports that require structural framing. Drawings shall clearly indicate sizes and location relative to column lines. Drawings shall be completed in sufficient time to allow for structural steel fabrication so as not to delay the project schedule.

### 3.05 SCAFFOLDING, RIGGING, HOISTING

- A. Unless otherwise specified, the work shall include all scaffolding, rigging, hoisting and service necessary for erection and delivery into the premises of any equipment and apparatus furnished. Remove same from the premises when no longer required.

### 3.06 AS-BUILT DRAWINGS

- A. Keep a record on prints of all changes and additions to the systems and show exact location of all concealed and buried conduits.

### 3.07 SUPERVISION

- A. The contractor shall personally, or through an authorized and competent representative, constantly supervise the work from beginning to completion and final acceptance without notice from anyone. As far as possible, he shall keep the same foremen and workmen throughout the project duration.

### 3.08 CLEANING

- A. The contractor shall at all times keep the premises free from surplus material and rubbish and he shall not have undue surplus material for which there is no immediate use on site in the work areas.
- B. At the completion of the work the contractor shall remove his entire plant and equipment, rubbish, waste, and surplus materials. He shall leave the premises broom clean.

### 3.09 EXISTING CONDITIONS

- A. The contractor shall visit the site of the work and familiarize himself with all available information concerning the existing nature of the structural, mechanical, and electrical conditions bearing on the installation, transportation, handling, storage of necessary materials and equipment. Access to and from the work areas to be assessed carefully as a job site condition. Failure of the contractor to acquaint himself with all available

information concerning the foregoing conditions will not relieve him from responsibility for estimating the difficulties and costs of successfully performing the complete work under this contract.

### 3.10 PHASING OF THE WORK

- A. All work will be coordinated by the General Contractor and phasing of the work to accommodate the facility occupancy/scheduling requirements will be a part of the scope of work. Refer to General Conditions and other technical specifications for phasing requirements.

### 3.11 DRAWINGS

- A. Drawings are diagrammatic and indicate the general arrangement of systems and work required. Do not scale the drawings. Consult the architectural drawings and details, and drawings of other trades, for exact location of equipment. The contractor is cautioned to examine all of the contract drawings to ascertain the full extent of the work required under this or any other division.
- B. Drawings shall be used in layout of the work. Check reference drawing to verify spaces in which the work will be installed.
- C. As directed by the Architect/Engineer, make minor modifications in the layout as needed to prevent conflicts with the work of other trades or for the proper execution of the work.

### 3.12 EQUIPMENT SUBSTITUTIONS

- A. Whenever the terms "or equal" or "or approved equal" are used, substitutions are permitted provided the substitution conforms to the specified item with regard to quality, noise generated, operating efficiency, and method of operation. Performance in the schedules and the specifications shall be interpreted as the required minimum performance. Substitutions are subject to approval by the Architect/Engineer.
- B. Where an item of equipment is proposed, other than specified, and requires adjustments to the structure, ceilings, piping, ductwork, or wiring, etc., any redesign, drawing revisions, resubmissions to local officials, or costs incurred therein, shall be the responsibility of the Contractor.

### 3.13 WARRANTIES AND GUARANTEES

- A. **Materials and Workmanship Warranty** - All materials, workman-ship and the entire installation shall be maintained and serviced for a period of one year from date of acceptance by the Owner. Leave entire system installed under this Contract in perfect working order, and replace any work or material which develops defects within the warranty period, at no cost to the Owner.

1. Perform all work in a practical, neat and workmanlike manner with mechanics skilled in the work and using the very best practices of the trade involved.
  2. No work shall be concealed until it has been inspected and approved by the Architect.
- B. **Equipment Warranty** - The manufacturer shall warrant that the equipment which he has furnished is free from defects in material and workmanship and meets the specified performance. Obligations under this warranty shall be as follows:
1. For a period of one year from date of acceptance by the Owner or eighteen (18) months from date of shipment, the equipment manufacturer/supplier shall provide and pay for all labor, parts, accessories, material, freight and other work required for the repair or replacement of any equipment or part therein which is found to be defective.
  2. Where a system fails to meet the intended performance, any unsatisfactory conditions must be corrected by the installing Contractor. Where questions arise concerning inadequacy of the design, the burden of proof rests upon the Contractor.
- C. The Contractor shall deliver to the Owner a copy of all manufacturer warranties before requesting acceptance and final payment for the work.
- D. Acceptance will be upon written request by the contractor that the work is finished and that an acceptance inspection is requested. Acceptance by the Architect/Engineer will be made in writing. The guarantee period will begin on the acceptance date. The guarantee may also begin upon substantial completion, this will also require an Architect/Engineer's certification that substantial completion has been reached.

### 3.14 DELIVERY, SCAFFOLDING, RIGGING, HOISTING

- A. The Contractor shall transport and hoist all his own materials and equipment, or arrange and pay for transportation and hoisting by other Contractors of the project.
- B. The Contractor shall be responsible for receiving, uncrating, checking and properly storing his own equipment and apparatus delivered to the job site for installation in the building.
- C. Equipment shall be protected when stored in areas exposed to the elements or hazards of construction.

### 3.15 EQUIPMENT FOUNDATIONS

- A. The Contractor shall furnish all necessary templates, forms, patterns, etc., for foundations, support pads, bases, and piers required for all equipment, switchboards, luminaires, panels, etc., and shall submit drawings to the Architect for approval before purchase or fabrication.



### 3.16 CUTTING/PATCHING AND DRILLING

- A. In general, all cutting/rough patching, and drilling will be provided by the Contractor requiring the work.
- B. All holes are to be core drilled. All core drilling for conduits and equipment shall be by the Contractor.
- C. The Contractor shall furnish and set all sleeves and forms necessary to provide proper openings for his work in floors and walls. When sleeves and forms are set by others, this Contractor shall be held responsible for their exact location and size. Any cutting and patching resulting from error shall be done at this Contractor's expense.
- D. All repairing, patching, piecing-out, filling-in, restoring and refinishing shall be neatly done by mechanics skilled in their trade to leave same in condition satisfactory to the Owner.
- E. Any disturbance or damage to the work, the existing building, and improvements, or any impairment of facilities resulting from the construction operations, shall be promptly rectified, with the disturbed, damaged, or impaired work, restored, repaired or replaced at no extra cost.

### PART 4 - MEASUREMENT AND PAYMENT

See Section 16.000 for measurement and payment information for the electrical system, lighting, and security components.

## SECTION 16.012

### CONDUIT

#### 1.0 DESCRIPTION

This item of work shall include the construction and installation of all conduit, conduit duct banks, including conduits, plastic spacers, sleeves, elbows, fittings, couplings, adapters, expansion couplings, support racks, temporary or permanent pull strings, concrete encasement or sand bedding, and all appurtenances of the type, size and kind indicated on the plans and in the specifications, or as ordered by the Engineer. This item shall also include the furnishing and installation of all hardware, materials, and the performance of all work required for the complete conduit duct bank installation.

Conduit and Conduit Duct Bank installation shall conform to the lines, sizes, grades, dimensions, materials and details shown on the plans and in accordance with the provisions of these Specifications.

This section shall include:

1. Above ground and below ground installations.
2. Conduit for telecommunications, electrical power (primary or secondary), or spares.

#### 2.0 MATERIALS

All materials specified shall be new and unused and meet the requirements specified herein and as required and approved by the Owner.

Conduit size shall be as called out on the plans. All conduits shall be minimum 1½" diameter.

PVC Conduit shall be schedule 40 piping or schedule 80 and shall conform to the requirements of form 819, Section M.15.09.3.

Rigid Galvanized Steel conduit shall conform to the requirements of form 819, Section M.15.09.1.

Handholes, pull boxes, and junction boxes shall be manufactured of concrete, polymer concrete or HDPE and shall be manufactured by Carson/Old Castle, or approved equal. Boxes shall not be subject to traffic or vehicle loading. Covers shall be nonslip, bolt down, with "Electric", "Telephone", or "Communications" cast into the top.

Portland Cement Concrete for concrete encased duct banks shall conform to the requirements of form 819, Section M.03.02, Class "PCC04462".

Sand bedding for conduit duct banks shall conform to the requirements of form 819, Section M.05.01.3

### 3.0 CONSTRUCTION METHODS

Conduit and Conduit Duct Banks shall be laid and installed as indicated on the Contract plans or otherwise directed. **Conduit routing as shown on the plans is for a general arrangement. The Contractor shall provide an actual conduit layout to the Owner for approval prior to construction.** All conduits when in place shall be true to the line and grade specified. Trenching and backfilling of conduit shall conform to the requirements of form 819, Article 10.01 and these specifications.

The conduit shall be sand bedded or concrete encased as detailed on the Contract plans and in accordance with these Contract specifications. Conduits installed with less than 30" of cover shall be concrete encased.

The maximum conduit length shall be 150 linear feet without a pull box, junction box, or handhole. Boxes or handholes shall be sized per the NEC code.

It shall be the responsibility of the contractor to ensure that Schedule 40 PVC be installed no less than 30" (thirty inches) below grade or steel piping must be used. In no case shall conduit be installed with less than 24" of cover.

All underground conduits shall be laid in a trench free of water. The Contractor shall furnish all equipment necessary to keep trenches free of water during the laying of pipe.

For buried conduit, marking tape shall be installed in the trench at the depth and to the requirements set forth in the Article 1.05.15 of Form 819.

Schedule 40 or 80 PVC Conduit shall be installed as detailed and directed in full accordance with the manufacturer's recommendations and accepted best practice, with the below listed qualifications and clarifications. A lay schedule shall be submitted for approval by the Owner. The methods employed in performing the work and all equipment, tools and machinery used in handling material and executing any part of the work shall be started and, whenever found unsatisfactory, shall be changed and improved as required by the Owner. All equipment, tools and machinery used shall be maintained in a satisfactory working condition.

It shall be the responsibility of the contractor to coordinate his work schedule, where required, with that of the Owner or Utility Company. Ample notice shall be given to the Utility Company so that a minimum of 24 to 48 hours notice may be given to any user whose service may be disconnected for any reason.

Proper implements, tools and facilities shall be provided and used by the Contractor for safe and convenient performance of the work. All conduit materials shall be lowered into the trench with a suitable device that will not damage the materials. Under no circumstance shall the materials be

dropped or dumped into the trench. Any damaged materials shall be satisfactorily repaired or replaced.

Conduits shall be installed so that the bell end is at the transformer pad, switchgear vault, each manhole, each handhole or other structure. This includes existing and proposed structures

Every precaution shall be taken to prevent foreign matter from entering the conduit while it is being placed in the trench. If the crew cannot put the conduit into the trench and in place without getting earth into it, the Owner may require that before lowering the conduit materials into the trench, a heavy tightly woven canvas bag of suitable size be placed over each end and left there until all connections are made. At times when work is not in progress, open ends shall be securely closed so that no trench water, earth or other substances will enter the conduit opening or fittings. If necessary, the line shall be flushed out to remove all foreign matter prior to pulling cable.

The cutting of conduit for installing fittings or closure pieces shall be done in a neat manner without damage to the conduit and so as to leave a smooth end at right angles to the axis of the conduit.

Joining of joints, fittings and accessories shall be provided in accordance with the recommendations of the manufacturer. The contractor shall provide at no additional expense to the Owner, all necessary adapters or terminators for use in pulling cables through the conduit.

Bends shall be used only at the locations shown on the plans or at other locations approved by the Owner.

A minimum 3/16" (three sixteenth inch) polypropylene pull string, or approved equal, shall be provided in each conduit within the duct banks.

Long radius elbows shall be provided for conduit called out to be stubbed out to grade. Conduits shall be cut square 12" above grade and a PVC cap provided on the end. Pull string shall be adequately secured to the cap or conduit for future use.

Upon completion of the conduit installation, all conduits shall be free from obstructions and burrs.

#### 4.0 MEASUREMENT AND PAYMENT

See Section 16.000 for measurement and payment information for the electrical system, lighting, and security components.

## SECTION 16.015 SITE LIGHTING

### 1.0 DESCRIPTION

The work covered under this Section includes furnishing all labor, equipment and materials, and performing all operations in connection with the installation of new permanent light poles, fixtures, concrete bases, conduits, and wiring as shown on the Contract Documents.

### 1.1 QUALITY ASSURANCE

- A. Codes and Standards: All work under this section shall comply with the applicable requirements of the National Electric Code, local electrical and other codes, laws, regulations and standards including those of all State authorities. Where references are made in law codes regulation and standards, these documents, including the latest revisions and amendments in effect as of the date of bid opening, shall form part of these specifications.
- B. Submittals: The Contractor shall submit Manufacturer's cut sheets or shop drawings for conduit, fittings, lamp pole bases, poles, and fixtures for review and approval by the Owner's Representative.

### 1.2 DESIGN & APPROVALS

- A. The lighting layout, height and fixtures shown on the Contract Drawings have been approved by the Town of Montville. Any modifications to the layout, height, or fixtures shall require prior approval from the Town of Montville.
- B. The lighting layout and fixture schedule has been provided by: Sylvia Perdakis of Apex Lighting Solutions, [www.apexltg.com](http://www.apexltg.com).

### 2.0 MATERIALS

Materials shall conform to those specified on the Contract Documents. All materials specified shall be new and unused and meet the requirements specified herein and as required and approved by the Owner.

#### **LAMP POSTS AND FIXTURES**

Fixture & Pole Color:	Black – to be approved by the Owner prior to construction
Fixtures:	Philips Gardco as shown on the Contract Drawings
Pole:	4" square minimum, galvanized steel, suitable for withstanding 110 mph wind speeds with the fixtures specified
Connections:	Waterproof Elastimold, Buchanan, or approved equal

All components shall be UL approved and are manufactured to meet or exceed utility grade standards.

All hardware and fasteners shall be grade 308 stainless steel.

Fixture and connections shall be water tight.

All handholes, bushings, and work necessary for future security cameras shall be watertight.

#### CONTROLS AND TIMER

- A. Each individual fixture shall include a heavy duty weatherproof outdoor photocell suitable for automatic switching of the individual light fixtures.
- B. Any other controls or devices as may be required to connect into the service panelboard.

#### CONCRETE LAMP POLE BASES

- A. Concrete shall be minimum 3,000 psi @ 28 days. Reinforcing steel shall conform to Section M.06.01 of the Standard Specifications. Bases shall conform to the details shown on the Contract Drawings.

#### CONDUITS & WIRING

- A. Conduits and wiring shall conform to the manufacturer's recommendations and the requirements specified herein, and Section 10.08.02 of the Standard Specification.

### 3.0 CONSTRUCTION METHODS

Refer to Section 16 of these technical specifications for wiring and electrical requirements.

Construction methods shall conform to the local building codes.

The Contractor shall be required to design and build the site lighting system based on the fixtures specified, including sizing and routing all wiring and conduits, and connection to the proposed electrical service and distribution panel.

Contractor is responsible for coordinating and installing all material and work necessary to completely install a functioning site lighting system.

#### CONCRETE BASES

- A. Lamp pole bases shall be constructed and installed as shown on the Contract Drawings.
- B. Lamp pole bases shall be installed on a stable processed grave or crushed stone base.

- C. The Contractor shall coordinate and locate all conduit through the light poles bases, as required for the site lighting, security camera wiring, and any potential conduits as called for on the Contract Drawings.

#### LIGHT POLES

- A. Shall be installed in accordance with manufacturers' instructions.
- B. Install lighting poles at locations indicated.
- C. Install poles plumb. Provide shims and double nuts to adjust plumb. Grout around each base. Leave weepholes, 3/8", round on two sides of bottom of base cover.
- D. Install lamps in each luminaire.
- E. Bond luminaires, metal accessories and metal poles to branch circuit equipment grounding conductor. Provide supplementary grounding electrode at each pole.

#### FIELD QUALITY CONTROL

- A. Operate each luminaire after installation and connection. Inspect for improper connections and operation.
- B. Measure illumination levels to verify conformance with performance requirements.
- C. Take measurements during night sky, without moon or with heavy overcast clouds effectively obscuring moon.

#### ADJUSTMENTS

- A. Aim and adjust luminaires to provide illumination levels and distribution indicated on Drawings or as requested by the Owner.
- B. Relamp luminaires which have failed lamps at Date of Substantial Completion.

#### CLEANING

- A. Clean electrical parts to remove conductive and deleterious materials.
- B. Remove dirt and debris from enclosure.
- C. Clean photometric control surfaces as recommended by manufacturer.
- D. Clean finishes and touch up damage.

#### 4.0 MEASUREMENT AND PAYMENT

See Section 16.000 for measurement and payment information for the electrical system, lighting, and security components.

SECTION 16.123  
WIRE AND CABLE

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Building wire and cable.
- B. Wiring connectors and connections.

1.2 RELATED SECTIONS

- A. Section 16.195 - Electrical Identification.

1.3 REFERENCES

- A. NECA Standard of Installation (National Electrical Contractors Association).
- B. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems (International Electrical Testing Association).
- C. NFPA 70 - National Electrical Code.

1.4 SUBMITTALS FOR REVIEW

- A. Wire to be used.

1.5 SUBMITTALS FOR INFORMATION

- A. Test Reports: Indicate procedures and values obtained.
- B. Design Data: Indicate voltage drop and ampacity calculations for aluminum conductors substituted for copper conductors.
- C. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency specified under Regulatory Requirements.

1.6 SUBMITTALS AT PROJECT CLOSEOUT

- A. Project Record Documents: Record actual locations of components and circuits.

1.7 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three years experience.



## 1.8 REGULATORY REQUIREMENTS

- A. Conform to NFPA 70.
- B. Furnish products listed and classified by Underwriters Laboratories Inc., as suitable for the purpose specified and indicated.

## 1.9 PROJECT CONDITIONS

### Coordination and Meetings:

- A. Verify that field measurements are as indicated.
- B. Conductor sizes are based on copper.
- C. Aluminum conductors are not allowed.
- D. Wire and cable routing indicated is approximate unless dimensioned. Include wire and cable lengths within 10 ft of length shown.

## 1.10 COORDINATION

- A. Coordinate Work under provisions of this Section.
- B. Where wire and cable destination is indicated and routing is not shown, determine exact routing and lengths required.

