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# PROJECT MANUAL

RECONSTRUCTION OF THE MILLSBORO BOAT RAMP

at

GRAVEL HILL ROAD  
MILLSBORO, DELAWARE 19966

FOR

STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES AND  
ENVIRONMENTAL CONTROL (DNREC)

Division of Fish & Wildlife  
89 Kings Highway  
Dover, DE 19901  
(302)-739-9914

DELAWARE DIVISION OF FISH & WILDLIFE CONTRACT #:  
NAT19001-MILLSBORO



Engineer:

Century Engineering, Inc.  
4134 North DuPont Hwy.  
Dover, DE 19901

February 15, 2019

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Specifications for this project are arranged in accordance with the Construction Specification Institute numbering system and format. Section numbering is discontinuous and all numbers not appearing in the Table of Contents are not used for this Project.

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**END OF SECTION 00 01 15**

## **SECTION 00 11 16 – INVITATION TO BID**

The Department of Natural Resources and Environmental Control, Division of Fish & Wildlife will receive sealed bids in the Auditorium, DNREC Building, 89 Kings Highway, Dover Delaware 19901, until 2:00 p.m. local time on March 29, 2019, at which time they will be publicly opened and read aloud in the Auditorium. Bidder bears the risk of late delivery. Any bid received after the stated time will be returned unopened.

Project involves removal of existing concrete boat ramp and construction of a paved parking area, a boat ramp, a fixed dock, and associated site amenities and utilities.

A **MANDATORY** Pre-Bid Meeting will be held at 10:00AM on March 1, 2019 at the Millsboro Boat Ramp job site (see meeting location map on [www.bids.delaware.gov](http://www.bids.delaware.gov)) for the purpose of establishing the listing of subcontractors and to answer questions. Contractors arriving after 10:00AM will not be considered eligible for bidding. Representatives of each party to any Joint Venture must attend this meeting. **ATTENDANCE OF THIS MEETING IS A PREREQUISITE FOR BIDDING ON THIS CONTRACT.**

Sealed bids shall be addressed to the following address. The outer envelope should clearly indicate  
**"DELAWARE DIVISION OF FISH AND WILDLIFE, CONTRACT #:  
NAT2019001-MILLSBORO SEALED BID – DO NOT OPEN".**

Dept. of Natural Resources & Environmental Control  
Delaware Division of Fish & Wildlife  
89 Kings Highway, Dover DE 19901  
Attn: Jeremy Ashe. Phone Number 302-739-9914.

Contract documents may be obtained and printed from [www.bids.delaware.gov](http://www.bids.delaware.gov).

Bidding documents will be available for review at the following locations: Division of Fish & Wildlife; Delaware Contractors Association and Associated Builders and Contractors.

Bidders will not be subject to discrimination on the basis of race, creed, color, sex, sexual orientation, gender identity or national origin in consideration of this award, and Minority Business Enterprises, Disadvantaged Business Enterprises, Women-Owned Business Enterprises and Veteran-Owned Business Enterprises will be afforded full opportunity to submit bids on this contract. Each bid must be accompanied by a bid security equivalent to ten percent of the bid amount and all additive alternates. The successful bidder must post a performance bond and payment bond in a sum equal to 100 percent of the contract price upon execution of the contract. The Owner reserves the right to reject any or all bids and to waive any informalities therein. The Owner may extend the time and place for the opening of the bids from that described in the advertisement, with not less than two calendar days' notice by certified delivery, facsimile machine or other electronic means to those bidders receiving plans.