## PART 2 - PRODUCTS

### 2.1 BUILDING WIRE

- A. Manufacturers:
  - 1. Okonite.
  - 2. Rome.
  - 3. Southwire.
- B. Description: Single conductor insulated wire.
- C. Conductor: Copper.
- D. Insulation Voltage Rating: 600 volts.
- E. Insulation: NFPA 70; Type XHHW insulation for feeders and branch circuits larger than #1 AWG; Type THHN/THWN insulation for feeders and branch circuits #2 AWG and smaller.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Coordination and Meetings: Verification of existing conditions before starting work.
- B. Verify that conduit has been protected from weather.
- C. Verify that mechanical work likely to damage wire and cable has been completed.

D. Verify that raceway installation is complete and supported.

### 3.2 PREPARATION

A. Completely and thoroughly swab raceway before installing wire.

### 3.3 WIRING METHODS

A. Exterior Locations: Use only building wire, Type THHN/THWN and XHHW insulation in raceway.

B. Underground Installations: Use only building wire, Type THHN/THWN and XHHW insulation, in raceway.

C. Use wiring methods indicated.

### 3.4 INSTALLATION

A. Section - Quality Control: Manufacturer's instructions.

B. Route wire and cable as required to meet Project Conditions.

C. Install cable in accordance with the NECA "Standard of Installation."

D. Use solid conductor for feeders and branch circuits 10 AWG and smaller.

E. Use stranded conductors for control circuits.

F. Pull all conductors into raceway at same time.

G. Use suitable wire pulling lubricant for building wire 4 AWG and larger.

H. Protect exposed cable from damage.

I. Use suitable cable fittings and connectors.

J. Neatly train and lace wiring inside boxes, equipment, and panelboards.

K. Clean conductor surfaces before installing lugs and connectors.

L. Make splices, taps, and terminations to carry full ampacity of conductors with no perceptible temperature rise.

M. Use split bolt connectors for copper conductor splices and taps, 6 AWG and larger. Tape uninsulated conductors and connector with electrical tape to 150 percent of insulation rating of conductor.

N. Use solderless pressure connectors with insulating covers for copper conductor splices and taps, 8 AWG and smaller.

O. Use insulated spring wire connectors with plastic caps for copper conductor splices and taps, 10 AWG and smaller.

P. Trench and backfill for conduit installation as specified. Install warning tape along entire length of direct burial cable, within 3 inches (75 mm) of grade.

Q. Identify and color code wire and cable under provisions of Section 16195. Identify each conductor with its circuit number or other designation indicated.

### 3.5 FIELD QUALITY CONTROL

A. Quality Control: Field inspection, testing, and adjusting.

- B. Inspect and test in accordance with NETA ATS, except Section 4.
- C. Perform inspections and tests listed in NETA ATS, Section 7.3.1.
- D. Perform inspections and test reporting in accordance with Section 16800.

#### PART 4 - MEASUREMENT AND PAYMENT

See Section 16.000 for measurement and payment information for the electrical system, lighting, and security components.

SECTION 16.140  
ELECTRICAL DEVICES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Receptacles.
- B. Device plates.
- C. Wiring Devices

1.2 REFERENCES

- A. NECA - Standard of Installation.
- B. NEMA WD 1 - General Requirements for Wiring Devices.
- C. NEMA WD 6 - Wiring Device -- Dimensional Requirements.
- D. NFPA 70 - National Electrical Code.

1.3 SUBMITTALS FOR REVIEW

- A. Product Data: Provide manufacturer's catalog information showing dimensions, colors, and configurations.

1.4 SUBMITTALS FOR INFORMATION

- A. Submit manufacturer's installation instructions.

1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum three years experience.

1.6 REGULATORY REQUIREMENTS

- A. Conform to requirements of NFPA 70.
- B. Provide Products listed and classified by Underwriters Laboratories, Inc., as suitable for the purpose specified and indicated.

PART 2 - PRODUCTS

2.1 RECEPTACLES

- A. Manufacturers:
  - 1. Hubbell 5362 series actual part number as needed, color as selected by Architect.

- 2. Leviton.
- 3. P and S.
- B. Description: NEMA WD 1, Heavy-duty general use receptacle.
- C. Device Body: Color as selected by Architect plastic.
- D. Configuration: NEMA WD 6, type as specified and indicated.
- E. Convenience Receptacle: Type 5-20.
- F. GFCI Receptacle: Contractor to use GFI C/B to protect circuit in lieu of GFCI receptacle. Provide cast weatherproof cover for receptacle, Hubbell 5206WO.

## 2.2 PLATES

- A. Weatherproof Cover Plate: Gasketed cast metal with hinged, gasketed device cover.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Coordination and Meetings: Verification of existing conditions prior to beginning work.
- B. Verify that branch circuit wiring installation is completed, tested, and ready for connection to wiring devices.

### 3.2 PREPARATION

- A. Clean debris from outlet boxes.

### 3.3 INSTALLATION

- A. Install in accordance with NECA "Standard of Installation."
- B. Install devices plumb and level.
- C. Install receptacles with grounding pole on top.
- D. Connect wiring device grounding terminal to outlet box with bonding jumper and to branch circuit equipment grounding conductor.
- E. Connect wiring devices by wrapping conductor around screw terminal.

### 3.4 FIELD QUALITY CONTROL

- A. Quality Control: Field inspection, testing, adjusting, and balancing.
- B. Inspect each wiring device for defects.
- C. Verify that each receptacle device is energized.
- D. Test each receptacle device for proper polarity.
- E. Test each GFCI receptacle device for proper operation.

3.5 ADJUSTING

A. Contract Closeout: Adjusting installed work.

3.6 CLEANING

A. Contract Closeout: Cleaning installed work.

B. Clean exposed surfaces to remove splatters and restore finish.

PART 4 - MEASUREMENT AND PAYMENT

See Section 16.000 for measurement and payment information for the electrical system, lighting, and security components.

SECTION 16.170  
GROUNDING AND BONDING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Grounding electrodes and conductors.
- B. Equipment grounding conductors.
- C. Bonding.

1.2 REFERENCES

- A. Quality Control: Requirements for references and standards.
- B. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems (International Electrical Testing Association).
- C. NFPA 70 - National Electrical Code.

1.3 GROUNDING SYSTEM DESCRIPTION

- A. Rod electrode.

1.4 PERFORMANCE REQUIREMENTS

- A. Grounding System Resistance: 5 ohms.

1.5 SUBMITTALS FOR REVIEW

- A. Procedures for submittals, product data: Provide for grounding electrodes and connections.

1.6 SUBMITTALS FOR INFORMATION

- A. Submittals: Submittals for information.
- B. Test Reports: Indicate overall resistance to ground and resistance of each electrode.
- C. Manufacturer's Instructions: Indicate application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, and installation of Product.

1.7 SUBMITTALS FOR CLOSEOUT

- A. Contract Closeout: Procedures for submittals.

- B. Project Record Documents: Record actual locations of components and grounding electrodes.
- C. Certificate of Compliance: Indicate approval of installation by authority having jurisdiction.

## 1.8 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years experience.

## 1.9 REGULATORY REQUIREMENTS

- A. Conform to requirements of NFPA 70.
- B. Products: Listed and classified by Underwriters Laboratories, Inc. as suitable for the purpose specified and indicated.

## PART 2 - PRODUCTS

### 2.1 ROD ELECTRODES

- A. Manufacturers:
  - 1. Thomas and Betts .
  - 2. Blackburn.
- B. Material: Copper-clad steel.
- C. Diameter: 3/4 inch and 5/8 inch, as noted.
- D. Length: 10 feet and 8 feet, as noted.

### 2.2 MECHANICAL CONNECTORS

- A. Manufacturers:
  - 1. Thomas and Betts.
  - 2. Blackburn.
- B. Material: Bronze.
- C. Mechanical connectors may be used above grade only.

### 2.4 EXOTHERMIC CONNECTIONS

- A. Manufacturers:
  - 1. Cadweld

### 2.5 WIRE

- A. Material: Stranded copper.



- B. Electrodes: 4/0 AWG or as noted on the plans.
- C. Grounding Electrode Conductor: Size to meet NFPA 70 requirements and as noted on the plans.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Coordination and Meetings: Verification of existing conditions prior to beginning work.
- B. Verify that final backfill and compaction has been completed before driving rod electrodes.

#### 3.2 INSTALLATION

- A. Quality Control: Manufacturer's instructions.
- B. Install rod electrodes at locations indicated. Install additional rod electrodes as required to achieve specified resistance to ground.
- C. Provide bonding to meet Regulatory Requirements.
- D. Bond together any metal siding not attached to grounded structure; bond to ground.
- E. Equipment Grounding Conductor: Provide separate, insulated conductor within each feeder and branch circuit raceway. Terminate each end on suitable lug, bus, or bushing.

#### 3.3 FIELD QUALITY CONTROL

- A. Quality Assurance: Field inspection, testing, adjusting.
- B. Inspect and test in accordance with NETA ATS, except Section 4.
- C. Perform inspections and tests listed in NETA ATS, Section 7.13.
- D. Perform inspections and test reporting in accordance with Section 16800.

### PART 4 - MEASUREMENT AND PAYMENT

See Section 16.000 for measurement and payment information for the electrical system, lighting, and security components.

SECTION 16.195  
IDENTIFICATION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Nameplates and labels.
- B. Wire and cable markers.
- C. Conduit markers.

1.02 REFERENCES

- A. ANSI/NFPA 70 - National Electrical Code.

1.03 SUBMITTALS

- A. Submit under provisions of this Section.
- B. Product Data: Provide catalog data for nameplates, labels, and markers.
- C. Manufacturer's Instructions: Indicate application conditions and limitations of use stipulated by Product testing agency specified under regulatory requirements. Include instructions for storage, handling, protection, examination, preparation and installation of Product.

1.04 REGULATORY REQUIREMENTS

- A. Conform to requirements of ANSI/NFPA 70.
- B. Furnish products listed and classified by Underwriters Laboratories, Inc. as suitable for purpose specified and shown.

PART 2 - PRODUCTS

2.01 NAMEPLATES AND LABELS

- A. Nameplates: Engraved three-layer laminated plastic, white letters on black background.
- B. Locations:
  - 1. Each electrical distribution and control equipment enclosure.
- C. Letter Size:
  - 1. Use 1/8 inch letters for identifying individual equipment and loads.
  - 2. Use 1/4 inch letters for identifying grouped equipment and loads.
- D. Labels: Embossed adhesive tape, with 3/16 inch white letters on black background. Use only for identification of individual switches and receptacles, control device stations, and other similar individual elements.

## 2.02 WIRE MARKERS

- A. Description: Tape, split sleeve, or tubing type wire markers.
- B. Locations: Each conductor at panelboard gutters, pull boxes, outlet and junction boxes, and each load connection.
- C. Legend:
  - 1. Power and Lighting Circuits: Branch circuit or feeder number indicated on drawings.
  - 2. Control Circuits: Control wire number indicated on schematic and interconnection diagrams on drawings.

## 2.03 UNDERGROUND WARNING TAPE

- A. Manufacturers:
  - 1. 3-M.
- B. Description: 4 inch wide plastic tape, detectable type, colored yellow with suitable warning legend describing buried electrical lines.

## PART 3 - EXECUTION

### 3.01 PREPARATION

- A. Degrease and clean surfaces to receive nameplates and labels.

### 3.02 APPLICATION

- A. Install nameplate and label parallel to equipment lines.
- B. Secure nameplate to equipment front using screws, rivets, or adhesive.
- C. Secure nameplate to inside surface of door on panelboard that is recessed in finished locations.
- D. Install colored bands 20 feet on center.
- E. Identify underground conduits using underground warning tape.

## PART 4 - MEASUREMENT AND PAYMENT

See Section 16.000 for measurement and payment information for the electrical system, lighting, and security components.

SECTION 16.470  
ELECTRICAL SERVICE / SERVICE CABINET / PANELBOARDS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Design, sizing, and installation of electrical service drop per Eversource requirements.
- B. Design, sizing, and installation of distribution panel boards and enclosures.
- C. Furnish and install the concrete equipment pad.

1.2 RELATED SECTIONS

- A. Section 16170 – Grounding and Bonding.
- B. Section 16195 – Electrical Identification.
- C. Section 16475 – Overcurrent Protection Device

1.3 DEFINITIONS

- A. Load Center: A panelboard with thermal magnetic circuit breaker branches, primarily of the plug in type, designed for residential and light commercial projects, operating at 240 V and below, available in both single and 3 phase versions, and equipped with combination flush/surface mounting trim.
- B. Overcurrent Protective Device (OCPD): A device operative on excessive current that causes and maintains the interruption of power in the circuit it protects.

1.4 REFERENCES

- A. NECA Standard of Installation (published by the National Electrical Contractors Association).
- B. NEMA AB1 - Molded Case Circuit Breakers.
- C. NEMA ICS 2 - Industrial Control Devices, Controllers and Assemblies.
- D. NEMA KS1 - Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum).
- E. NEMA PB 1 - Panelboards.
- F. NEMA PB 1.1 - Instructions for Safe Installation, Operation and Maintenance of Panelboards Rated 600 Volts or Less.
- G. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment (published by the International Electrical Testing Association).
- H. NFPA 70 - National Electrical Code
- I. Eversource / CL&P – Information & Requirements for Electrical Supply below 600 Volts, latest edition.

## 1.5 SUBMITTALS

- A. Product data for each type panelboard, accessory item, and component specified or required by the Contractors design.
- B. Shop drawings from manufacturers of panelboards including dimensioned plans, sections, and elevations. Show tabulations of installed devices, major features, and voltage rating. Include the following:
  - 1. Enclosure type with details for types other than NEMA Type 1.
  - 2. Bus configuration and current ratings.
  - 3. Short circuit current rating of panelboard.
  - 4. Features, characteristics, ratings, and factory settings of individual protective devices and auxiliary component.
- C. Wiring diagrams detailing schematic diagram including control wiring, and differentiating between manufacturer installed and field installed wiring.
- D. Qualification data for field testing organization certificates, signed by the Contractor, certifying that the organization complies with the requirements specified in Quality Assurance below. Include list of completed projects with project names, addresses, and names of Architect and Owner plus basic organization qualifications data.
- E. Report of field tests and observations certified by the testing organization.
- F. Panel schedules for installation in panelboards. Submit final versions after load balancing.
- G. Maintenance data for panelboard components. Include instructions for testing circuit breakers.

## 1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years' experience.
- B. All electrical design and installation work shall be performed by an electrical contractor licensed to perform work in the State of Connecticut.

## 1.7 REGULATORY REQUIREMENTS

- A. Conform to requirements of NFPA 70.
- B. Products: Listed and classified by Underwriters Laboratories, Inc. as suitable for the purpose specified and indicated.

## 1.8 MAINTENANCE MATERIALS

- A. Contract Closeout - Furnish four (4) of each panelboard key.

## 1.9 PERFORMANCE / DESIGN REQUIREMENTS

- A. Contractor shall be responsible for sizing the electrical service and meter for the proposed and future uses in conformance with Eversource requirements and in accordance with the Contract Electrical Drawings.
- B. Contractor shall be responsible for sizing the electrical distribution panel for the proposed and future uses in conformance with Eversource requirements and in accordance with the Contract Electrical Drawings.

## PART 2 - PRODUCTS

2.1 Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include the following:

- 1. GE.
- 2. Eaton.
- 3. Square D.
- 4. SIEMENS.

## 2.2 Panelboards General Requirements

- A. Overcurrent Protective Devices (OCPDs): Provide type, rating, and features as required. Comply with Division 16 Section "Overcurrent Protective Devices," with OCPDs adapted to panelboard installation. Tandem circuit breakers shall not be used. Multipole breakers shall have common trip.
- B. Enclosures: Cabinets, flush or surface mounted as called for on the Contract Drawings. Cabinet size shall accommodate the required electrical service panel and load center, Telecommunications equipment and demarcations, and security camera equipment, emergency call stations as called for on the Contract Drawings.
- C. Front: Hinged front covers.
- D. Directory Frame: Metal, mounted inside each panel door.
- E. Bus: Hard drawn copper of 98 percent conductivity.
- F. Main and Neutral Lugs: Compression type.
- G. Equipment Ground Bus: Adequate for feeder and branch circuit equipment ground conductors. Bonded to box.
- H. Service Equipment Approval: Listed for use as service equipment for panelboards having main service disconnect.
- I. Provision for Future Devices: Equip with mounting brackets, bus connections, and necessary appurtenances, for the OCPD ampere ratings indicated for future installation of devices if applicable.
- J. Special Features: Provide the following features for panelboards as indicated.
  - i. Isolated Equipment Ground Bus: Adequate for branch circuit equipment ground conductors; insulated from box.
  - ii. Hinged Front Cover: Entire front trim hinged to box with standard door within hinged trim cover.

- iii. Split Bus: Vertical bus of indicated panels divided into two vertical sections with connections as indicated.
  - iv. Skirt for Surface Mounted Panels: Same gage and finish as panel front with flanges for attachment to panel, wall, and floor.
  - v. Extra Gutter Space: Dimensions and arrangement as indicated.
  - vi. Gutter Barrier: Arranged to isolate section of gutter as indicated.
  - vii. Column Type Panelboard Configuration: Narrow cabinet extended as wireway to overhead junction box equipped with ground and neutral terminal buses.
  - viii. Subfeed: OCPD or lug provision as indicated.
- K. Feed Through Lugs: Sized to accommodate feeders indicated.

2.3 Concrete Equipment Pad shall conform to the requirements called for on the Contract Drawings.

### PART 3 - EXECUTION

Installation shall be in conformance with the latest edition of the Eversource / CL&P Information & Requirements for Electrical Supply below 600 Volts.

#### 3.1 INSTALLATION

- A. Install the concrete equipment pad in accordance with the Contract Drawings. The pad size shall conform to the requirements called for on the Contract Drawings based on the Enclosure dimensions.
- B. Install panelboards in accordance with NEMA PB 1.1 and the NECA "Standard of Installation."
- C. Provide filler plates for unused spaces in panelboards.
- D. Provide typed circuit directory for each branch circuit panelboard. Revise directory to reflect circuiting changes required to balance phase loads.
- E. Provide engraved plastic nameplates under the provisions of Section 16195.
- F. Ground and bond panelboard enclosure according to Section 16170.
- G. Auxiliary Gutter: Install where a panel is tapped to a riser at an intermediate location.
- H. Wiring in Panel Gutters: Train conductors neatly in groups, bundle, and wrap with wire ties after completion of load balancing.
- I. Tighten electrical connectors and terminals, including grounding connections, in accordance with manufacturer's published torque tightening values. Where manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

#### 3.2 FIELD QUALITY CONTROL

- A. Section- Quality Control: Field inspection, testing, adjusting.
- B. Inspect and test in accordance with NETA ATS, except Section 4.

- C. Perform inspections and tests listed in NETA ATS, Section 7.4 for switches, Section 7.5 for circuit breakers.
- D. Perform inspections and test reporting in accordance with Section 16800.

### 3.3 ADJUSTING

- A. Section - Contract Closeout: Adjusting installed work.
- B. Measure steady state load currents at each panelboard feeder; rearrange circuits in the panelboard to balance the phase loads to within 20 percent of each other. Maintain proper phasing for multi-wire branch circuits.

## PART 4 - MEASUREMENT AND PAYMENT

See Section 16.000 for measurement and payment information for the electrical system, lighting, and security components.



SECTION 16.475  
OVERCURRENT PROTECTION DEVICES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes overcurrent protective devices (OCPDs) rated 600 V and below and switching devices commonly used with them.
- B. Panelboards: Application, installation, and other related requirements for overcurrent protective device installations in distribution equipment are specified in other Division 16 sections.

PART 2 - MATERIALS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:
  - 1. Cartridge Fuses: Bussmann, Ferraz Shawmut, Littelfuse Inc.
  - 2. Fusible Switches: Allen Bradley Co., Crouse Hinds Distribution Equipment, Eaton Corp., General Electric Co., Siemens Energy & Automation, Inc., Square D Co.
  - 3. Molded Case Circuit Breakers: Eaton Corp., General Electric Co., General Electric Co., Siemens Energy & Automation, Inc., Square D Co.

2.2 OVERCURRENT PROTECTIVE DEVICES (OCPDs)

- A. General: Provide OCPDs as required by the Electrical Designer, as integral components of panelboards and also as individually enclosed and mounted single units.
- B. Enclosures: NEMA 250 "Enclosures for Electrical Equipment (1,000 Volts Maximum)."

2.3 CARTRIDGE FUSES

- A. General: NEMA Standard FU1, "Low Voltage Cartridge Fuses." Unless indicated otherwise, provide nonrenewable cartridge fuses of indicated types, classes, and current ratings that have voltage ratings consistent with the circuits on which used.
- B. Class J Fuses: UL 198C, "High Interrupting Capacity Fuses, Current Limiting Type."
- C. Class L Fuses: UL 198C, "High Interrupting Capacity Fuses, Current Limiting Type."
- D. Class RK1 and RK5 Dual Element Time Delay Fuses: UL 198E, "Class R Fuses."
- E. Class RK1 Fast Acting Fuses: UL 198E, "Class R Fuses."

2.4 FUSIBLE SWITCHES

- A. General: UL 98 "Enclosed and Dead Front Switches" and NEMA KS 1 "Enclosed Switches," quick make, quick break heavy duty units.
- B. Rating: Load breaking capacity in excess of the normal horsepower rating for the switch.

- C. Withstand Capability: In excess of the let through current permitted by its fuse when subject to faults up to 100,000 RMS symmetrical amperes.
- D. Operation: By means of external handle.
- E. Interlock: Prevents access to switch interior except when in "off" position.
- F. Fuse Clips: Rejection type.
- G. Padlocking Provisions: For 2 padlocks, whether open or closed.
- H. Enclosure for Independent Mounting: NEMA Type 1 enclosure except as otherwise indicated or required to suit environment where located.

## 2.5 MOLDED CASE CIRCUIT BREAKERS

- A. General: UL 489, "Molded Case Circuit Breakers and Circuit Breaker Enclosures," and NEMA AB 1, "Molded Case Circuit Breakers."
- B. Construction: Bolt in type, except breakers 225 ampere frame size and larger may be plug in type if held in place by positive locking device requiring mechanical release for removal.
- C. Construction: Bolt in type, except breakers in load center type panelboards and breakers 225 ampere frame size and larger may be plug in type if held in place by positive locking device requiring mechanical release for removal.
- D. Characteristics: Indicated frame size, trip rating, number of poles, and a short circuit interrupting capacity rating of 10,000 amperes symmetrical, unless a greater rating is indicated.
- E. Tripping Device: Quick make, quick break toggle mechanism with inverse time delay and instantaneous overcurrent trip protection for each pole.
- F. Enclosure for Panelboard Mounting: Suitable for panel mounting in switchboard or panelboards where indicated.
- G. Enclosure for Independent Mounting: NEMA Type 1 enclosure, except as otherwise indicated or required to suit environment where located.

## PART 3 - EXECUTION

Installation shall be in conformance with the latest edition of the Eversource / CL&P Information & Requirements for Electrical Supply below 600 Volts.

### 3.1 INSTALLATION

- A. Independently Mounted OCPDs: Locate as required and install in accordance with manufacturer's written installation instructions.
- B. OCPDs in distribution equipment shall be factory installed.

### 3.2 CONTROL WIRING INSTALLATION

- A. Install wiring between OCPDs and control/indication devices as specified in Division 16 Section "Wires and Cables" for hard wired connections.

### 3.3 CONNECTIONS

- A. Check connectors, terminals, bus joints, and mountings for tightness. Tighten field connected connectors and terminals, including screws and bolts, in accordance with equipment manufacturer's published torque tightening values. Where manufacturer's torquing requirements are not indicated, tighten connectors and terminals to comply with tightening torques specified in UL 486A and UL 486B.

### 3.4 GROUNDING

- A. Provide equipment grounding connections for individually mounted OCPD units as indicated and as required by NEC. Tighten connectors to comply with tightening torques specified in UL Standard 486A to assure permanent and effective grounding.

### 3.5 FIELD QUALITY CONTROL

- A. Independent Testing Organization: Arrange and pay for the services of an independent electrical testing organization to perform tests and observations on OCPDs.
- B. Reports: Prepare written reports certified by testing organization on tests and observations. Report defective materials and workmanship and unsatisfactory test results. Include complete records of repairs and adjustments made.
- C. Labeling: Upon satisfactory completion of tests and related effort, apply a label to tested components indicating test results, date, and responsible organization and person.
- D. Schedule visual and mechanical inspections and electrical tests with at least one week's advance notification.
- E. Pretesting: Upon completing installation of the system, perform the following preparations for independent tests:
  - 1. Make insulation resistance tests of OCPD buses, components, and connecting supply, feeder, and control circuits.
  - 2. Make continuity tests of circuits.
  - 3. Provide set of Contract Documents to test personnel. Include full updating on final system configuration and parameters where they supplement or differ from those indicated in original Contract Documents.
  - 4. Provide manufacturer's instructions for installation and testing of OCPDs to test personnel.
- F. Visual and mechanical inspection: Include the following inspections and related work.
  - 1. Overcurrent Protective Device Ratings and Settings: Verify indicated ratings and settings to be appropriate for final system arrangement and parameters. Where discrepancies are found, test organization shall recommend final protective device ratings and settings. Use accepted revised ratings or settings to make the final system adjustments.
  - 2. Inspect for defects and physical damage, NRTL labeling, and nameplate compliance with current single line diagram.
  - 3. Exercise and perform operational tests of all mechanical components and other operable devices in accordance with manufacturer's instruction manual.

4. Check tightness of electrical connections of OCPDs with calibrated torque wrench. Refer to manufacturer's instructions for proper torque values.
5. Clean OCPDs using manufacturer's approved methods and materials.
6. Verify installation of proper fuse types and ratings in fusible OCPDs.
- G. Electrical Tests: Include the following items performed in accordance with manufacturer's instructions:
  1. Insulation resistance test of OCPD conducting parts. Insulation resistance less than 100 megohms is not acceptable.
  2. Contact resistance test or measurement of millivolt drop across contacts of drawout circuit breakers and fused power circuit devices at rated current. Compare contact resistance or millivolt drop values of adjacent poles and of similar breakers. Deviations of more than 50 percent are not acceptable.
  3. Insulation resistance test of fused power circuit devices and insulated case and molded case circuit breakers over 600 ampere frame size at 1000 V d.c. for one minute from pole to pole and from each pole to ground with breaker closed and across open contacts of each phase. Insulation resistance less than 100 megohms is not acceptable.
  4. Use primary current injection to check performance characteristics of trip units of molded case breakers over 600 ampere frame size. Trip characteristics not falling within manufacturer's published time current characteristic tolerance bands when adjusted to approved parameters are not acceptable. Perform the following tests:
    - a. Determine minimum pickup current acceptable per manufacturer's instructions.
    - b. Determine long time delay at 300 percent pickup current.
    - c. Determine short time pickup current and corresponding delay time.
    - d. Determine ground fault current pickup and corresponding delay time
    - e. Determine instantaneous pickup current value.
  5. Make adjustments for final settings of adjustable trip devices.
  6. Activate auxiliary protective devices such as ground fault or undervoltage relays, to verify operation of shunt trip devices.
  7. Check operation of electrically operated OCPDs in accordance with manufacturer's instructions.
- H. Retest: Correct deficiencies identified by tests and observations and provide retesting of OCPDs by testing organization. Verify by the system tests that specified requirements are met.

### 3.7 CLEANING

- A. Upon completion of installation, inspect OCPDs. Remove paint splatters and other spots, dirt, and debris. Touch up scratches and mars of finish to match original finish.

### 3.8 DEMONSTRATION

- A. Training: Arrange and pay for the services of factory authorized service representatives to demonstrate OCPDs and train Owner's maintenance personnel.
- B. Conduct a minimum of one half day of training in operation and maintenance as specified under "Instructions to Owner Employees" in the "Project Closeout" Section of

these specifications. Include both classroom training and hands on equipment operation and maintenance procedures.

C. Schedule training with at least seven days' advance notification.

#### PART 4 - MEASUREMENT AND PAYMENT

See Section 16.000 for measurement and payment information for the electrical system, lighting, and security components.

SECTION 16.600  
EMERGENCY CALL STATION

PART 1      GENERAL

1.1      SECTION INCLUDES

- D. Design, sizing, furnishing and installation of emergency call stations.
- E. All conduit, wiring, concrete pads or foundations, and other work incidental to providing fully functioning emergency call stations.

1.2      RELATED SECTIONS

- D. Section 16016 - Conduits
- E. Section 16170 - Grounding and Bonding.
- F. Section 16195 - Electrical Identification.

1.3      REFERENCES

- J. NECA Standard of Installation (published by the National Electrical Contractors Association).
- K. NFPA 70 - National Electrical Code
- L. NFPA 72
- M. Americans with Disabilities Act (ADA)

1.4      SUBMITTALS

- A. Product Data or shop drawing:
  - 1. Emergency call station
  - 2. Transformers and all other necessary communications equipment.
  - 3. Cast-in place concrete.
- B. Conduit routing plan and conduit sizing.

1.5      QUALIFICATIONS

- C. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years experience.
- D. All electrical design and installation work shall be performed by an electrical contractor licensed to perform work in the State of Connecticut.

1.6      REGULATORY REQUIREMENTS

- C. Conform to requirements of NFPA 70 and 72.
- D. Unit shall be ADA compliant.

- E. Products: Listed and classified by Underwriters Laboratories, Inc. as suitable for the purpose specified and indicated.

## 1.7 MAINTENANCE MATERIALS

- A. Contract Closeout - Furnish two copies of operation and maintenance guides.

## 1.8 PERFORMANCE / DESIGN REQUIREMENTS

- A. Contractor shall be solely responsible for sizing and routing the proposed conduits and wiring to the emergency call stations.
- B. Contractor shall furnish and install the proposed emergency call stations, concrete foundations/pads, anchor plate, anchor bolts, conduits, wiring, transformers, controls and any other required equipment, and all other work incidental to the completion of this item.
- C. Contractor shall test each emergency call station prior to acceptance by the Owner

## PART 2 MATERIALS

### 2.1 EMERGENCY CALL STATIONS

- A. **Shall be Code Blue Model CB 5-s standard unit, as manufactured by Code Blue Corporation.**
- B. Shall be supplied with the optional overhead camera mount.
- C. Shall be supplied with the optional clear coat face plate.
- D. The pedestal shall be standard painted finish, color to be determined by the Owner.
- E. Mounting brackets, plates, anchoring and fasteners as required by the manufacturer or provided by the manufacturer.

### 2.2 CONDUITS & WIRING

- B. Conduits and wiring shall conform to the manufacturer's recommendations and the requirements of Section 16 specified herein.

### 2.3 CAST-IN-PLACE CONCRETE

- A. Cast-in-place concrete shall conform to the Contract Drawings

### 2.4 REINFORCING STEEL

- A. Reinforcing steel shall conform to Section M.06.01 of Form 819.

### 2.5 GRAVEL FILL

- A. Gravel fill shall conform to section M.02.01 and the requirements of material grading A as defined in section M.02.06 of Form 819.

2.6 CRUSHED STONE

A. Crushed stone shall conform to section M.02.01-1 of Form 819.

PART 3 EXECUTION

Installation shall be in conformance with the manufacturer's recommendations, applicable local, state, and federal codes, and the Contract Drawings.

The Contractor shall be required to design and build the emergency call station system, including sizing and routing all wiring and conduits, and connection to the proposed electrical service, distribution panel and communications system.

PART 4 MEASUREMENT AND PAYMENT

See Section 16.000 for measurement and payment information for the electrical system, lighting, and security components.



SECTION 16.800  
TESTING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- D. Basic electrical testing requirements specifically applicable to Division 16 Sections, in addition to the General Requirements.

1.02 REFERENCES

- A. ANSI/NFPA 70 - National Electrical Code.
- B. NFPA 101 - Life Safety Code.

1.03 REGULATORY REQUIREMENTS

- A. Conform to applicable Building Code for Connecticut.
- B. Electrical: Conform to NFPA 70.
- C. Life Safety Code NFPA 101, with Connecticut Supplement.
- D. Obtain permits, and request inspections from authority having jurisdiction.

PART 3 - EXECUTION

3.01 QUALIFICATION OF THE TESTING AGENCY

- A. The testing firm shall be a corporately independent testing organization which can function as an unbiased testing authority, professionally independent of the manufacturers, suppliers, and installers of equipment or systems evaluated by the testing firm.
- B. The testing firm shall be regularly engaged in the testing of electrical equipment devices, installations, and systems.
- C. The testing firm shall have been engaged in such practices for a minimum of five years.
- D. The testing firm shall meet federal OSHA criteria for accreditation of testing laboratories, Title 29, Parts 1907, 1910, and 1936. Full membership in the International Electrical Testing Association constitutes proof of such criteria.
- E. The lead, on site, technical person shall be currently certified by the International Electrical Testing Association (NETA) in Electrical Power Distribution System Testing.
- F. Testing firm shall utilize only full-time technicians who are regularly employed by the firm for testing services. Electrically unskilled employees are not permitted to perform testing or assistance of any kind. Electricians and/or linemen may assist, but may not perform testing and/or inspection services.
- G. The testing firm shall submit proof of the above qualifications.

- H. The testing firm shall be an independent organization as defined by OSHA Title 29, Part 1936 and the International Electrical Testing Association.
- I. All instruments used by the testing firm to evaluate electrical performance shall meet NETA's Specifications for Test Instruments.
- J. Northeast Electrical Testing, Inc Wallingford, Ct., or approved equal shall be used for the testing/reconditioning work described in this section.
- K. The testing firm shall furnish certified test reports for all of the testing described in this specification section. These reports are to be furnished to the engineer for evaluation and approval.

### 3.02 CABLES-Cables-Low Voltage-600V Maximum

#### Visual and Mechanical Inspection

- A. Inspect cables for physical damage and proper connection in accordance with single line diagram.
- B. Test cable mechanical connections to manufacturer's recommended values with a calibrated torque wrench. In the absence of manufacturer's data use Table 11.1.
- C. Check cable color coding with applicable National Electrical Code standards.

#### Electrical Tests

- A. Perform insulation resistance test on each conductor with respect to ground and adjacent conductors. Applied potential to be 1000 volts dc for 1 minute.
- B. Perform continuity test to insure proper cable connection.

#### Test Values

- A. Minimum insulation resistance values shall be not Less than two megohms

### 3.03 CIRCUIT BREAKERS

#### CIRCUIT BREAKERS-LOW VOLTAGE INSULATED CASE

Visual and Mechanical Inspection -Does not apply.

#### CIRCUIT BREAKERS-LOW VOLTAGE POWER (600V Service Class)

Visual and Mechanical Inspection- Does not apply.

### 3.04 GROUNDING SYSTEMS

#### Visual and Mechanical Inspection

- A. Inspect ground system for compliance with plans and specifications

#### Electrical Tests

- A. Perform 3-point fall-of-potential test per IEEE Standard No. 81, Section 9.04 on the main grounding electrode or system.
- B. Perform the 2-point method test per IEEE No. 81, Section 9.03 to determine the ground resistance between the main grounding system and all major electrical equipment frames, system neutral and/or derived neutral points.
- C. Alternate Method to C. Perform ground continuity test between main ground system and equipment frame, system neutral and/or derived neutral point. This test shall be made by passing a minimum of ten (10) amperes dc current between ground reference system and the ground point to be tested. Voltage drop shall be measured and resistance calculated by voltage drop method.

#### Test Values

- A. The main ground electrode system resistance to ground should be no greater than five (5) ohms for commercial or industrial systems and one (1) ohm or less for generating or transmission station grounds unless otherwise specified by the project electrical engineer.

#### PART 4 - MEASUREMENT AND PAYMENT

See Section 16.000 for measurement and payment information for the electrical system, lighting, and security components.

**SECTION 35.00**  
**FISHING PIER WORK MEASUREMENT & PAYMENT**

**1.0 DESCRIPTION**

The fishing pier work outlined in the Contract Documents shall be measured and paid for by the following means.

**4.0 MEASUREMENT AND PAYMENT**

**Construction Staging, Water Access, and Barge:**

“Fishing Pier: Construction Staging, Water Access, and Barge” will be measured as a lump sum.

"Fishing Pier: Construction Staging, Water Access, and Barges" will be paid monthly in proportion to the amount of work done as determined by the Owner. Said payments will be a proportionate amount of the Lump Sum Price bid for the Construction Staging, Water Access, and Barges, of which shall include all costs for furnishing, installing, maintaining, and monitoring all equipment, boats, barges, temporary measures, and appurtenances provided by the Contractor, all equipment, tools, and labor incidental to the work, as well as the cost of all fees, fuel, delivery charges, and involved in these activities throughout the duration of the project.