Shawn Garvin, Secretary

**END OF SECTION 00 11 16**

## **INSTRUCTIONS TO BIDDERS**

### **TABLE OF ARTICLES**

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2. BIDDER'S REPRESENTATION
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4. BIDDING PROCEDURES
5. CONSIDERATION OF BIDS
6. POST-BID INFORMATION
7. PERFORMANCE BOND AND PAYMENT BOND
8. FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

**ARTICLE 1: GENERAL**

## 1.1 DEFINITIONS

1.1.1 Whenever the following terms are used, their intent and meaning shall be interpreted as follows:

1.2 STATE: The State of Delaware.

1.3 AGENCY: Contracting State Agency as noted on cover sheet.

1.4 DESIGNATED OFFICIAL: The agent authorized to act for the Agency.

1.5 BIDDING DOCUMENTS: Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement for Bid, Invitation to Bid, Instructions to Bidders, Supplementary Instructions to Bidders (if any), General Conditions, Supplementary General Conditions, General Requirements, Special Provisions (if any), the Bid Form (including the Non-collusion Statement), and other sample bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between the Owner and Contractor, as well as the Drawings, Specifications (Project Manual) and all Addenda issued prior to execution of the Contract.

1.6 CONTRACT DOCUMENTS: The Contract Documents consist of the, Instructions to Bidders, Supplementary Instructions to Bidders (if any), General Conditions, Supplementary General Conditions, General Requirements, Special Provisions (if any), the form of agreement between the Owner and the Contractor, Drawings (if any), Specifications (Project Manual), and all addenda.

1.7 AGREEMENT: The form of the Agreement shall be the DNREC Contract Document contained in these specifications (SAMPLE CONTRACT). In the case of conflict between the instructions contained therein and the General Requirements herein, these General Requirements shall prevail.

1.8 GENERAL REQUIREMENTS (or CONDITIONS): General Requirements (or conditions) are instructions pertaining to the Bidding Documents and to contracts in general. They contain, in summary, requirements of laws of the State; policies of the Agency and instructions to bidders.

1.9 SPECIAL PROVISIONS: Special Provisions are specific conditions or requirements peculiar to the bidding documents and to the contract under consideration and are supplemental to the General Requirements. Should the Special Provisions conflict with the General Requirements, the Special Provisions shall prevail.

1.10 ADDENDA: Written or graphic instruments issued by the Owner/Architect prior to the execution of the contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.

1.11 BIDDER OR VENDOR: A person or entity who formally submits a Bid for the material or Work contemplated, acting directly or through a duly authorized representative who meets the requirements set forth in the Bidding Documents.

1.12 SUB-BIDDER: A person or entity who submits a Bid to a Bidder for materials or labor, or both for a portion of the Work.

1.13 BID: A complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.

- 1.14 BASE BID: The sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids (if any are required to be stated in the bid).
- 1.15 ALTERNATE BID (or ALTERNATE): An amount stated in the Bid, where applicable, to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents is accepted.
- 1.16 UNIT PRICE: An amount stated in the Bid, where applicable, as a price per unit of measurement for materials, equipment or services or a portion of the Work as described in the Bidding Documents.
- 1.17 SURETY: The corporate body which is bound with and for the Contract, or which is liable, and which engages to be responsible for the Contractor's payments of all debts pertaining to and for his acceptable performance of the Work for which he has contracted.
- 1.18 BIDDER'S DEPOSIT: The security designated in the Bid to be furnished by the Bidder as a guaranty of good faith to enter into a contract with the Agency if the Work to be performed or the material or equipment to be furnished is awarded to him.
- 1.19 CONTRACT: The written agreement covering the furnishing and delivery of material or work to be performed.
- 1.20 CONTRACTOR: Any individual, firm or corporation with whom a contract is made by the Agency.
- 1.21 SUBCONTRACTOR: An individual, partnership or corporation which has a direct contract with a contractor to furnish labor and materials at the job site, or to perform construction labor and furnish material in connection with such labor at the job site.
- 1.22 CONTRACT BOND: The approved form of security furnished by the contractor and his surety as a guaranty of good faith on the part of the contractor to execute the work in accordance with the terms of the contract.