**Timber Piles, Structural Elements, and Concrete Abutment:**

“Fishing Pier: Timber Piles, Structural Elements, and Concrete Abutment” will be measured as a lump sum furnished, installed, completed, and accepted in place.

Payment will be made according to the Contract lump sum price for “Fishing Pier: Timber Piles, Structural Elements, and Concrete Abutment” complete and accepted in place, which price shall include timber piles, structural timbers, bracing, hardware, fasteners, pile driving equipment, concrete reinforcing steel, formwork, and all materials, equipment, tools and labor incidental thereto and not included in other items.

**Pressure Treated Timber Decking:**

“Fishing Pier: Pressure Treated Timber Decking” will be measured as a lump sum furnished, installed, completed, and accepted in place.

Payment will be made according to the Contract lump sum price for “Fishing Pier: Pressure Treated Timber Decking” complete and accepted in place, which price shall include decking, fasteners, hardware, staging, delivery charges, and all materials, equipment, tools and labor incidental thereto and not included in other items.

**Guiderail, Posts, and Cables:**

“Fishing Pier: Guiderail, Posts, and Cables” will be measured as a lump sum furnished, installed, completed, and accepted in place.

Payment will be made according to the Contract lump sum price for “Fishing Pier: Guiderail, Posts, and Cables” complete and accepted in place, which price shall include all timber, bracing, rail elements, hardware, fasteners, cable, and all materials, equipment, tools and labor incidental thereto and not included in other items.

**Amenities:**

“Fishing Pier: Amenities” will be measured as a lump sum furnished, installed, completed, and accepted in place.

Payment will be made according to the Contract lump sum price for “Fishing Pier: Amenities” complete and accepted in place, which price shall include all benches, delivery charges, fasteners, hardware, and all materials, equipment, tools and labor incidental thereto and not included in other items.

## SECTION 35.01 FISHING PIER

### 1.0 DESCRIPTION

The work under this Section shall include furnishing and installing all components of the fishing pier as shown on the Contract Drawings. Work consists of, but is not limited to the following:

- A. Furnish and install all timber piles.
- B. Furnish and install the concrete abutment
- C. Furnish and install all structural elements including timbers, framing, bracing, fasteners, and hardware.
- D. Furnish and install all timber decking including framing, bracing, blocking, fasteners, and hardware.
- E. Furnish and install all guide railing including posts, bracing, cable, fasteners, and hardware.
- F. Furnish and install fishing pier amenities including benches and fastening hardware.

### 2.0 MATERIALS

**Materials shall conform to the Build America, Buy America requirements outlined in the Instructions to Bidders.**

The materials for this work shall conform to the details included on the Contract Drawings, or approved equals.

### 3.0 CONSTRUCTION METHODS

Construction methods shall conform to the requirements set forth on the Contract Drawings, best management practices, and industry standards.

Construction activities must conform to all OSHA regulations and standards.

### 4.0 MEASUREMENT AND PAYMENT

See Section 35.00 for measurement and payment information for the Fishing Pier.

SECTION 35.05  
CONSTRUCTION STAGING, IN WATER ACCESS, AND BARGES

1.0 DESCRIPTION

The work under this Section shall include providing construction staging, in water access and use of barges and other support boats for the in-water construction of the fishing pier.

2.0 MATERIALS

The Contractor shall furnish and install all staging measures, temporary measures, cranes, lifts, scaffolding, bridging, or any other measures as needed to complete the construction of the in-water improvements and features as outlined on the Contract Drawings and herein.

The Contractor shall be solely responsible for specifying, sizing, and procurement of all boats, barges, equipment, and any other measures as needed to complete the construction.

3.0 CONSTRUCTION METHODS

All staging or temporary measures as needed for the construction shall conform to OSHA requirements.

The existing boat ramp may be used for water access for barges and support boats or equipment as needed. The Contractor shall be responsible for the construction sequencing and coordination for the access.

4.0 MEASUREMENT AND PAYMENT

See Section 35.00 for measurement and payment information for the Fishing Pier.

## **IX. INSURANCE REQUIREMENTS**



### **Project Insurance Requirements**

1. Contractor/Vendor will agree to maintain in force at all times during which work/services are to be performed, the following minimum limits of insurance coverage. The insurance company(ies) must be licensed with the State of Connecticut and have a Financial Strength Rating of "A-" or higher and a Financial Size Rating of VIII or higher from A.M. Best Company. The limits of liability for insurance required by Paragraph 5.04 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations.
2. CLA Engineers, Inc. and the Town of Montville shall be listed as additional insured as outlined in the following requirements.
3. If subcontractors are employed, same limits as named above shall apply and the certificate of insurance must be filed with the Owner.
4. Contractors shall observe and comply with all Federal, State and local laws, ordinances and regulations. Contractors shall indemnify and save harmless the Town, all of its officers, agents and servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation or negligence whether by the bidder, his employees, his consultant and/or their employees.

### **Insurance Requirements - Boat Launch & Fishing Pier Construction**

Contractor shall agree to maintain in force at all times during the contract the following minimum coverages and shall name Town of Montville as an Additional Insured on a primary and non-contributory basis to all policies, except Workers Compensation. All policies should also include a Waiver of Subrogation.

Insurance shall be written with Carriers approved in the State of Connecticut and with a minimum AM Best's Rating of "A-" VIII. In addition, all Carriers are subject to approval by Town of Montville .

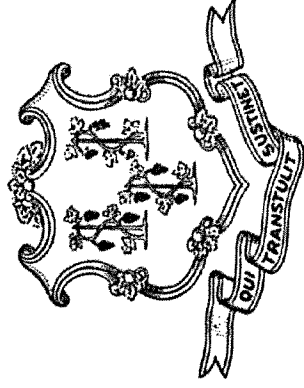
		(Minimum Limits)
General Liability	Each Occurrence	\$1,000,000
	General Aggregate	\$2,000,000
	Products/Completed Operations Aggregate	\$2,000,000
Auto (Any Auto Incl Hired/Non-Owned)	Combined Single Limit	\$1,000,000
Excess Liability	Each Occurrence	\$1,000,000
	Aggregate	\$1,000,000
Professional Liability	Each Claim	\$1,000,000
	Aggregate	\$1,000,000
Protection & Indemnity (P&I)	Each Claim	\$1,000,000
	Aggregate	\$1,000,000

If any policy is written on a "Claims Made" basis, the policy must be continually renewed for a minimum of two (2) years from the completion date of this contract. If the policy is replaced and/or the retroactive date is changed, then the expiring policy must be endorsed to extend the reporting period for claims for the policy in effect during the contract for two (2) years from the completion date.

Workers' Compensation and Employers' Liability	WC Statutory Limits	
	EL Each Accident	\$1,000,000
	EL Disease Each Employee	\$1,000,000
	EL Disease Policy Limit	\$1,000,000

Original, completed Certificates of Insurance must be presented to Town of Montville & Montville Board of Education prior to contract issuance. Contractor agrees to provide replacement/renewal certificates at least 60 days prior to the expiration date of the policies. Should any of the above-described policies be cancelled, limits reduced, or coverage altered, 60 days written notice must be given to Town of Montville.

**X. PREVAILING WAGE**  
**REQUIREMENTS & RATES**



# THIS IS A PUBLIC WORKS PROJECT

Covered by the

## PREVAILING WAGE LAW

CT General Statutes Section 31-53

**If you have QUESTIONS regarding your wages  
CALL (860) 263-6790**

Section 31-55 of the CT State Statutes requires every contractor or subcontractor performing work for the state to post in a prominent place the prevailing wages as determined by the Labor Commissioner.

Minimum Rates and Classifications for  
Heavy/Highway Construction

ID#: 24-70367

Connecticut Department of Labor  
Wage and Workplace Standards Division

By virtue of the authority vested in the Labor Commissioner under provisions of Section 31-53 of the General Statutes of Connecticut, as amended, the following are declared to be the prevailing rates and welfare payments and will apply only where the contract is advertised for bid within 20 days of the date on which the rates are established. Any contractor or subcontractor not obligated by agreement to pay to the welfare and pension fund shall pay this amount to each employee as part of his/her hourly wages.

Project Number: Project Town: Montville  
State#: FAP#:  
Project: Town Boat Launch Improvements & Fishing Pier Construction

CLASSIFICATION	Hourly Rate	Benefits
1) Boilermaker	46.21	29.35
1a) Bricklayer, Cement Masons, Cement Finishers, Plasterers, Stone Masons	41.63	34.50
2) Carpenters, Piledrivermen	39.54	28.68
2a) Diver Tenders	39.54	28.68
3) Divers	48.0	28.68
03a) Millwrights	40.56	28.87
4) Painters: (Bridge Construction) Brush, Roller, Blasting (Sand, Water, etc.), Spray	57.85	25.95
4a) Painters: Brush and Roller	38.07	25.80
4b) Painters: Spray Only	41.07	25.80

4c) Painters: Steel Only	40.07	25.80
4d) Painters: Blast and Spray	41.07	25.80
4e) Painters: Tanks, Tower and Swing	40.07	25.80
4f) Elevated Tanks (60 feet and above)	47.07	25.80
5) Electrician (Trade License required: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	45.75	33.97+3% of gross wage
6) Ironworkers: Ornamental, Reinforcing, Structural, and Precast Concrete Erection	45.25	41.27 + a
7) Plumbers (Trade License required: (P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2) and Pipefitters (Including HVAC Work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4 G-1, G-2, G-8, G-9)	49.58	36.15
----LABORERS-----		
8) Group 1: General Laborers and concrete specialist	34.5	27.26
8) Group 1a: Acetylene Burners (Hours worked with a torch)	35.5	27.26
9) Group 2: Chain saw operators, fence and guard rail erectors, pneumatic tool operators, powdermen	34.75	27.26
10) Group 3: Pipelayers	35.0	27.26
11) Group 4: Jackhammer/Pavement breaker (handheld); mason tenders (cement/concrete), catch basin builders, asphalt rakers, air track operators, block paver, curb setter and forklift operators	35.0	27.26

As of: December 30, 2024

12) Group 5: Toxic waste removal (non-mechanical systems)	36.5	27.26
13) Group 6: Blasters	36.25	27.26
Group 7: Asbestos/lead removal, non-mechanical systems (does not include leaded joint pipe)	37.5	27.26
Group 8: Traffic control signalmen	20.7	27.26
Group 9: Hydraulic Drills	35.25	27.26
Group 10: Toxic Waste Removers A or B With PPE	37.5	27.26
----LABORERS (TUNNEL CONSTRUCTION, FREE AIR). Shield Drive and Liner Plate Tunnels in Free Air.----		
13a) Miners, Motormen, Mucking Machine Operators, Nozzle Men, Grout Men, Shaft & Tunnel Steel & Rodmen, Shield & Erector, Arm Operator, Cable Tenders	36.73	27.26 + a
13b) Brakemen, Trackmen, Miners' Helpers and all other men	35.76	27.26 + a
----CLEANING, CONCRETE AND CAULKING TUNNEL----		
14) Concrete Workers, Form Movers, and Strippers	35.76	27.26 + a
15) Form Erectors	36.09	27.26 + a
----ROCK SHAFT LINING, CONCRETE, LINING OF SAME AND TUNNEL IN FREE AIR:----		
16) Brakemen, Trackmen, Tunnel Laborers, Shaft Laborers, Miners Helpers	35.76	27.26 + a
As of:	December 30, 2024	

17) Laborers Topside, Cage Tenders, Bellman	35.65	27.26 + a
18) Miners	36.73	27.26 + a
----TUNNELS, CAISSON AND CYLINDER WORK IN COMPRESSED AIR: --- -		
18a) Blaster	43.22	27.26 + a
19) Brakemen, Trackmen, Groutman, Laborers, Outside Lock Tender, Gauge Tenders	43.02	27.26 + a
20) Change House Attendants, Powder Watchmen, Top on Iron Bolts	41.04	27.26 + a
21) Mucking Machine Operator, Grout Boss, Track Boss	43.81	27.26 + a
----TRUCK DRIVERS----(*see note below)		
Two Axle Trucks, Helpers	33.16	32.36 + a
Three Axle Trucks; Two Axle Ready Mix	33.27	32.36 + a
Three Axle Ready Mix	33.33	32.36 + a
Four Axle Trucks	33.39	32.36 + a
Four Axle Ready-Mix	33.44	32.36 + a
Heavy Duty Trailer (40 tons and over)	35.66	32.36 + a

As of: December 30, 2024



Specialized earth moving equipment other than conventional type on-the road trucks and semi-trailer (including Euclids)	33.44	32.36 + a
Heavy Duty Trailer (up to 40 tons)	34.39	32.36 + a
Heavy Duty Trailer (up to 40 tons)	34.39	32.36 + a
Snorkle Truck	33.54	32.36 + a
----POWER EQUIPMENT OPERATORS----		
Group 1: Crane Handling or Erecting Structural Steel or Stone, Hoisting Engineer (2 drums or over). (Trade License Required)	55.42	28.80 + a
Group 1a: Front End Loader (7 cubic yards or over); Work Boat 26 ft. and over.	50.79	28.80 + a
Group 2: Cranes (100 ton rated capacity and over); Bauer Drill/Caisson. (Trade License Required)	55.03	28.80 + a
Group 2a: Cranes (under 100 ton rated capacity).	54.09	28.80 + a
Group 2b: Excavator over 2 cubic yards; Pile Driver (\$3.00 premium when operator controls hammer).	50.4	28.80 + a
Group 3: Excavator; Gradall; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade (slopes, shaping, laser or GPS, etc.). (Trade License Required)	49.45	28.80 + a
Group 4: Trenching Machines; Lighter Derrick; CMI Machine or Similar; Koehring Loader (Skooper).	48.97	28.80 + a
Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Spreader; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self	48.22	28.80 + a

As of: December 30, 2024

Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" mandrel)

Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller.	48.22	28.80 + a
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	47.83	28.80 + a
Group 7: Asphalt Roller; Concrete Saws and Cutters (ride on types); Vermeer Concrete Cutter; Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and under Mandrel)	47.4	28.80 + a
Group 8: Mechanic, Grease Truck Operator, Hydroblaster, Barrier Mover, Power Stone Spreader; Welder; Work Boat under 26 ft.; Transfer Machine.	46.9	28.80 + a
Group 9: Front End Loader (under 3 cubic yards), Skid Steer Loader regardless of attachments (Bobcat or Similar); Fork Lift, Power Chipper; Landscape Equipment (including hydroseeder), Vacuum Excavation Truck and Hydrovac Excavation Truck (27 HG pressure or greater).	46.35	28.80 + a
Group 10: Vibratory Hammer, Ice Machine, Diesel and Air Hammer, etc.	43.77	28.80 + a
Group 11: Conveyor, Earth Roller; Power Pavement Breaker (whiphammer), Robot Demolition Equipment.	43.77	28.80 + a
Group 12: Wellpoint Operator.	43.69	28.80 + a
Group 13: Compressor Battery Operator.	42.97	28.80 + a
Group 14: Elevator Operator; Tow Motor Operator (Solid Tire No Rough Terrain).	41.52	28.80 + a
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	41.01	28.80 + a

As of: December 30, 2024

Group 16: Maintenance Engineer.	40.19	28.80 + a
Group 17: Portable Asphalt Plant Operator; Portable Crusher Plant Operator; Portable Concrete Plant Operator., Portable Grout Plant Operator, Portable Water Filtration Plant Operator.	45.63	28.80 + a
Group 18: Power Safety Boat; Vacuum Truck; Zim Mixer; Sweeper; (minimum for any job requiring CDL license).	42.57	28.80 + a
Surveyor: Chief of Party	45.87	28.80 + a
Surveyor: Assistant Chief of Party	42.3	28.80 + a
Surveyor: Instrument Man	40.7	28.80 + a
Surveyor: Rodman or Chairman	35.03	28.80 + a

**\*\*NOTE: SEE BELOW**

**----LINE CONSTRUCTION----(Railroad Construction and Maintenance)----**

20) Lineman, Cable Splicer, Technician	48.84	18.07
21) Heavy Equipment Operator	42.26	6.5% + 19.88
22) Equipment Operator, Tractor Trailer Driver, Material Men	40.96	6.5% + 19.21
23) Driver Groundmen	26.5	6.5% + 9.00
23a) Truck Driver	40.96	6.5% + 17.76

As of: December 30, 2024

----LINE CONSTRUCTION----

24) Driver Groundmen	30.92	6.5% + 9.70
25) Groundmen	22.67	6.5% + 6.20
26) Heavy Equipment Operators	37.1	6.5% + 10.70
27) Linemen, Cable Splicers, Dynamite Men	41.22	6.5% + 12.20
28) Material Men, Tractor Trailer Drivers, Equipment Operators	35.04	6.5% + 10.45

Welders: Rate for craft to which welding is incidental.

Surveyors: Hazardous material removal: \$3.00 per hour premium.

\*Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.

\*\*Note: Hazardous waste premium \$3.00 per hour over classified rate

- Crane with 150 ft. boom (including jib) - \$1.50 extra
- Crane with 200 ft. boom (including jib) - \$2.50 extra
- Crane with 250 ft. boom (including jib) - \$5.00 extra
- Crane with 300 ft. boom (including jib) - \$7.00 extra
- Crane with 400 ft. boom (including jib) - \$10.00 extra

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyperson instructing and supervising the work of each apprentice in a specific trade.

~~Connecticut General Statute Section 31-55a: Annual Adjustments to wage rates by contractors doing state work  
~~

The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.

Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.

It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.

The annual adjustments will be posted on the Department of Labor's Web page:

[www.ct.gov/dol](http://www.ct.gov/dol). For those without internet access, please contact the division listed below.

The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.

All subsequent annual adjustments will be posted on our Web Site for contractor access.

Contracting Agencies are under no obligation pursuant to State labor law to pay any increase due to the annual adjustment provision.

Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage

All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)

Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

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

Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.