**ARTICLE 2: BIDDER'S REPRESENTATIONS**

- 2.1 PRE-BID MEETING
- 2.1.1 A pre-bid meeting for this project will be held at the time and place designated. Attendance at this meeting is a pre-requisite for submitting a Bid, unless this requirement is specifically waived elsewhere in the Bid Documents.
- 2.2 By submitting a Bid, the Bidder represents that:
- 2.2.1 The Bidder has read and understands the Bidding Documents and that the Bid is made in accordance therewith.
- 2.2.2 The Bidder has visited the site, become familiar with existing conditions under which the Work is to be performed, and has correlated the Bidder's his personal observations with the requirements of the proposed Contract Documents.
- 2.2.3 The Bid is based upon the materials, equipment, and systems required by the Bidding Documents without exception.

**2.3 JOINT VENTURE REQUIREMENTS**

- 2.3.1 For Public Works Contracts, each Joint Venturer shall be qualified and capable to complete the Work with their own forces.
- 2.3.2 Included with the Bid submission, and as a requirement to bid, a copy of the executed Joint Venture Agreement shall be submitted and signed by all Joint Venturers involved.
- 2.3.3 All required Bid Bonds, Performance Bonds, Material and Labor Payment Bonds must be executed by both Joint Venturers and be placed in both of their names.
- 2.3.4 All required insurance certificates shall name both Joint Venturers.
- 2.3.5 Both Joint Venturers shall sign the Bid Form and shall submit a copy of a valid Delaware Business License with their Bid.
- 2.3.6 Both Joint Venturers shall include their Federal E.I. Number with the Bid.
- 2.3.7 In the event of a mandatory Pre-bid Meeting, each Joint Venturer shall have a representative in attendance.
- 2.3.8 Due to exceptional circumstances and for good cause shown, one or more of these provisions may be waived at the discretion of the State.

**2.4 ASSIGNMENT OF ANTITRUST CLAIMS**

- 2.4.1 As consideration for the award and execution by the Owner of this contract, the Contractor hereby grants, conveys, sells, assigns and transfers to the State of Delaware all of its right, title and interests in and to all known or unknown causes of action it presently has or may now or hereafter acquire under the antitrust laws of the United States and the State of Delaware, relating to the particular goods or services purchased or acquired by the Owner pursuant to this contract.

**ARTICLE 3: BIDDING DOCUMENTS****3.1 COPIES OF BID DOCUMENTS**

- 3.1.1 Bidders may obtain complete sets of the Bidding Documents from the Architectural/Engineering firm designated in the Advertisement or Invitation to Bid in the number and for the deposit sum, if any, stated therein.
- 3.1.2 Bidders shall use complete sets of Bidding Documents for preparation of Bids. The issuing Agency nor the Architect assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 3.1.3 Any errors, inconsistencies or omissions discovered shall be reported to the Architect immediately.
- 3.1.4 The Agency and Architect may make copies of the Bidding Documents available on the above terms for the purpose of obtaining Bids on the Work. No license or grant of use is conferred by issuance of copies of the Bidding Documents.

### 3.2 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

- 3.2.1 The Bidder shall carefully study and compare the Bidding Documents with each other, and with other work being bid concurrently or presently under construction to the extent that it relates to the Work for which the Bid is submitted, shall examine the site and local conditions, and shall report any errors, inconsistencies, or ambiguities discovered to the Architect.
- 3.2.2 Bidders or Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request to the Architect at least seven days prior to the date for receipt of Bids. Interpretations, corrections and changes to the Bidding Documents will be made by written Addendum. Interpretations, corrections, or changes to the Bidding Documents made in any other manner shall not be binding.
- 3.2.3 The apparent silence of the specifications as to any detail, or the apparent omission from it of detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and only material and workmanship of the first quality are to be used. Proof of specification compliance will be the responsibility of the Bidder.
- 3.2.4 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for all permits, labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Work.
- 3.2.5 The Owner will bear the costs for all impact and user fees associated with the project.

### 3.3 SUBSTITUTIONS

- 3.3.1 The materials, products and equipment described in the Bidding Documents establish a standard of quality, required function, dimension, and appearance to be met by any proposed substitution. The specification of a particular manufacturer or model number is not intended to be proprietary in any way. Substitutions of products for those named will be considered, providing that the Vendor certifies that the function, quality, and performance characteristics of the material offered is equal or superior to that specified. It shall be the Bidder's responsibility to assure that the proposed substitution will not affect the intent of the design, and to make any installation modifications required to accommodate the substitution.
- 3.3.2 Requests for substitutions shall be made in writing to the Architect at least ten days prior to the date of the Bid Opening. Such requests shall include a complete description of the proposed substitution, drawings, performance and test data, explanation of required installation modifications due the substitution, and any other information necessary for an evaluation. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval shall be final. The Architect is to notify Owner prior to any approvals.
- 3.3.3 If the Architect approves a substitution prior to the receipt of Bids, such approval shall be set forth in an Addendum. Approvals made in any other manner shall not be binding.
- 3.3.4 The Architect shall have no obligation to consider any substitutions after the Contract award.
- 3.4 ADDENDA
- 3.4.1 Addenda will be mailed or delivered to all who are known by the Architect to have received a complete set of the Bidding Documents.

- 3.4.2 Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.
- 3.4.3 No Addenda will be issued later than 4 days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which extends the time or changes the location for the opening of bids.
- 3.4.4 Each bidder shall ascertain prior to submitting his Bid that they have received all Addenda issued, and shall acknowledge their receipt in their Bid in the appropriate space. Not acknowledging an issued Addenda could be grounds for determining a bid to be non-responsive.

**ARTICLE 4: BIDDING PROCEDURES**

**4.1 PREPARATION OF BIDS**

- 4.1.1 Submit the bids on the Bid Forms included with the Bidding Documents.
- 4.1.2 Submit the original Bid Form for each bid. Bid Forms may be removed from the project manual for this purpose.
- 4.1.3 Execute all blanks on the Bid Form in a non-erasable medium (typewriter or manually in ink).
- 4.1.4 Where so indicated by the makeup on the Bid Form, express sums in both words and figures, in case of discrepancy between the two, the written amount shall govern.
- 4.1.5 Interlineations, alterations or erasures must be initialed by the signer of the Bid.
- 4.1.6 BID ALL REQUESTED ALTERNATES AND UNIT PRICES, IF ANY. If there is no change in the Base Bid for an Alternate, enter "No Change". The Contractor is responsible for verifying that they have received all addenda issued during the bidding period. Work required by Addenda shall automatically become part of the Contract.
- 4.1.7 Make no additional stipulations on the Bid Form and do not qualify the Bid in any other manner.
- 4.1.8 Each copy of the Bid shall include the legal name of the Bidder and a statement whether the Bidder is a sole proprietor, a partnership, a corporation, or any legal entity, and each copy shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further give the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current Power of Attorney attached, certifying agent's authority to bind the Bidder.
- 4.1.9 Bidder shall complete the Non-Collusion Statement form included with the Bid Forms and include it with their Bid.
- 4.1.10 In the construction of all Public Works projects for the State of Delaware or any agency thereof, preference in employment of laborers, workers or mechanics shall be given to bona fide legal citizens of the State who have established citizenship by residence of at least 90 days in the State.
- 4.1.11 Each bidder shall include in their bid a copy of a valid Delaware Business License.'
- 4.1.12 Each bidder shall include a signed Affidavit for the Bidder certifying compliance with OMB Regulation 4104 - "Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on "Large Public Works Projects." "Large Public Works" is based upon the current threshold required for bidding Public Works as set by the Purchasing and Contracting Advisory Council.