Sec. 31-53b. Worker training requirements for public works projects. Enforcement. Regulations. Exceptions. (a) Each contract for a public works project entered into on or after July 1, 2009, by the state or any of its agents, or by any political subdivision of the state or any of its agents, described in subsection (h) of section 31-53, shall contain a provision requiring that each contractor furnish proof with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR 46 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268, and, on or after July 1, 2012, that any plumber or electrician subject to the continuing education requirements of section 20-334d, who has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration five or more years prior to the date such electrician or plumber begins work on such public works project, has completed a supplemental refresher training course of at least four hours in duration in construction safety and health taught by a federal Occupational Safety and Health Administration authorized trainer.

(b) Any person required to complete a course or program under subsection (a) of this section who has not completed the course or program shall be subject to removal from the worksite if the person does not provide documentation of having completed such course or program by the fifteenth day after the date the person is found to be in noncompliance. The Labor Commissioner or said commissioner's designee shall enforce this section.

(c) Not later than January 1, 2012, the Labor Commissioner shall adopt regulations, in accordance with the provisions of chapter 54, to implement the provisions of subsections (a) and (b) of this section. Such regulations shall require that the ten-hour construction safety and health courses required under subsection (a) of this section be conducted in accordance with federal Occupational Safety and Health Administration Training Institute standards, or, in the case of a supplemental refresher training course, shall include, but not be limited to, an update of revised Occupational Safety and Health Administration standards and a review of required construction hazards training, or in accordance with Federal Mine Safety and Health Administration Standards or in accordance with 29 CFR 1910.268, as appropriate. The Labor Commissioner shall accept as sufficient proof of compliance with the provisions of subsection (a) or (b) of this section a student course completion card issued by the federal Occupational Safety and Health Administration Training Institute, or such other proof of compliance said commissioner deems appropriate, dated no earlier than five years before the commencement date of such public works project or, in the case of supplemental refresher training, a student course completion card issued by said Occupational Safety and Health Administration authorized trainer dated not earlier than five years prior to the date such electrician or plumber begins work on such public works project.

(d) This section shall not apply to employees of public service companies, as defined in section 16-1, or drivers of commercial motor vehicles driving the vehicle on the public works project

and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

(P.A. 06-175, S. 1; P.A. 08-83, S. 1; P.A. 10-47, S. 2; P.A. 11-63, S. 1.)

Sec. 31-55a. Annual adjustments to wage rates by contractors doing state work. Each contractor that is awarded a contract on or after October 1, 2002, for (1) the construction of a state highway or bridge that falls under the provisions of section 31-54, or (2) the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project that falls under the provisions of section 31-53 shall contact the Labor Commissioner on or before July first of each year, for the duration of such contract, to ascertain the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done, and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee, effective each July first.

(P.A. 02-69, S. 1.)

## **Informational Bulletin**

### **THE 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE**

(applicable to public building contracts entered into *on or after July 1, 2007*, where the total cost of all work to be performed is at least \$100,000)

- (1) This requirement was created by Public Act No. 06-175, which is codified in Section 31-53b of the Connecticut General Statutes (pertaining to the prevailing wage statutes);
- (2) The course is required for public building construction contracts (projects funded in whole or in part by the state or any political subdivision of the state) entered into on or after July 1, 2007;
- (3) It is required of private employees (not state or municipal employees) and apprentices who perform manual labor for a general contractor or subcontractor on a public building project where the total cost of all work to be performed is at least \$100,000;
- (4) The ten-hour construction course pertains to the ten-hour Outreach Course conducted in accordance with federal OSHA Training Institute standards, and, for telecommunications workers, a ten-hour training course conducted in accordance with federal OSHA standard, 29 CFR 1910.268;
- (5) The internet website for the federal OSHA Training Institute is [http://www.osha.gov/fso/ote/training/edcenters/fact\\_sheet.html](http://www.osha.gov/fso/ote/training/edcenters/fact_sheet.html);
- (6) The statutory language leaves it to the contractor and its employees to determine who pays for the cost of the ten-hour Outreach Course;
- (7) Within 30 days of receiving a contract award, a general contractor must furnish proof to the Labor Commissioner that all employees and apprentices performing manual labor on the project will have completed such a course;
- (8) Proof of completion may be demonstrated through either: (a) the presentation of a *bona fide* student course completion card issued by the federal OSHA Training Institute; *or* (2) the presentation of documentation provided to an employee by a trainer certified by the Institute pending the actual issuance of the completion card;
- (9) Any card with an issuance date more than 5 years prior to the commencement date of the construction project shall not constitute proof of compliance;



- (10) Each employer shall affix a copy of the construction safety course completion card to the certified payroll submitted to the contracting agency in accordance with Conn. Gen. Stat. § 31-53(f) on which such employee's name first appears;
- (11) Any employee found to be in non-compliance shall be subject to removal from the worksite if such employee does not provide satisfactory proof of course completion to the Labor Commissioner by the fifteenth day after the date the employee is determined to be in noncompliance;
- (12) Any such employee who is determined to be in noncompliance may continue to work on a public building construction project for a maximum of fourteen consecutive calendar days while bringing his or her status into compliance;
- (13) The Labor Commissioner may make complaint to the prosecuting authorities regarding any employer or agent of the employer, or officer or agent of the corporation who files a false certified payroll with respect to the status of an employee who is performing manual labor on a public building construction project;
- (14) The statute provides the minimum standards required for the completion of a safety course by manual laborers on public construction contracts; any contractor can exceed these minimum requirements; and
- (15) Regulations clarifying the statute are currently in the regulatory process, and shall be posted on the CTDOL website as soon as they are adopted in final form.
- (16) Any questions regarding this statute may be directed to the Wage and Workplace Standards Division of the Connecticut Labor Department via the internet website of <http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm>; or by telephone at (860)263-6790.

**THE ABOVE INFORMATION IS PROVIDED EXCLUSIVELY AS AN EDUCATIONAL RESOURCE, AND IS NOT INTENDED AS A SUBSTITUTE FOR LEGAL INTERPRETATIONS WHICH MAY ULTIMATELY ARISE CONCERNING THE CONSTRUCTION OF THE STATUTE OR THE REGULATIONS.**

November 29, 2006

## Notice

### **To All Mason Contractors and Interested Parties Regarding Construction Pursuant to Section 31-53 of the Connecticut General Statutes (Prevailing Wage)**

The Connecticut Labor Department Wage and Workplace Standards Division is empowered to enforce the prevailing wage rates on projects covered by the above referenced statute.

Over the past few years the Division has withheld enforcement of the rate in effect for workers who operate a forklift on a prevailing wage rate project due to a potential jurisdictional dispute.

The rate listed in the schedules and in our Occupational Bulletin (see enclosed) has been as follows:

#### **Forklift Operator:**

- **Laborers (Group 4) Mason Tenders** - operates forklift solely to assist a mason to a maximum height of nine feet only.

- **Power Equipment Operator (Group 9)** - operates forklift to assist any trade and to assist a mason to a height over nine feet.

The U.S. Labor Department conducted a survey of rates in Connecticut but it has not been published and the rate in effect remains as outlined in the above Occupational Bulletin.

***Since this is a classification matter and not one of jurisdiction, effective January 1, 2007 the Connecticut Labor Department will enforce the rate on each schedule in accordance with our statutory authority.***

Your cooperation in filing appropriate and accurate certified payrolls is appreciated.

CONNECTICUT DEPARTMENT OF LABOR  
WAGE AND WORKPLACE STANDARDS DIVISION

CONTRACTORS WAGE CERTIFICATION FORM  
Construction Manager at Risk/General Contractor/Prime Contractor

I, \_\_\_\_\_ of \_\_\_\_\_  
Officer, Owner, Authorized Rep. Company Name

do hereby certify that the \_\_\_\_\_  
Company Name  
\_\_\_\_\_  
Street  
\_\_\_\_\_  
City

and all of its subcontractors will pay all workers on the

\_\_\_\_\_  
Project Name and Number  
\_\_\_\_\_  
Street and City

the wages as listed in the schedule of prevailing rates required for such project (a copy of which is attached hereto).

\_\_\_\_\_  
Signed

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

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

Return to:

Connecticut Department of Labor  
Wage & Workplace Standards Division  
200 Folly Brook Blvd.  
Wethersfield, CT 06109

Rate Schedule Issued (Date): \_\_\_\_\_

[New] In accordance with Section 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OSHA 10 Hour Construction Safety and Health Card for each employee, to be attached to the first certified payroll on the project.

<b>PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS</b>							<b>Connecticut Department of Labor Wage and Workplace Standards Division 200 Folly Brook Blvd. Wethersfield, CT 06109</b>									
<b>In accordance with Connecticut General Statutes, § 31-53 Certified Payrolls with a statement of compliance shall be submitted monthly to the contracting agency.</b>																
<b>CONTRACTOR NAME AND ADDRESS:</b>		<b>SUBCONTRACTOR NAME &amp; ADDRESS</b>			<b>WORKER'S COMPENSATION INSURANCE CARRIER</b>											
<b>PAYROLL NUMBER</b>	<b>Week-Ending Date</b>	<b>PROJECT NAME &amp; ADDRESS</b>					<b>POLICY #  EFFECTIVE DATE: EXPIRATION DATE:</b>									
<b>PERSON/WORKER, ADDRESS and SECTION</b>	<b>APPR RATE/FEMALE % AND RACE*</b>	<b>WORK CLASSIFICATION</b>	<b>DAYS OF THE WEEK</b>							<b>TOTAL ST Hours</b>	<b>GROSS PAY FOR ALL WORK PERFORMED THIS WEEK</b>	<b>TOTAL DEDUCTIONS</b>			<b>CHECK # AND NET PAY</b>	
												FEDERAL STATE	LIST OTHER	<b>WITH-HOLDING</b>		
			S	M	T	W	TH	F	S			WITH-	HOLDING			
			<b>HOURS WORKED EACH DAY</b>							Total O/T Hours	BENEFIT PLAN CASH	FRINGE BENEFITS Per Hour 1 through 6 (see back)	FICA			
										\$	1. \$					
										Base Rate	2. \$					
											3. \$					
										\$	4. \$					
										Cash Fringe	5. \$					
											6. \$					
										\$	1. \$					
										Base Rate	2. \$					
											3. \$					
										\$	4. \$					
										Cash Fringe	5. \$					
											6. \$					
										\$	1. \$					
										Base Rate	2. \$					
											3. \$					
										\$	4. \$					
										Cash Fringe	5. \$					
											6. \$					
										\$	1. \$					
										Base Rate	2. \$					
											3. \$					
										\$	4. \$					
										Cash Fringe	5. \$					
											6. \$					

**\*FRINGE BENEFITS EXPLANATION (P):**

Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker's compensation, income taxes, etc.).

Please specify the type of benefits provided:

- 1) Medical or hospital care \_\_\_\_\_ 4) Disability \_\_\_\_\_  
2) Pension or retirement \_\_\_\_\_ 5) Vacation, holiday \_\_\_\_\_  
3) Life Insurance \_\_\_\_\_ 6) Other (please specify) \_\_\_\_\_

**CERTIFIED STATEMENT OF COMPLIANCE**

For the week ending date of \_\_\_\_\_,

I, \_\_\_\_\_ of \_\_\_\_\_, (hereafter known as  
Employer) in my capacity as \_\_\_\_\_ (title) do hereby certify and state:

**Section A:**

1. All persons employed on said project have been paid the full weekly wages earned by them during the week in accordance with Connecticut General Statutes, section 31-53, as amended. Further, I hereby certify and state the following:

- a) The records submitted are true and accurate;
- b) The rate of wages paid to each mechanic, laborer or workman and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as defined in Connecticut General Statutes, section 31-53 (h), are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection Connecticut General Statutes, section 31-53 (d), and said wages and benefits are not less than those which may also be required by contract;
- c) The Employer has complied with all of the provisions in Connecticut General Statutes, section 31-53 (and Section 31-54 if applicable for state highway construction);
- d) Each such person is covered by a worker's compensation insurance policy for the duration of his employment which proof of coverage has been provided to the contracting agency;
- e) The Employer does not receive kickbacks, which means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a prime contractor in connection with a subcontractor relating to a prime contractor; and
- f) The Employer is aware that filing a certified payroll which he knows to be false is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years or both.

2. OSHA~The employer shall affix a copy of the construction safety course, program or training completion document to the certified payroll required to be submitted to the contracting agency for this project on which such persons name first appears.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
Submitted on (Date)

**\*\*\*THIS IS A PUBLIC DOCUMENT\*\*\***  
**\*\*\*DO NOT INCLUDE SOCIAL SECURITY NUMBERS\*\*\***

Weekly Payroll Certification For Public Works Projects (Continued)

PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS

Week-Ending Date:  
Contractor or Subcontractor Business Name:

WEEKLY PAYROLL

PERSON/WORKER, ADDRESS and SECTION	APPR RATE %	MALE/ FEMALE AND RACE*	WORK CLASSIFICATION  Trade License Type & Number - OSHA 10 Certification Number	DAY AND DATE							Total ST Hours	Total O/T Hours	TYPE OF FRINGE BENEFITS Per Hour 1 through 6 (see back)	GROSS PAY FOR ALL WORK PERFORMED THIS WEEK	TOTAL DEDUCTIONS			GROSS PAY FOR THIS PREVAILING RATE JOB	CHECK # AND NET PAY
				S	M	T	W	TH	F	\$									
HOURS WORKED EACH DAY													TOTAL FRINGE BENEFIT PLAN CASH	TOTAL FRINGE BENEFITS Per Hour 1 through 6 (see back)	GROSS PAY FOR ALL WORK PERFORMED THIS WEEK	FICA	WITH- HOLDING	FEDERAL STATE	LIST OTHER

\*IF REQUIRED

[New] In accordance with Section 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OSHA 10 Hour Construction Safety and Health Card for each employee, to be attached to the first certified payroll on the project.

PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS																					
In accordance with Connecticut General Statutes, § 31-53 Certified Payrolls with a statement of compliance shall be submitted monthly to the contracting agency.																					
WEEKLY PAYROLL																					
CONTRACTOR NAME AND ADDRESS:						SUBCONTRACTOR NAME & ADDRESS						WORKERS COMPENSATION INSURANCE CARRIER									
Landon Corporation, 15 Connecticut Avenue, Northford, CT 06472						XYZ Corporation 2 Main Street Yonick, CT 06389						Travelers Insurance Company POLICY # #BAC888928 EFFECTIVE DATE: 1/1/09 EXPIRATION DATE: 12/31/09									
PAYROLL NUMBER	Week-Ending Date	PROJECT NAME & ADDRESS		DAY AND DATE							Total ST Hours		Base Hourly Rate		Type of Fringe Benefits		Gross Pay for All Work Performed This Week	Total Deductions	Gross Pay for This Prevailing Rate Job	Check # and Net Pay	
		S	M	T	W	TH	F	S													
		HOURS WORKED EACH DAY																			
		20	21	22	23	24	25	26													
		To Certification Number																			
Robert Craft 81 Maple Street Williamantic, CT 06226	M/C	Electrical Lineman E-1 1234567 Owner OSHA 123456																			\$123 \$ xxx.xx
Ronald Jones 212 Elm Street Norwich, CT 06360	M/B	Electrical Apprentice OSHA 234567																			\$124 \$xxx.xx
Franklin T. Smith 234 Washington Rd. New London, CT 06320 SECTION B	M/H	Project Manager																			\$125 xxx.xx

\*IF REQUIRED  
 7/13/2009  
 WWS-CF1

\*SEE REVERSE SIDE

PAGE NUMBER 1 OF 2

OSHA 10 ~ATTACH CARD TO 1ST CERTIFIED PAYROLL

**\*FRINGE BENEFITS EXPLANATION (P):**

Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker's compensation, income taxes, etc.).

Please specify the type of benefits provided:

- 1) Medical or hospital care Blue Cross 4) Disability \_\_\_\_\_  
2) Pension or retirement \_\_\_\_\_ 5) Vacation, holiday \_\_\_\_\_  
3) Life Insurance Utopia 6) Other (please specify) \_\_\_\_\_

**CERTIFIED STATEMENT OF COMPLIANCE**

For the week ending date of 9/26/09,

I, Robert Craft of XYZ Corporation, (hereafter known as

Employer) in my capacity as Owner (title) do hereby certify and state:

**Section A:**

1. All persons employed on said project have been paid the full weekly wages earned by them during the week in accordance with Connecticut General Statutes, section 31-53, as amended. Further, I hereby certify and state the following:
- a) The records submitted are true and accurate;
  - b) The rate of wages paid to each mechanic, laborer or workman and the amount of payment or contributions paid or payable on behalf of each such employee to any employee welfare fund, as defined in Connecticut General Statutes, section 31-53 (h), are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such employee to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection Connecticut General Statutes, section 31-53 (d), and said wages and benefits are not less than those which may also be required by contract;
  - c) The Employer has complied with all of the provisions in Connecticut General Statutes, section 31-53 (and Section 31-54 if applicable for state highway construction);
  - d) Each such employee of the Employer is covered by a worker's compensation insurance policy for the duration of his employment which proof of coverage has been provided to the contracting agency;
  - e) The Employer does not receive kickbacks, which means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a prime contractor in connection with a subcontractor relating to a prime contractor; and
  - f) The Employer is aware that filing a certified payroll which he knows to be false is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years or both.

2. OSHA~The employer shall affix a copy of the construction safety course, program or training completion document to the certified payroll required to be submitted to the contracting agency for this project on which such employee's name first appears.

Robert Craft owner 10/2/09  
(Signature) (Title) Submitted on (Date)

**Section B: Applies to CONNDOT Projects ONLY**

That pursuant to CONNDOT contract requirements for reporting purposes only, all employees listed under Section B who performed work on this project are not covered under the prevailing wage requirements defined in Connecticut General Statutes Section 31-53.

Robert Craft owner 10/2/09  
(Signature) (Title) Submitted on (Date)

Note: CTDOL will assume all hours worked were performed under Section A unless clearly delineated as Section B WWS-CPI as such. Should an employee perform work under both Section A and Section B, the hours worked and wages paid must be segregated for reporting purposes.

\*\*\*THIS IS A PUBLIC DOCUMENT\*\*\*  
\*\*\*DO NOT INCLUDE SOCIAL SECURITY NUMBERS\*\*\*



## **Information Bulletin**

### ***Occupational Classifications***

The Connecticut Department of Labor has the responsibility to properly determine "job classification" on prevailing wage projects covered under C.G.S. Section 31-53(d).