## 4.2 BID SECURITY

- 4.2.1 All bids shall be accompanied by a deposit of either a good and sufficient bond to the agency for the benefit of the agency, with corporate surety authorized to do business in this State, the form of the bond and the surety to be approved by the agency, or a security of the bidder assigned to the agency, for a sum equal to at least 10% of the bid plus all add alternates, or in lieu of the bid bond a security deposit in the form of a certified check, bank treasurer's check, cashier's check, money order, or other prior approved secured deposit assigned to the State. The bid bond need not be for a specific sum, but may be stated to be for a sum equal to 10% of the bid plus all add alternates to which it relates and not to exceed a certain stated sum, if said sum is equal to at least 10% of the bid. The Bid Bond form used shall be the standard OMB form (attached).
- 4.2.2 The Agency has the right to retain the bid security of Bidders to whom an award is being considered until either a formal contract has been executed and bonds have been furnished or the specified time has elapsed so the Bids may be withdrawn or all Bids have been rejected.
- 4.2.3 In the event of any successful Bidder refusing or neglecting to execute a formal contract and bond within 20 days of the awarding of the contract, the bid bond or security deposited by the successful bidder shall be forfeited.

## 4.3 SUBCONTRACTOR LIST

- 4.3.1 As required by Delaware Code, Title 29, section 6962(d)(10)b, each Bidder shall submit with their Bid a completed List of Sub-Contractors included with the Bid Form. NAME ONLY ONE SUBCONTRACTOR FOR EACH TRADE. A Bid will be considered non-responsive unless the completed list is included.
- 4.3.2 Provide the Name and Address for each listed subcontractor. Addresses by City, Town or Locality, plus State, will be acceptable.
- 4.3.3 It is the responsibility of the Contractor to ensure that their Subcontractors are in compliance with the provisions of this law. Also, if a Contractor elects to list themselves as a Subcontractor for any category, they must specifically name themselves on the Bid Form and be able to document their capability to act as Subcontractor in that category in accordance with this law.

## 4.4 EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS

- 4.4.1 During the performance of this contract, the contractor agrees as follows:
- A. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, sex, color, sexual orientation, gender identity or national origin. The Contractor will take affirmative action to ensure the applicants are employed, and that employees are treated during employment, without regard to their race, creed, sex, color, sexual orientation, gender identity or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided by the contracting agency setting forth this nondiscrimination clause.
- B. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, sex, color, sexual orientation, gender identity or national origin."

#### 4.5 PREVAILING WAGE REQUIREMENT

4.5.1 Wage Provisions: For renovation and new construction projects whose costs exceed the thresholds contained in Delaware Code, Title 29, Section 6960, the minimum wage rates for various classes of laborers and mechanics shall be as determined by the Department of Labor, Division of Industrial Affairs of the State of Delaware.

4.5.2 The employer shall pay all mechanics and labors employed directly upon the site of work, unconditionally and not less often than once a week and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment, computed at wage rates not less than those stated in the specifications, regardless of any contractual relationship which may be alleged to exist between the employer and such laborers and mechanics.

4.5.3 The scale of the wages to be paid shall be posted by the employer in a prominent and easily accessible place at the site of the work.

4.5.4 Every contract based upon these specifications shall contain a stipulation that sworn payroll information, as required by the Department of Labor, be furnished weekly. The Department of Labor shall keep and maintain the sworn payroll information for a period of 6 months from the last day of the work week covered by the payroll.

#### 4.6 SUBMISSION OF BIDS

4.6.1 Enclose the Bid, the Bid Security, and any other documents required to be submitted with the Bid in a sealed opaque envelope. Address the envelope to the party receiving the Bids. Identify with the project name, project number, and the Bidder's name and address. If the Bid is sent by mail, enclose the sealed envelope in a separate mailing envelope with the notation "BID ENCLOSED" on the face thereof. The State is not responsible for the opening of bids prior to bid opening date and time that are not properly marked.

4.6.2 Deposit Bids at the designated location prior to the time and date for receipt of bids indicated in the Advertisement for Bids. Bids received after the time and date for receipt of bids will be marked "LATE BID" and returned.

4.6.3 Bidder assumes full responsibility for timely delivery at location designated for receipt of bids.

4.6.4 Oral, telephonic or telegraphic bids are invalid and will not receive consideration.

4.6.5 Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids, provided that they are then fully in compliance with these Instructions to Bidders.

#### 4.7 MODIFICATION OR WITHDRAW OF BIDS

4.7.1 Prior to the closing date for receipt of Bids, a Bidder may withdraw a Bid by personal request and by showing proper identification to the Architect. A request for withdraw by letter or fax, if the Architect is notified in writing prior to receipt of fax, is acceptable. A fax directing a modification in the bid price will render the Bid informal, causing it to be ineligible for consideration of award. Telephone directives for modification of the bid price shall not be permitted and will have no bearing on the submitted proposal in any manner.

4.7.2 Bidders submitting Bids that are late shall be notified as soon as practicable and the bid shall be returned.

- 4.7.3 A Bid may not be modified, withdrawn or canceled by the Bidder during a thirty (30) day period following the time and date designated for the receipt and opening of Bids, and Bidder so agrees in submitting their Bid. Bids shall be binding for 30 days after the date of the Bid opening.

**ARTICLE 5: CONSIDERATION OF BIDS**

**5.1 OPENING/REJECTION OF BIDS**

- 5.1.1 Unless otherwise stated, Bids received on time will be publicly opened and will be read aloud. An abstract of the Bids will be made available to Bidders.

- 5.1.2 The Agency shall have the right to reject any and all Bids. A Bid not accompanied by a required Bid Security or by other data required by the Bidding Documents, or a Bid which is in any way incomplete or irregular is subject to rejection.

- 5.1.3 If the Bids are rejected, it will be done within thirty (30) calendar day of the Bid opening.

**5.2 COMPARISON OF BIDS**

- 5.2.1 After the Bids have been opened and read, the bid prices will be compared and the result of such comparisons will be made available to the public. Comparisons of the Bids may be based on the Base Bid plus desired Alternates. The Agency shall have the right to accept Alternates in any order or combination.

- 5.2.2 The Agency reserves the right to waive technicalities, to reject any or all Bids, or any portion thereof, to advertise for new Bids, to proceed to do the Work otherwise, or to abandon the Work, if in the judgment of the Agency or its agent(s), it is in the best interest of the State.

- 5.2.3 An increase or decrease in the quantity for any item is not sufficient grounds for an increase or decrease in the Unit Price.

- 5.2.4 The prices quoted are to be those for which the material will be furnished F.O.B. Job Site and include all charges that may be imposed during the period of the Contract.

- 5.2.5 No qualifying letter or statements in or attached to the Bid, or separate discounts will be considered in determining the low Bid except as may be otherwise herein noted. Cash or separate discounts should be computed and incorporated into Unit Bid Price(s).

**5.3 DISQUALIFICATION OF BIDDERS**

- 5.3.1 An agency shall determine that each Bidder on any Public Works Contract is responsible before awarding the Contract. Factors to be considered in determining the responsibility of a Bidder include:

- A. The Bidder's financial, physical, personnel or other resources including Subcontracts;
- B. The Bidder's record of performance on past public or private construction projects, including, but not limited to, defaults and/or final adjudication or admission of violations of the Prevailing Wage Laws in Delaware or any other state;
- C. The Bidder's written safety plan;
- D. Whether the Bidder is qualified legally to contract with the State;