***Note: This information is intended to provide a sample of some occupational classifications for guidance purposes only. It is not an all-inclusive list of each occupation's duties. This list is being provided only to highlight some areas where a contractor may be unclear regarding the proper classification. If unsure, the employer should seek guidelines for CTDOL.***

**Below are additional clarifications of specific job duties performed for certain classifications:**

- **ASBESTOS WORKERS**

Applies all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems.

- **ASBESTOS INSULATOR**

Handle, install apply, fabricate, distribute, prepare, alter, repair, dismantle, heat and frost insulation, including penetration and fire stopping work on all penetration fire stop systems.

- **BOILERMAKERS**

Erects hydro plants, incomplete vessels, steel stacks, storage tanks for water, fuel, etc. Builds incomplete boilers, repairs heat exchanges and steam generators.

- **BRICKLAYERS, CEMENT MASONS, CEMENT FINISHERS, MARBLE MASONS, PLASTERERS, STONE MASONS, PLASTERERS. STONE MASONS, TERRAZZO WORKERS, TILE SETTERS**

Lays building materials such as brick, structural tile and concrete cinder, glass, gypsum, terra cotta block. Cuts, tools and sets marble, sets stone, finishes concrete, applies decorative steel, aluminum and plastic tile, applies cements, sand, pigment and marble chips to floors, stairways, etc.

- **CARPENTERS, MILLWRIGHTS. PILEDRIVERMEN. LATHERS. RESILEINT FLOOR LAYERS, DOCK BUILDERS, DIKERS, DIVER TENDERS**

Constructs, erects, installs and repairs structures and fixtures of wood, plywood and wallboard. Installs, assembles, dismantles, moves industrial machinery. Drives piling into ground to provide foundations for structures such as buildings and bridges, retaining walls for earth embankments, such as cofferdams. Fastens wooden, metal or rockboard lath to walls, ceilings and partitions of buildings, acoustical tile layer, concrete form builder. Applies firestopping materials on fire resistive joint systems only. Installation of curtain/window walls only where attached to wood or metal studs. Installation of insulated material of all types whether blown, nailed or attached in other ways to walls, ceilings and floors of buildings. Assembly and installation of modular furniture/furniture systems. Free-standing furniture is not covered. This includes free standing: student chairs, study top desks, book box desks, computer furniture, dictionary stand, atlas stand, wood shelving, two-position information access station, file cabinets, storage cabinets, tables, etc.

- **LABORER, CLEANING**

- The clean up of any construction debris and the general (heavy/light) cleaning, including sweeping, wash down, mopping, wiping of the construction facility and its furniture, washing, polishing, and dusting.

- **DELIVERY PERSONNEL**

- If delivery of supplies/building materials is to one common point and stockpiled there, prevailing wages are not required. If the delivery personnel are involved in the distribution of the material to multiple locations within the construction site then they would have to be paid prevailing wages for the type of work performed: laborer, equipment operator, electrician, ironworker, plumber, etc.

- An example of this would be where delivery of drywall is made to a building and the delivery personnel distribute the drywall from one "stockpile" location to further sub-locations on each floor. Distribution of material around a construction site is the job of a laborer or tradesman, and not a delivery personnel.

- **ELECTRICIANS**

Install, erect, maintenance, alteration or repair of any wire, cable, conduit, etc., which generates, transforms, transmits or uses electrical energy for light, heat, power or other purposes, including the Installation or maintenance of telecommunication, LAN wiring or computer equipment, and low voltage wiring. ***\*License required per Connecticut General Statutes: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9.***

- **ELEVATOR CONSTRUCTORS**

Install, erect, maintenance and repair of all types of elevators, escalators, dumb waiters and moving walks. *\*License required by Connecticut General Statutes: R-1,2,5,6.*

- **FORK LIFT OPERATOR**

Laborers Group 4) Mason Tenders - operates forklift solely to assist a mason to a maximum height of nine (9) feet only.

Power Equipment Operator Group 9 - operates forklift to assist any trade, and to assist a mason to a height over nine (9) feet.

- **GLAZIERS**

Glazing wood and metal sash, doors, partitions, and 2 story aluminum storefronts. Installs glass windows, skylights, store fronts and display cases or surfaces such as building fronts, interior walls, ceilings and table tops and metal store fronts. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers, which require equal composite workforce.

- **IRONWORKERS**

Erection, installation and placement of structural steel, precast concrete, miscellaneous iron, ornamental iron, metal curtain wall, rigging and reinforcing steel. Handling, sorting, and installation of reinforcing steel (rebar). Metal bridge rail (traffic), metal bridge handrail, and decorative security fence installation. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers which require equal composite workforce.

- **INSULATOR**

- Installing fire stopping systems/materials for "Penetration Firestop Systems": transit to cables, electrical conduits, insulated pipes, sprinkler pipe penetrations, ductwork behind radiation, electrical cable trays, fire rated pipe penetrations, natural polypropylene, HVAC ducts, plumbing bare metal, telephone and communication wires, and boiler room ceilings.

- **LABORERS**

Acetylene burners, asphalt rakers, chain saw operators, concrete and power buggy operator, concrete saw operator, fence and guard rail erector (except metal bridge rail (traffic), decorative security fence (non-metal)).

installation.), hand operated concrete vibrator operator, mason tenders, pipelayers (installation of storm drainage or sewage lines on the street only), pneumatic drill operator, pneumatic gas and electric drill operator, powermen and wagon drill operator, air track operator, block paver, curb setters, blasters, concrete spreaders.

- **PAINTERS**

Maintenance, preparation, cleaning, blasting (water and sand, etc.), painting or application of any protective coatings of every description on all bridges and appurtenances of highways, roadways, and railroads. Painting, decorating, hardwood finishing, paper hanging, sign writing, scenic art work and drywall hhg for any and all types of building and residential work.

- **LEAD PAINT REMOVAL**

- Painter's Rate

1. Removal of lead paint from bridges.
2. Removal of lead paint as preparation of any surface to be repainted.
3. Where removal is on a Demolition project prior to reconstruction.

- Laborer's Rate

1. Removal of lead paint from any surface NOT to be repainted.
2. Where removal is on a *TOTAL* Demolition project only.

- **PLUMBERS AND PIPEFITTERS**

Installation, repair, replacement, alteration or maintenance of all plumbing, heating, cooling and piping. ***\*License required per Connecticut General Statutes: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2 S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4.***

- **POWER EQUIPMENT OPERATORS**

Operates several types of power construction equipment such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers or motor graders, etc. Repairs and maintains equipment. ***\*License required, crane operators only, per Connecticut General Statutes.***

- **ROOFERS**

Covers roofs with composition shingles or sheets, wood shingles, slate or asphalt and gravel to waterproof roofs, including preparation of surface. (demolition or removal of any type of roofing and or clean-up of any and all areas where a roof is to be relaid.)

- **SHEETMETAL WORKERS**

Fabricate, assemble, install and repair sheetmetal products and equipment in such areas as ventilation, air-conditioning, warm air heating, restaurant equipment, architectural sheet metal work, sheetmetal roofing, and aluminum gutters. Fabrication, handling, assembling, erecting, altering, repairing, etc. of coated metal material panels and composite metal material panels when used on building exteriors and interiors as soffits, fascia, louvers, partitions, canopies, cornice, column covers, awnings, beam covers, cladding, sun shades, lighting troughs, spires, ornamental roofing, metal ceilings, mansards, copings, ornamental and ventilation hoods, vertical and horizontal siding panels, trim, etc. The sheet metal classification also applies to the vast variety of coated metal material panels and composite metal material panels that have evolved over the years as an alternative to conventional ferrous and non-ferrous metals like steel, iron, tin, copper, brass, bronze, aluminum, etc. Fabrication, handling, assembling, erecting, altering, repairing, etc. of architectural metal roof, standing seam roof, composite metal roof, metal and composite bathroom/toilet partitions, aluminum gutters, metal and composite lockers and shelving, kitchen equipment, and walk-in coolers. To include testing and air –balancing ancillary to installation and construction.

- **SPRINKLER FITTERS**

Installation, alteration, maintenance and repair of fire protection sprinkler systems.

***\*License required per Connecticut General Statutes: F-1,2,3,4.***

- **TILE MARBLE AND TERRAZZO FINISHERS**

Assists and tends the tile setter, marble mason and terrazzo worker in the performance of their duties.

- **TRUCK DRIVERS**

~How to pay truck drivers delivering asphalt is under REVISION~

Truck Drivers are required to be paid prevailing wage for time spent "working" directly on the site. These drivers remain covered by the prevailing wage for any time spent transporting between the actual construction location and facilities (such as fabrication, plants, mobile factories, batch plant, borrow pits, job headquarters, tool yards, etc.) dedicated exclusively, or nearly so, to performance of the contract or project, which are so located in proximity to the actual construction location that it is reasonable to include them. ***\*License required, drivers only, per Connecticut General Statutes.***

***For example:***

- Material men and deliverymen are not covered under prevailing wage as long as they are not directly involved in the construction process. If, they unload the material, they would then be covered by prevailing wage for the classification they are performing work in: laborer, equipment operator, etc.
- Hauling material off site is not covered provided they are not dumping it at a location outlined above.
- Driving a truck on site and moving equipment or materials on site would be considered covered work, as this is part of the construction process.

➤ *Any questions regarding the proper classification should be directed to:*  
*Public Contract Compliance Unit*  
*Wage and Workplace Standards Division*  
*Connecticut Department of Labor*  
*200 Folly Brook Blvd, Wethersfield, CT 06109*  
*(860) 263-6790.*

**Connecticut Department of Labor  
Wage and Workplace Standards Division  
FOOTNOTES**

- ⇒ Please Note: If the “Benefits” listed on the schedule for the following occupations includes a letter(s) (+ a or + a+b for instance), refer to the information below.

Benefits to be paid at the appropriate prevailing wage rate for the listed occupation.

If the “Benefits” section for the occupation lists only a dollar amount, disregard the information below.

**Bricklayers, Cement Masons, Cement Finishers, Concrete Finishers, Stone Masons**  
(Building Construction) and  
(Residential- Hartford, Middlesex, New Haven, New London and Tolland Counties)

- a. Paid Holiday: Employees shall receive 4 hours for Christmas Eve holiday provided the employee works the regularly scheduled day before and after the holiday. Employers may schedule work on Christmas Eve and employees shall receive pay for actual hours worked in addition to holiday pay.

**Elevator Constructors: Mechanics**

- a. Paid Holidays: New Year’s Day, Memorial Day, Independence Day, Labor Day, Veterans’ Day, Thanksgiving Day, Christmas Day, plus the Friday after Thanksgiving.
- b. Vacation: Employer contributes 8% of basic hourly rate for 5 years or more of service or 6% of basic hourly rate for 6 months to 5 years of service as vacation pay credit.

**Glaziers**

- a. Paid Holidays: Labor Day and Christmas Day.

**Power Equipment Operators**  
(Heavy and Highway Construction & Building Construction)

- a. Paid Holidays: New Year’s Day, Good Friday, Memorial day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, provided the employee works 3 days during the week in which the holiday falls, if scheduled, and if scheduled, the working day before and the working day after the holiday. Holidays falling on Saturday may be observed on Saturday, or if the employer so elects, on the preceding Friday.

**Ironworkers**

- a. Paid Holiday: Labor Day provided employee has been on the payroll for the 5 consecutive work days prior to Labor Day.

**Laborers (Tunnel Construction)**

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. No employee shall be eligible for holiday pay when he fails, without cause, to work the regular work day preceding the holiday or the regular work day following the holiday.

**Roofers**

- a. Paid Holidays: July 4<sup>th</sup>, Labor Day, and Christmas Day provided the employee is employed 15 days prior to the holiday.

**Sprinkler Fitters**

- a. Paid Holidays: Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day, provided the employee has been in the employment of a contractor 20 working days prior to any such paid holiday.

**Truck Drivers**

(Heavy and Highway Construction & Building Construction)

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas day, and Good Friday, provided the employee has at least 31 calendar days of service and works the last scheduled day before and the first scheduled day after the holiday, unless excused.



## **APPENDIX A**

### **Buy America, Build America Act Information**



# Buy America Preference

## *In Financial Assistance for Infrastructure*

### Buy America, Build America Act

The [Buy America, Build America Act](#) (sections 70901-52 of the Infrastructure Investment and Jobs Act, Pub. L. 117-58) requires all federal agencies to ensure that no financial assistance funding is provided for infrastructure projects unless all of the iron, steel, manufactured products, and construction materials used in the project are produced in the United States, unless subject to an approved waiver. Per the [Office of Management and Budget \(OMB\) memorandum M-22-11](#), federal agencies must meet this requirement by May 14, 2022.

### “Buy America” Preference

*A domestic procurement preference applies to these categories of products and materials used in infrastructure projects:*

- **All iron and steel.** All manufacturing processes, from the initial melting stage through the application of coatings, must occur in the United States.
- **All manufactured products.** Must be manufactured in the United States and the cost of its domestically mined, produced, or manufactured components must be greater than 55 percent of the total cost of all its components unless another standard applies under law or regulation.
- **All construction materials.** All manufacturing processes for the construction material must occur in the United States.

Classify an article, material, or supply into only one category. Apply the iron and steel test to items made mostly of iron or steel unless another standard applies under law or regulation.



Credit: Brad Gunn, USFWS

*Boating Infrastructure Grant dock project, Wharf Marina, Washington, D.C.*

### Application

*The Buy America preference applies to:*

- All Service programs where we award [financial assistance](#) funds for infrastructure, even when infrastructure is not the primary purpose.
- All new awards, award amendments, and renewal awards [to non-federal entities](#) where we award funds for infrastructure on or after May 14, 2022, even when related funding opportunities did not identify it as applicable.
- Only the iron and steel, manufactured products, and construction materials used for an infrastructure project that are consumed in, incorporated into, or affixed to the infrastructure.
- An *entire* infrastructure project, including both federal and non-federal funding.

*The Buy America preference does not apply to:*

- Financial assistance expenditures excluded from the definition of “Federal financial assistance” in section 70912(4)(b) of the [Buy America, Build America Act](#).
- Non-infrastructure spending under an award that includes an infrastructure project.
- Tools, equipment, and supplies brought to the construction site and removed at or before project completion.
- Equipment and furnishings used or within the finished structure but not an integral part of or permanently affixed to it.

**Waivers**

Subject to prior review by the public and the [OMB's Made in America Office](#), federal agencies may waive the application of this Buy America preference in any case in which the agency finds that:

1. Applying it would be inconsistent with public interest,
2. The United States does not produce the needed product or material in a sufficient and available quantity or of a satisfactory quality, or
3. Applying it would increase the overall project cost by more than 25 percent.

**Types of Waivers**

- 1. Public interest**
- 2. Nonavailability**
- 3. Unreasonable cost**

The Service will include all waiver submission requirements, instructions, and procedures in Notices of Award or Award Amendments as applicable. This information is also detailed in the [Service's General Award Terms and Conditions](#) effective on and after May 14, 2022.

For more information, see the [Department of the Interior's Buy America web page](#).

**Definitions**

*Infrastructure* includes, at a minimum, the structures, facilities, and equipment for, in the United States, roads, highways, and bridges; public transportation; dams, ports, harbors, and other maritime facilities; intercity passenger and freight railroads; freight and intermodal facilities; airports; water systems, including drinking water and wastewater systems; electrical transmission facilities and systems; utilities; broadband infrastructure; and buildings and real property. Infrastructure includes facilities that generate, transport, and distribute energy.

*Project* means the construction, alteration, maintenance, or repair of infrastructure in the United States.

For more definitions, see section 70912 of the [Buy America, Build America Act](#) and the [OMB M-22-11 memorandum](#).

**Contact**

E-mail questions, comments, or information requests *regarding this Buy America preference* to: [fwhqfasupport@fws.gov](mailto:fwhqfasupport@fws.gov).

E-mail *any other* financial assistance questions, comments, or information requests to: [fwsgrants@fws.gov](mailto:fwsgrants@fws.gov).

## **APPENDIX B**

### **Permits and Conditions**



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, NEW ENGLAND DISTRICT**  
**NEW ENGLAND DISTRICT OFFICE**  
**696 VIRGINIA ROAD**  
**CONCORD MASSACHUSETTS 01742-2751**

November 25, 2024

Regulatory Division  
Connecticut & Rhode Island Section

Matthew Davis  
Town of Montville  
317 Norwich-New London Tpke  
Uncasville, CT 06382  
Via Email: mdavis@montville-ct.org

Dear Mr. Davis:

This letter is in response to the application you submitted to the New England District on July 12, 2024, for a Department of the Army general permit verification. This project has been assigned the file number NAE-2024-01890. This file number should be referenced in all correspondence with this office.

A review of the information provided indicates the proposed work includes the excavation of an existing bituminous boat ramp and replaced with a new precast concrete ramp. The existing concrete fixed dock will be replaced with a new concrete fixed dock with ADA access. The existing asphalt milling parking lot will be removed and replaced with a new bituminous concrete parking lot with ADA accessible parking and sidewalk. The parking lot will be graded to direct stormwater runoff to a new water quality basin to treat the stormwater during and after construction.

A new fishing pier has been proposed to extend into the Thames River approximately 98 feet south of the existing boat dock. The pier will extend straight into the Thames River for 135 feet and then spread out into two octagonal fishing areas measuring approximately 41 feet. The pier will be supported by timber piles driven into the river bed.

A temporary sand bag cofferdam will be used to isolate the boat launch area and the fixed dock. A barge and pile driver will be used to drive the wood piles for the floating docks and the fishing pier.

The project is located in the Thames River at 55 Dock Road at latitude 41.432200° and longitude -72.099230°; in Uncasville, Southeastern Connecticut Planning Region County, Connecticut. The work is shown on the enclosed plans titled Town Boat Launch Improvements and Fishing Pier Construction, on 17 sheets, and dated July 29, 2024.