- E. Whether the Bidder supplied all necessary information concerning its responsibility; and,
  - F. Any other specific criteria for a particular procurement, which an agency may establish; provided however, that, the criteria be set forth in the Invitation to Bid and is otherwise in conformity with State and/or Federal law.
- 5.3.2 If an agency determines that a Bidder is nonresponsive and/or nonresponsible, the determination shall be in writing and set forth the basis for the determination. A copy of the determination shall be sent to the affected Bidder within five (5) working days of said determination.
- 5.3.3 In addition, any one or more of the following causes may be considered as sufficient for the disqualification of a Bidder and the rejection of their Bid or Bids.
- 5.3.3.1 More than one Bid for the same Contract from an individual, firm or corporation under the same or different names.
  - 5.3.3.2 Evidence of collusion among Bidders.
  - 5.3.3.3 Unsatisfactory performance record as evidenced by past experience.
  - 5.3.3.4 If the Unit Prices are obviously unbalanced either in excess or below reasonable cost analysis values.
  - 5.3.3.5 If there are any unauthorized additions, interlineation, conditional or alternate bids or irregularities of any kind which may tend to make the Bid incomplete, indefinite or ambiguous as to its meaning.
  - 5.3.3.6 If the Bid is not accompanied by the required Bid Security and other data required by the Bidding Documents.
  - 5.3.3.7 If any exceptions or qualifications of the Bid are noted on the Bid Form.
- 5.4 ACCEPTANCE OF BID AND AWARD OF CONTRACT
- 5.4.1 A formal Contract shall be executed with the successful Bidder within twenty (20) calendar days after the award of the Contract.
  - 5.4.2 Per Section 6962(d)(13) a., Title 29, Delaware Code, "The contracting agency shall award any public works contract within thirty (30) days of the bid opening to the lowest responsive and responsible Bidder, unless the Agency elects to award on the basis of best value, in which case the election to award on the basis of best value shall be stated in the Invitation To Bid."
  - 5.4.3 Each Bid on any Public Works Contract must be deemed responsive by the Agency to be considered for award. A responsive Bid shall conform in all material respects to the requirements and criteria set forth in the Contract Documents and specifications.
  - 5.4.4 The Agency shall have the right to accept Alternates in any order or combination, and to determine the low Bidder on the basis of the sum of the Base Bid, plus accepted Alternates.

- 5.4.5 The successful Bidder shall execute a formal contract, submit the required Insurance Certificate, and furnish good and sufficient bonds, unless specifically waived in the General Requirements, in accordance with the General Requirement, within twenty (20) days of official notice of contract award. The successful Bidder shall provide, at least two business days prior to contract execution, copies of the Employee Drug Testing Program for the Bidder and all listed Subcontractors. Bonds shall be for the benefit of the Agency with surety in the amount of 100% of the total contract award. Said Bonds shall be conditioned upon the faithful performance of the contract. Bonds shall remain in affect for period of one year after the date of substantial completion.
- 5.4.6 If the successful Bidder fails to execute the required Contract, Bond and all required information, as aforesaid, within twenty (20) calendar days after the date of official Notice of the Award of the Contract, their Bid guaranty shall immediately be taken and become the property of the State for the benefit of the Agency as liquidated damages, and not as a forfeiture or as a penalty. Award will then be made to the next lowest qualified Bidder of the Work or readvertised, as the Agency may decide.
- 5.4.7 Each bidder shall supply with its bid its taxpayer identification number (i.e., federal employer identification number or social security number) and a copy of its Delaware business license, and should the vendor be awarded a contract, such vendor shall provide to the agency the taxpayer identification license numbers of such subcontractors. Such numbers shall be provided on the later of the date on which such subcontractor is required to be identified or the time the contract is executed. The successful Bidder shall provide to the agency to which it is contracting, within 30 days of entering into such public works contract, copies of all Delaware Business licenses of subcontractors and/or independent contractors that will perform work for such public works contract. However, if a subcontractor or independent contractor is hired or contracted more than 20 days after the Bidder entered the public works contract the Delaware Business license of such subcontractor or independent contractor shall be provided to the agency within 10 days of being contracted or hired.
- 5.4.8 The Bid Security shall be returned to the successful Bidder upon the execution of the formal contract. The Bid Securities of unsuccessful bidders shall be returned within thirty (30) calendar days after the opening of the Bids.

#### **ARTICLE 6: POST-BID INFORMATION**

- 6.1 CONTRACTOR'S QUALIFICATION STATEMENT
- 6.1.1 Bidders to whom award of a Contract is under consideration shall, if requested by the Agency, submit a properly executed Contractor's Qualification Statement, unless such a statement has been previously required and submitted.
- 6.2 BUSINESS DESIGNATION FORM
- 6.2.1 Successful bidder shall be required to accurately complete an Office of Management and Budget Business Designation Form for Subcontractors.