Based on the information you have provided, we verify that the activity is authorized under General Permit Nos. 4 and 5 of the December 15, 2021, Federal Permit known as the Connecticut General Permits (GPs). If the extent of the project area and/or nature of the authorized impacts to waters are modified, a revised application must be submitted to this office for written approval before work is initiated. A copy of these permits can be found at: <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/>

Any deviation from the terms and conditions of the permit, or your submitted plans, may subject the permittee to the enforcement provisions of our regulations. Therefore, in the event changes to this project are contemplated, it is recommended you coordinate with this office prior to proceeding with the work. This office must approve any changes before you undertake them. You must perform this work in compliance with the terms and conditions of the GPs listed above, and also in compliance with the following special conditions:

**Project Specific Special Conditions:**

1. The permittee shall complete and return the enclosed Work-Start Notification Form to this office at least two weeks prior to the anticipated construction start date.
2. The permittee shall complete and return the enclosed Completion Certification Form to this office at least one month following the completion of the authorized work.
3. You must maintain the activity herein in good condition and in conformance with the terms and conditions of this authorization. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with a General Condition of this GPs. Should you wish to cease to maintain the authorized activities, or should you desire to abandon it without a good faith transfer, you must obtain a modification of this authorization from this office, which may require restoration of the area.
4. A “soft start” is required to allow animals an opportunity to leave the project vicinity before sound pressure levels increase.

This verification is valid until December 15, 2026. You must commence or be under contract to commence the work authorized herein by December 15, 2026, and complete the work by December 15, 2027. If not, you must contact this office to determine the need for further authorization before beginning or continuing the activity. It is recommended that you contact this office before this authorization expires to discuss if permit reissuance is a possibility.

This general permit verification and any associated authorizations does not preclude the necessity to obtain any other Federal, State, or local permits, licenses, and/or certifications, which may be required.

This determination becomes valid only after the Connecticut Department of Energy & Environmental Protection (DEEP) issues or waives the following applicable State permits: Certificate of Permission (COP); General Permit (LIS-GP); Tidal Wetlands Permit; Structures and Dredging and Filling Permit; Water Quality Certification (WQC) as required under Section 401 of the Clean Water Act; and/or a Section 307 Coastal Zone Management Act consistency determination. In the event the DEEP denies any of these permits, this determination becomes null and void. The address of the DEEP office for your area is provided in the enclosed GP.

If you have any questions related to this verification or have issues accessing documents referenced in this letter, please contact Paul Silva, Project Manager at 978-318-8465, or by email at [paul.silva@usace.army.mil](mailto:paul.silva@usace.army.mil). This agency continually strives to improve our customer service. In order to better serve you, please complete the Customer Service Survey located at: <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

Sincerely,

*Kevin R Kotelly*

Kevin R. Kotelly  
Chief, CT/RI Section

Enclosures (Work Start Notices, Plans, CT General Permit General Conditions)

Cc (w/enclosures):

Kyle Haubert, CLA Engineers, via email [khaubert@CLAengineers.com](mailto:khaubert@CLAengineers.com)

Sabrina Pereira, National Marine Fisheries Service via email, [sabrinapereira@noaa.gov](mailto:sabrinapereira@noaa.gov)

Darcy Winther, CT DEEP, Land and Water Resources Division via email, [darcy.winther@ct-gov](mailto:darcy.winther@ct-gov)

## **Work-Start Notification Form**

**File Number:** NAE-2024-01890      **State:** Connecticut  
**County:** Southeastern Connecticut Planning Region

**Permittee:** Town of Montville, Matthew Davis  
**Date Verification Issued:** 11/25/2024  
**Project Manager:** Paul Silva

At least two weeks prior to commencing the activity authorized by this permit, sign this certification and return it to the following address:

**US ARMY CORPS OF ENGINEERS**  
**New England District**  
**Attn: Paul Silva**  
**696 Virginia Road**  
**Concord, MA 01742**  
**or**  
**paul.silva@usace.army.mil**  
**978-318-8465**

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers (USACE) representative. Failure to comply with any terms or conditions of this authorization may result in the USACE suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

**The people (e.g. contractor) listed below will do the work, and they understand the permit's conditions and limitations.**

**Contractor Name/Contractor Firm:** \_\_\_\_\_

**Business Address:** \_\_\_\_\_

**Contractor Phone and Email:** \_\_\_\_\_

**Proposed Construction Dates:**    **Start:** \_\_\_\_\_    **Finish:** \_\_\_\_\_

\_\_\_\_\_  
**Signature of Permittee**

\_\_\_\_\_  
**Date**



## **Compliance Certification Form**

**File Number: NAE-2024-01890**                      **State: Connecticut**  
**County: Southeastern Connecticut Planning Region**

**Permittee: Town of Montville, Matthew Davis**  
**Date Verification Issued: 11/25/2024**  
**Project Manager: Paul Silva**

Within one month of completion of the activity authorized by this permit and any mitigation required by the permit (you must submit this form after mitigation is complete, but not the mitigation monitoring, which requires separate submittals), sign this certification and return it to the following address:

**US ARMY CORPS OF ENGINEERS**  
**New England District**  
**Attn: Paul Silva**  
**696 Virginia Road**  
**Concord, MA 01742**  
**or**  
**paul.silva@usace.army.mil**

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers (USACE) representative. Failure to comply with any terms or conditions of this authorization may result in the USACE suspending, modifying, or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

I hereby certify that the work, and mitigation (if applicable), authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit including any general or specific conditions.

**Date Authorized Work Started:** \_\_\_\_\_ **Completed:** \_\_\_\_\_

Describe any deviations from permit (attach drawing(s) depicting the deviations):

\_\_\_\_\_

**\*Note: The description of any deviations on this form does not constitute approval by the USACE.**

\_\_\_\_\_  
**Signature of Permittee**

## APPENDIX B - GENERAL CONDITIONS

**1. Other Permits.** Authorizations provided by these GPs do not obviate the need for project proponents to obtain other Federal, State, or local permits, approvals, or authorizations required by law. Applicants are responsible for applying and obtaining all such permits, approvals or authorizations. Work that is not regulated by the State, but subject to USACE jurisdiction, may be still be eligible for these GPs.

### **2. Federal Jurisdiction**

a. Applicability of these GPs shall be evaluated with reference to federal jurisdictional boundaries (e.g., mean high water mark (MWH), high tide line (HTL), ordinary high water mark (OHW), and wetland boundary). Activities shall be evaluated with reference to “waters of the U.S.” under the Clean Water Act (33 CFR 328) and “navigable waters of the U.S.” under Section 10 of the Rivers and Harbors Act of 1899 (33 CFR 329). Prospective permittees are responsible for ensuring that the boundaries satisfy the federal criteria defined at 33 CFR 328 – 329. These sections prescribe the policy, practice, and procedures to be used in determining the extent of USACE jurisdiction.

b. Permittees shall identify the following aquatic resources on project plans: wetlands and other special aquatic sites (SAS) including vegetated shallows (also known as submerged aquatic vegetation (SAV)), riffle and pool complexes, sanctuaries and refuges, coral reefs, and mudflats; and other waters such as lakes and ponds; and perennial and intermittent streams on the project site. Wetlands shall be delineated in accordance with the Corps of Engineers Wetlands Delineation Manual and its applicable regional supplement.

### **3. Mitigation (Avoidance, Minimization, and Compensatory Mitigation)**

a. Activities shall be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the U.S. to the maximum extent practicable at the project site (i.e., on site). Consideration of mitigation (avoiding, minimizing, rectifying, reducing, or compensating) is required to the extent necessary to ensure that the adverse effects to the aquatic environment are no more than minimal.

b. Applicants should consider riparian/forested buffers for stormwater management and low impact development (LID) best management practices (BMPs) to reduce impervious cover and manage stormwater to minimize impacts to the maximum extent practicable.

c. Compensatory mitigation<sup>1</sup> for unavoidable impacts to waters of the U.S., including direct, secondary and temporal<sup>2</sup>, will generally be required for projects with permanent impacts that exceed the SV area limits, and may be required for temporary impacts that exceed the SV area limits, to offset unavoidable impacts which remain after all appropriate and practicable avoidance and minimization has been achieved and to ensure that the adverse effects to the aquatic environment are no more than minimal. Proactive restoration projects or temporary impact work with no secondary effects may generally be excluded from this requirement.

Note: The USACE Connecticut In-Lieu Fee Program allows USACE permittees, as compensation for their project impacts to aquatic resources of the U.S. in Connecticut to make monetary payment *in-lieu* of permittee-responsible mitigation. Information is provided at <https://www.nae.usace.army.mil/Missions/Regulatory/Mitigation/In-Lieu-Fee-Programs/CT/>. This only applies to USACE required mitigation and additional CT DEEP mitigation may be required.

**4. Discretionary Authority.** Notwithstanding compliance with the terms and conditions of this permit, USACE retains discretionary authority to require an Individual Permit review based on concerns for the aquatic environment or for any other factor of the public interest [33 CFR 320.4(a)]. This authority is invoked on a case-by-case basis whenever USACE determines that the potential consequences of the proposal warrant Individual Permit review based on the concerns stated above. This authority may be invoked for projects with cumulative adverse environmental effects that are more than minimal, or if there is a special resource or concern

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<sup>1</sup> Compensatory mitigation sites proposed to offset losses of aquatic resource function must comply with the applicable provisions of 33 CFR 332. See also the New England District Compensatory Mitigation Standard Operating Procedures at <http://www.nae.usace.army.mil/Missions/Regulatory/Mitigation.aspx>

<sup>2</sup> Temporal loss: The time lag between the losses of aquatic resource functions caused by the permitted impacts and the replacement of aquatic resource functions at the compensatory mitigation site(s) (33 CFR 332.2).

associated with a particular project. Whenever USACE notifies an applicant that an Individual Permit may be required, authorization under these GPs is voided and no work may be conducted in waters of the U.S. until a USACE Individual Permit is obtained or until USACE notifies the applicant that further review has demonstrated that the work may be reviewed under these GPs.

**5. Fills Within 100-Year Floodplains.** The activity shall comply with applicable Federal Emergency Management Agency (FEMA)-approved State of Connecticut or local floodplain management requirements. Permittees should contact FEMA and/or the State of Connecticut regarding floodplain management requirements.

**6. Single and Complete Projects.** The term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. The GPs shall not be used for piecemeal work and shall be applied to single and complete projects.

a. For non-linear projects, a single and complete project must have independent utility. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed, even if the other phases were not built, can be considered as separate single and complete projects with independent utility.

b. Unless USACE determines the activity has independent utility, all components of a single project and/or all planned phases of a multi-phased project (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be treated together as constituting one single and complete project.

c. For linear projects such as power lines or pipelines with multiple crossings, a “single and complete project” is all crossings of a single water of the U.S. (i.e., single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately. If any crossing requires a PCN review or an individual permit review, then the entire linear project shall be reviewed as one project under PCN or the individual permit procedures.

**7. Use of Multiple General Permits.** The use of more than one GP for a single and complete project is prohibited, except when the acreage loss of waters of the U.S. authorized by the GPs does not exceed the acreage limit of the GPs with the highest specified acreage limit. For example, if a road crossing over waters is constructed under GP 19, with an associated utility line crossing authorized by GP 6, if the maximum acreage loss of waters of the U.S. for the total project is  $\geq 1$  acre it shall be evaluated as an IP.

## **8. USACE Property and Federal Projects**

a. USACE projects and property can be found at: [www.nae.usace.army.mil/Missions/Civil-Works](http://www.nae.usace.army.mil/Missions/Civil-Works)

b. In addition to any authorization under these GPs, proponents must contact the USACE Real Estate Division at (978) 318-8585 for work occurring on or potentially affecting USACE properties and/or USACE-controlled easements to initiate reviews and determine what real estate instruments are necessary to perform work. Permittees may not commence work on USACE properties and/or USACE-controlled easements until they have received any required USACE real estate documents evidencing site-specific permission to work.

c. Any proposed temporary or permanent modification or use of a Federal project (including but not limited to a levee, dike, floodwall, channel, anchorage, seawall, bulkhead, jetty, wharf, pier or other work built but not necessarily owned by the United States), or any use which would obstruct or impair the usefulness of the Federal project in any manner, and/or would involve changes to the authorized Federal project’s scope, purpose, and/or functioning, is not eligible for SV and will also require review and approval by USACE pursuant to Section 14 of the Rivers and Harbors Act of 1899 (33 USC 408) (Section 408)

d. A PCN is required for all work in, over, under, or within a distance of three times the authorized depth of a USACE Federal Navigation Project (FNP) and may also require permission under Section 408.

e. Any structure or work that extends closer than a distance of three times the project’s authorized depth to the horizontal limits of any FNP shall be subject to removal at the owner’s expense prior to any future USACE dredging or the performance of periodic hydrographic surveys.

f. Where a Section 408 permission is required, written verification for the PCN will not be issued prior to the decision on the Section 408 permission request.

**9. National Lands.** Activities that impinge upon the value of any National Wildlife Refuge, National Forest, National Marine Sanctuary, or any area administered by the National Park Service, U.S. Fish and Wildlife Service (USFWS) or U.S. Forest Service are not eligible for SV and require either a PCN or Individual Permit.

## **10. Wild and Scenic Rivers**

a. The following activities in designated rivers of the National Wild and Scenic River (WSR) System, or in a river designated by Congress as a “study river” for possible inclusion in the system, require a PCN or IP unless the National Park Service (NPS) has determined in writing to the proponent that the proposed work will not adversely affect the WSR designation or study status:

(1) Activities that occur in WSR segments, in and 0.25 mile up or downstream of WSR segments, or in tributaries within 0.25 miles of WSR segments;

(2) Activities that occur in wetlands within 0.25 mile of WSR segments; or

(3) Activities that have the potential to alter free-flowing characteristics in WSR segments. The District Engineer will coordinate the application with the NPS or its designee with direct management responsibility for that river.

b. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

c. As of 2021, designated rivers in Connecticut include: the West Branch of the Farmington River from Colebrook to Canton (designated river); the Eightmile River and tributaries in Salem, Lyme, and East Haddam (designated river); the Lower Farmington River from Canton to Windsor (study river – including its tributary Salmon Brook) and the Wood & Pawcatuck Rivers. Additional information can be found at:

<http://www.rivers.gov/connecticut.php>.

## **11. Historic Properties**

a. No undertaking shall cause effects (defined at 33 CFR 325 Appendix C and 36 CFR 800) to properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places<sup>3</sup>, including previously unknown historic properties within the permit area, unless USACE or another Federal action agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act (NHPA). The State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO) and the National Register of Historic Places can assist with locating information on:

(1) Previously identified historic properties; and

(2) Areas with potential for the presence of historic or cultural resources, which may require identification and evaluation by qualified historic preservation and/or archaeological consultants or tribal entities in consultation with USACE and the SHPO and/or THPO(s).

b. For activities eligible for SV, proponents must document that the activity will not cause effects as stated in 11(a). To comply with this condition, both SV and PCN prospective permittees shall notify the CT SHPO and THPOs for projects in close proximity to tribal lands or with potential impacts to tribal lands and request their identification of historic properties and cultural resources. The notification shall consist of the project location, plans, and brief narrative and state that a federal permit is required. Documentation of the notification to the SHPO/THPO shall be included with the SV or PCN submittal and dated. If no response is received within 30-days from the SHPO/THPO notification, the Corps may proceed to a permit decision on an SV or PCN. A PCN or IP is required if any activity may have an adverse effect on a historic property or cultural resource.

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<sup>3</sup> Many historic properties are not listed on the National Register of Historic Places and may require identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with USACE and the SHPO and/or THPO(s).

c. Proponents must submit a PCN to USACE as soon as possible if the authorized activity may cause effects as stated in 11(a) to ensure that USACE is aware of any potential effects of the permitted activity on any historic property or cultural resource so that the consultation requirements of Section 106 of NHPA can be satisfied.

d. All PCN (inland projects) submittals shall:

1) show notification to the SHPO and applicable THPO(s) for their identification of historic properties or cultural resources ([https://portal.ct.gov/-/media/DECD/Historic-Preservation/01\\_Programs\\_Services/Environmental-Review/ProjectNotificationForm\\_2021.pdf](https://portal.ct.gov/-/media/DECD/Historic-Preservation/01_Programs_Services/Environmental-Review/ProjectNotificationForm_2021.pdf)). If no response is received within 30-days from the SHPO/THPO notification, the Corps may proceed to a permit decision on an SV or PCN.

2) state which historic properties or cultural resources may be affected by the proposed work or include a vicinity map indicating the location of them, and

3) include any available documentation from the SHPO or THPO(s) indicating that there are, or are not, historic properties or cultural resources affected. Starting consultation early in project planning can save proponents time and money.

e. If you discover any previously unknown historic, cultural, or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

f. Federal agencies should follow their own procedures for complying with the requirements of Section 106 of the NHPA. Along with the application, Federal permittees shall provide USACE with the appropriate documentation to demonstrate compliance with those requirements.

g. Federal and non-federal applicants should coordinate with USACE before conducting any onsite archeological work (reconnaissance, surveys, recovery, etc.) requested by the SHPO or the THPOs, as USACE will determine the permit area for the consideration of historic properties based on 33 CFR 325 Appendix C. This is to ensure that work done is in accordance with USACE requirements.

## **12. Federal Threatened and Endangered Species**

a. No activity is authorized by these GPs which:

(1) Is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat or proposed critical habitat of such species.

(2) “May affect” a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(3) Is “likely to adversely affect” a listed species or critical habitat unless Section 7 consultation has been completed by USACE or another lead action agency in coordination with USACE.

(4) Violates the ESA.

b. All prospective permittees shall attach to their SVNF or PCN an Official Species List obtained from the U.S. Fish and Wildlife Service’s Information for Planning and Consultation (IPaC) found at: <https://ecos.fws.gov/ipac> and provide the email address of the person who generated the list.

c. For proposed activities in waters with tidal influence, prospective permittees shall also refer to the National Oceanic and Atmospheric Administration (NOAA) Fisheries’ Section 7 Mapper for federally-listed species found at: <https://noaa.maps.arcgis.com/apps/webappviewer/index.html>.

Several tidal freshwater waterways in Connecticut have been identified as foraging and overwintering areas, or designated as critical habitat, for the endangered Atlantic sturgeon and shortnose sturgeon. The extent of these waterways is highlighted below. The list of waters below does not include higher salinity coastal tidal creeks and brackish waterways which also possess habitat for these species, so it is strongly recommended that applicants refer to the NOAA Section 7 mapper (link above) for all work in waterways that may have tidal influence:



- Mainstem Housatonic River from Long Island Sound (LIS) to the upstream limit of the Derby Dam in Shelton, CT (Atlantic sturgeon critical habitat; migrating and foraging habitat for Atlantic sturgeon and shortnose sturgeon).
  - Naugatuck River confluence with the Housatonic River up to the Naugatuck River Reservoir dam in Ansonia, CT.
- Quinnipiac River from LIS to the bridge/intersection of Quinnipiac Street and River Road, Wallingford, CT (migrating and foraging habitat for Atlantic sturgeon and shortnose sturgeon).
- Mainstem Connecticut River from LIS to the Massachusetts Border (Atlantic sturgeon critical habitat; spawning, migrating, and foraging for Atlantic sturgeon; overwintering, migrating, and foraging for shortnose sturgeon).
  - Salmon River confluence at Connecticut River to the dam at Powerhouse Road, Leesville, CT
  - Farmington River confluence with the Connecticut River to Tunxis Road, Tariffville, CT
  - Pataconk Brook confluence with the Connecticut River to North Quarter Park, Chester, CT
  - Confluence of Hamburg Cove with the Connecticut River to Eightmile River at Joshuatown Road/Old Hamburg Road, Hamburg, CT.
  - Lord Creek confluence with the Connecticut River to Coult's Hole and Mack Creek to Lord Hill Lane, Lyme, CT.
  - North Cove confluence with Connecticut River and Falls River confluence in North Cove to River Road, Essex, CT.
  - Mattabassett River confluence at the Connecticut River to Rt. 3, northeast of Newfield Street in Middletown, CT.
  - Coginchaug River confluence with the Mattabassett River to Johnson Street north of the Providence & Worcester Railroad.
  - Selden Creek, Lyme, CT.
- Mainstem of the Thames River to Norwich, Connecticut (migrating and foraging habitat for Atlantic sturgeon and shortnose sturgeon).
  - Shetucket River confluence with Thames River up to Greenville Dam, Greenville, CT
  - Yantic River confluence with the Thames River to Yantic Falls, Norwich, CT.
  - Horton Cove confluence with the Thames River to Stony Brook and Mohegan Brook, Montville, CT.
  - Poquetanuck Cove confluence with the Thames River to Poquetanuck Brook at Shingle Road, Poquetanuck, CT.

d. A PCN is required if a threatened or endangered species, a species proposed for listing as threatened or endangered, or designated or proposed critical habitat (all hereinafter referred to as “listed species or habitat”), as identified under the ESA, may be affected by the proposed work, unless consultation is completed by another lead Federal agency, in which case, an application can be SV. An activity may remain eligible for SV if the only listed species affected is the northern long-eared bat (*Myotis septentrionalis*), and only after Section 7 consultation has been completed by USACE under the 4(d) Rule Streamlined Consultation.

e. Federal agencies shall follow their own procedures for complying with the requirements of the ESA while ensuring that USACE and any other federal action agencies are included in the consultation process.

f. Non-federal representatives designated by USACE to conduct informal consultation or prepare a biological assessment shall follow the requirements in the designation document(s) and the ESA. Non-federal representatives shall also provide USACE with the appropriate documentation to demonstrate compliance with those requirements. The USACE will review the documentation and determine whether it is sufficient to address ESA compliance for the GP activity, or whether additional ESA consultation is necessary.

g. The requirements to comply with Section 7 of the ESA may be satisfied by a programmatic agreement (PA) or programmatic consultation (PC) with USACE, the New England District, or another federal agency. New England District PAs and PCs are found at: <https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Connecticut-General-Permit>.

### **13. Pile Installation and Removal and Related Time of Year Restrictions**

- a. Derelict, degraded, or abandoned piles and sheet piles in the project area shall be removed in their entirety as practicable and properly disposed of in an upland location and not in wetlands or other waters of the U.S. In areas of fine-grained substrates, piles/sheets shall be removed by direct, vibratory, or clamshell pull method to minimize potential turbidity and sedimentation impacts. If removal is not practicable, said piles/sheets shall be cut off or driven to a depth of, at least, one foot below substrate.
- b. Work involving pile installation and/or removal should occur “In-the-dry” or adhere to the applicable waterbody’s time-of-year restrictions in Appendix H.

### **14. Navigation**

- a. No activity may cause more than a minimal adverse effect on navigation.
- b. Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the U.S.
- c. Any structure or work that extends closer to the horizontal limits of any USACE FNP than a distance of three times the project’s authorized depth shall be subject to removal at the owner’s expense prior to any future USACE dredging or the performance of periodic hydrographic surveys. This is applicable to SV and PCN.
- d. There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein, and no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein.
- e. The permittee understands and agrees that if future U.S. operations require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.
- f. A PCN is required for all work in, over or under an FNP or its buffer zone unless otherwise indicated in Appendix A. as the work may also require a Section 408 permit.

**15. Federal Liability.** In issuing these permits, the Federal Government does not assume any liability for the following: (a) damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; (b) damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the U.S. in the public interest; (c) damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit; (d) design or construction deficiencies associated with the permitted work; and/or (e) damage claims associated with any future modification, suspension, or revocation of these permits.

**16. Heavy Equipment in Wetlands.** Operating heavy equipment other than fixed equipment (drill rigs, fixed cranes, etc.) within wetlands shall be minimized, and such equipment shall not be stored, maintained, or repaired in wetlands, to the maximum extent practicable. Where construction requires heavy equipment operation in wetlands, the equipment shall either have low ground pressure (typically <3 psi), or it shall be placed on swamp/construction/timber mats (herein referred to as “construction mats”) that are adequate to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation. Construction mats are to be placed in the wetland from the upland or from equipment positioned on construction mats if working within a wetland. Dragging construction mats into position is prohibited. Other support structures that are capable of safely supporting equipment may be used with written USACE authorization. Similarly, the permittee may request written authorization from USACE to waive use of mats during frozen or dry conditions. An adequate supply of spill containment equipment shall be maintained on site. Construction mats should be managed in accordance with the following construction mat BMPs:

- Mats should be in good condition to ensure proper installation, use and removal.

- Where feasible, mats should be carried and not dragged unless they are being used as a grading implement.
- Where feasible, place mats in a location that would minimize the amount needed for the wetlands crossing.
- Minimize impacts to wetland areas during installation, use, and removal.
- Install adequate erosion & sediment controls at approaches to mats to promote a smooth transition to, and minimize sediment tracking onto, swamp mats.
- In most cases, construction mats should be placed along the travel area so that the individual boards are resting perpendicular to the direction of traffic. No gaps should exist between mats. Place mats far enough on either side of the resource area to rest on firm ground.
- Provide standard construction mat BMP details to work crews.
- Construction mats shall be thoroughly cleaned before re-use to minimize spread of invasive species.

## 17. Temporary Fill

- Temporary fill, including but not limited to construction mats and corduroy roads shall be entirely removed as soon as they are no longer needed to construct the authorized work. Temporary fill shall be placed in its original location or disposed of at an upland site and suitably contained to prevent its subsequent erosion into waters of the U.S.
- All temporary fill and disturbed soils shall be stabilized to prevent its eroding into waters of the U.S. where it is not authorized. Work shall include phased or staged development to ensure only areas under active development are exposed and to allow for stabilization practices as soon as practicable. Temporary fill must be placed in a manner that will prevent it from being eroded by expected flows.
- Unconfined temporary fill authorized for discharge into waters of the U.S. shall consist of material that minimizes impacts to water quality (e.g., washed stone, stone, etc.).
- Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Materials shall be placed in a location and manner that does not adversely impact surface or subsurface water flow into or out of the wetland. Temporary fill authorized for discharge into wetlands shall be placed on geotextile fabric or other appropriate material laid on the pre-construction wetland grade where practicable to minimize impacts and to facilitate restoration to the original grade. Construction mats are excluded from this requirement.
- Construction debris and/or deteriorated materials shall not be located in waters of the U.S.

## 18. Restoration of Inland Wetland Areas

- Upon completion of construction, all disturbed wetland areas (the disturbance of these areas must be authorized) shall be stabilized with a wetland seed mix containing only plant species native to New England and shall not contain any species listed in the “Invasive and Other Unacceptable Plant Species” Appendix D in the “New England District Compensatory Mitigation Guidance” found at <http://www.nae.usace.army.mil/Portals/74/docs/regulatory/Mitigation/CompensatoryMitigationGuidance.pdf>.
- The introduction or spread of invasive plant species in disturbed areas shall be controlled. If swamp or timber mats are to be used, they shall be thoroughly cleaned before re-use.
- In areas of authorized temporary disturbance, if trees are cut, they shall be cut at or above ground level and not uprooted to prevent disruption to the wetland soil structure and to allow stump sprouts to revegetate the work area, unless otherwise authorized.
- Wetland areas where permanent disturbance is not authorized shall be restored to their original condition and elevation, which under no circumstances shall be higher than the pre-construction elevation. Original condition means careful protection and/or removal of existing soil and vegetation, and replacement back to the original location such that the original soil layering, and vegetation schemes are approximately the same, unless otherwise authorized.



**19. Coastal Bank Stabilization.** Projects involving construction or reconstruction/maintenance of bank stabilization structures within USACE jurisdiction should be designed to minimize environmental effects, effects to neighboring properties, scour, etc. to the maximum extent practicable. For example, vertical bulkheads should only be used in situations where reflected wave energy can be tolerated. This generally eliminates bodies of water where the reflected wave energy may interfere with or impact harbors, marinas, or other developed shore areas. A revetment is sloped and is typically employed to absorb the direct impact of waves more effectively than a vertical seawall. For more information, go to the USACE Coastal Engineering Manual (supersedes the Shore Protection Manual) located at <https://www.nae.usace.army.mil/Missions/Regulatory/Useful-Documents-Forms-and-Publications/>. Select “Products/ Services,” “Publications.” Part 5, Chapter 7-8, a (2) c.

**20. Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below OHW or HTL, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the U.S. during periods of low-flow or no-flow, or during low tides.

**21. Aquatic Life Movements & Management of Water Flows**

a. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity’s primary purpose is to impound water. Unless otherwise stated, activities impounding water in a stream require a PCN to ensure impacts to aquatic life species are avoided and minimized. All permanent and temporary crossings of waterbodies (e.g., streams, wetlands) shall be:

(1) Suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species; and

(2) Properly aligned and constructed to prevent bank erosion or streambed scour both adjacent to and inside the culvert. Permanent and temporary crossings of wetlands shall be suitably culverted, spanned or bridged in such a manner as to preserve hydraulic and ecological connectivity between the wetlands on either side of the road.

b. To avoid adverse impacts on aquatic organisms, the low flow channel/thalweg shall remain unobstructed during periods of low flow, except when it is necessary to perform the authorized work.

c. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

d. Refer to Appendix G for Stream Crossing BMPs.

**22. Discharge of Pollutants.** All activities involving any discharge of pollutants into waters of the U.S. authorized under these GPs shall be consistent with applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the CWA (33 U.S.C. 1251), and applicable state and local laws. If applicable water quality standards, limitations, etc., are revised or modified during the term of this permit, the authorized work shall be modified to conform with these standards within six months of the effective date of such revision or modification, or within a longer period deemed reasonable by the District Engineer in consultation with the Regional Administrator of the EPA. Applicants may presume that state water quality standards are met with issuance of the Section 401 WQC (applicable only to the Section 404 activity).

**23. Spawning, Breeding, and Migratory Areas**

a. Jurisdictional activities and impacts such as excavations, discharges of dredged or fill material, and/or suspended sediment producing activities in jurisdictional waters that provide value as fish migratory areas, fish and shellfish spawning or nursery areas, or amphibian and migratory bird breeding areas, during spawning or breeding seasons shall be avoided and minimized to the maximum extent practicable.

b. Jurisdictional activities in waters of the U.S. that provide value as breeding areas for migratory birds must be avoided to the maximum extent practicable. The permittee is responsible for obtaining any “take” permits required under the USFWS’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such “take” permits are required for a particular activity.

**24. Storage of Seasonal Structures.** Coastal structures, such as pier sections and floats, that are removed from the waterway for a portion of the year (often referred to as seasonal structures) shall be stored in an upland location, located above MHW and not in tidal wetlands. These seasonal structures may be stored on the fixed, pile-supported portion of the structure that is seaward of MHW. This is intended to prevent structures from being stored on the marsh substrate and the substrate seaward of MHW.

**25. Environmental Functions and Values.** The permittee shall make every reasonable effort to carry out the construction or operation of the work authorized herein in a manner that minimizes any adverse impacts on existing fish, wildlife, and the environmental functions to the extent practicable. The permittee will discourage the establishment or spread of plant species identified as non-native invasive species by any federal or state agency.

**26. Vernal Pools.**

a. A PCN is required if a discharge of dredged or fill material is proposed within a vernal pool depression located within waters of the U.S.

b. GC 26(a) above does not apply to projects that are within a municipality that meets the provisions of a USACE-approved vernal pool Special Area Management Plan (SAMP) and are otherwise eligible for SV, and the applicant meets the requirements to utilize the vernal pool SAMP.

**27. Invasive Species**

a. The introduction, spread, or the increased risk of invasion of invasive plant or animal species on the project site, into new or disturbed areas, or areas adjacent to the project site caused by the site work shall be avoided. Hence, swamp and timber mats shall be thoroughly cleaned before reuse.

b. Unless otherwise directed by USACE, all applications for PCN inland projects proposing fill in USACE jurisdiction shall include an Invasive Species Control Plan. Additional information can be found at [www.nae.usace.army.mil/missions/regulatory/invasive-species](http://www.nae.usace.army.mil/missions/regulatory/invasive-species) and <https://cipwg.uconn.edu/>

**28. Permit/Authorization Letter On-Site.** For PCN projects, the permittee shall ensure that a copy of these GPs and the accompanying authorization letter are at the work site (and the project office) whenever work is being performed, and that all personnel with operational control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit authorization shall be made a part of all contracts and sub-contracts for work that affects areas of USACE jurisdiction at the site of the work authorized by these GPs. This shall be achieved by including the entire permit authorization in the specifications for work. The term “entire permit authorization” means these GPs, including GCs and the authorization letter (including its drawings, plans, appendices, and other attachments) and includes permit modifications. If the authorization letter is issued after the construction specifications, but before receipt of bids or quotes, the entire permit authorization shall be included as an addendum to the specifications. If the authorization letter is issued after receipt of bids or quotes, the entire permit authorization shall be included in the contract or sub-contract as a change order. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire authorization letter, and no contract or sub-contract shall require or allow unauthorized work in areas of USACE jurisdiction.

**29. Inspections.** The permittee shall allow USACE to make periodic inspections at any time deemed necessary to ensure that the work is being or has been performed in accordance with the terms and conditions of this permit. To facilitate these inspections, the permittee shall complete and return to USACE the Work-Start Notification Form and the Compliance Certification Form when either is provided with a verification letter. The USACE may also require post-construction engineering drawings for completed work or post-dredging survey

drawings for any dredging work.

**30. Maintenance.** The permittee shall maintain the activity authorized by these GPs in good condition and in conformance with the terms and conditions of this permit. This does not include maintenance dredging projects. Maintenance dredging is subject to the review thresholds in Appendix A – General Permit #7 as well as any conditions included in a written USACE authorization. Maintenance dredging includes only those areas and depths previously authorized and dredged. Some maintenance activities may not be subject to regulation under Section 404 in accordance with 33 CFR 323.4(a)(2).

**31. Property Rights.** Per 33 CFR 320.4(g)(6), these GPs do not convey any property rights, either in real estate or material, or any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of federal, state, or local laws or regulations.

**32. Transfer of GP Verifications.** If the permittee sells the property associated with a GP verification, the permittee may transfer the GP verification to the new owner by submitting a letter to this office to validate the transfer. A copy of the GP verification must be attached to the letter, and the letter must contain the following statement and signature:

*When the structures or work authorized by this general permit are still in existence at the time the property is transferred, the terms and conditions of this general permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this general permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.*

\_\_\_\_\_(Transferee)  
\_\_\_\_\_(Date)

**33. Modification, Suspension, and Revocation.** These GPs and any individual authorization issued thereof may either be modified, suspended, or revoked in whole or in part pursuant to the policies and procedures of 33 CFR 325.7; and any such action shall not be the basis for any claim for damages against the United States.

**34. Special Conditions.** The USACE may impose other special conditions on a project authorized pursuant to this general permit that are determined necessary to minimize adverse environmental effects or based on any other factor of the public interest. These may be based on concerns from CT DEEP or a Federal resource agency. Failure to comply with all conditions of the authorization, including special conditions, will constitute a permit violation and may subject the permittee to criminal, civil, or administrative penalties and/or restoration.

**35. False or Incomplete Information.** If USACE decides regarding the eligibility of a project under this permit, and subsequently discovers that it has relied on false, incomplete, or inaccurate information provided by the permittee, the authorization will not be valid, and the U.S. government may institute appropriate legal proceedings.

**36. Abandonment.** If the permittee decides to abandon the activity authorized under this General Permit, unless such abandonment is merely the transfer of property to a third party, he/she may be required to restore the area to the satisfaction of USACE.

**37. Enforcement cases.** These GPs do not apply to any existing or proposed activity in USACE jurisdiction associated with an on-going USACE or EPA enforcement action, until such time as the enforcement action is resolved or USACE determines that the activity may proceed independently without compromising the enforcement action.

**38. Previously Authorized Activities**

a. Completed projects that received prior authorization from USACE (via SV or PCN), shall remain authorized in accordance with the original terms and conditions of those authorizations, including their terms, general conditions, and any special conditions provided in a written verification.

b. Activities authorized pursuant to 33 CFR Part 330.3 (“Activities occurring before certain dates”) are not affected by these GPs.

### **39. Duration of Authorization**

a. These GPs expire five years from the date issued as listed at the top of the cover sheet. Activities authorized by these GPs that have either commenced (i.e., are under construction) or are under contract to commence in reliance upon this authorization will have an additional year from the expiration date to complete the work. The permittee must be able to document to USACE satisfaction that the project had commenced or was under contract by the expiration date of these GPs. If work is not completed within the one-year extended timeframe, the permittee must contact USACE. The USACE may issue a new authorization provided the project meets the terms and conditions of the CT GPs in effect at the time.

b. Activities authorized under these GPs will remain authorized until the GP expires, unless discretionary authority has been exercised on a case-by-case basis to require an Individual Permit in accordance with 33 CFR 325.2(e)(2), or the authorization is modified, suspended, or revoked in accordance with 33 CFR 325.7. Activities completed under the SV or PCN authorizations of these GPs will continue to be authorized after its expiration date.