#### **ARTICLE 7: PERFORMANCE BOND AND PAYMENT BOND**

- 7.1 BOND REQUIREMENTS
- 7.1.1 The cost of furnishing the required Bonds, that are stipulated in the Bidding Documents, shall be included in the Bid.
- 7.1.2 If the Bidder is required by the Agency to secure a bond from other than the Bidder's usual sources, changes in cost will be adjusted as provide in the Contract Documents.

7.1.3 The Performance and Payment Bond forms used shall be the standard OMB forms (attached).

7.2 TIME OF DELIVERY AND FORM OF BONDS

7.2.1 The bonds shall be dated on or after the date of the Contract.

7.2.2 The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix a certified and current copy of the power of attorney.

**ARTICLE 8: FORM OF AGREEMENT BETWEEN AGENCY AND CONTRACTOR**

8.1 Unless otherwise required in the Bidding Documents, the Agreement for the Work will be the DNREC Contract Document contained in these specifications.

END OF INSTRUCTIONS TO BIDDERS



**BID FORM**

I/We acknowledge Addendums numbered \_\_\_\_\_ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for thirty (30) days from the date of opening of bids (60 days for School Districts and Department of Education), and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid.

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

Should I/We be awarded this contract, I/We pledge to achieve substantial completion of all the work within \_\_\_\_\_ calendar days of the Notice to Proceed.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By \_\_\_\_\_ Trading as \_\_\_\_\_  
(Individual's / General Partner's / Corporate Name)  
\_\_\_\_\_  
(State of Corporation)

Business Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Witness:** \_\_\_\_\_ **By:** \_\_\_\_\_  
(SEAL) ( Authorized Signature )  
\_\_\_\_\_  
( Title )  
**Date:** \_\_\_\_\_

**ATTACHMENTS**

- Sub-Contractor List
- Non-Collusion Statement
- Affidavit(s) of Employee Drug Testing Program
- Bid Security
- (Others as Required by Project Manuals)

## **BID FORM**

### **SUBCONTRACTOR LIST**

In accordance with Title 29, Chapter 6962 (d)(10)b Delaware Code, the following sub-contractor listing must accompany the bid submittal. The name and address of the sub-contractor **must be listed for each category** where the bidder intends to use a sub-contractor to perform that category of work. In order to provide full disclosure and acceptance of the bid by the *Owner*, **it is required that bidders list themselves as being the sub-contractor for all categories where he/she is qualified and intends to perform such work.** This form must be filled out completely with no additions or deletions.

<b><u>Subcontractor Category</u></b>	<b><u>Subcontractor</u></b>	<b><u>Address (City &amp; State)</u></b>	<b><u>Subcontractors tax payer ID # or Delaware Business license #</u></b>
1. Concrete	_____	_____	_____
2. Pile Driving	_____	_____	_____
3. Asphalt Paving	_____	_____	_____
4. Electrical	_____	_____	_____
5. Sitework Not Included In Categories Above	_____	_____	_____

**BID FORM**  
**NON-COLLUSION STATEMENT**

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date (*to the Office of Management and Budget, Division of Facilities Management*).

All the terms and conditions of (*Project or Contract Number*) have been thoroughly examined and are understood.

**NAME OF BIDDER:** \_\_\_\_\_

**AUTHORIZED REPRESENTATIVE  
(TYPED):** \_\_\_\_\_

**AUTHORIZED REPRESENTATIVE  
(SIGNATURE):** \_\_\_\_\_

**TITLE:** \_\_\_\_\_

**ADDRESS OF BIDDER:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**E-MAIL:** \_\_\_\_\_

**PHONE NUMBER:** \_\_\_\_\_

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

My Commission expires \_\_\_\_\_ . NOTARY PUBLIC \_\_\_\_\_ .

**THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.**

**AFFIDAVIT  
OF  
EMPLOYEE DRUG TESTING PROGRAM**

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite, including subcontractors that complies with this regulation:

**Contractor/Subcontractor Name:** \_\_\_\_\_

**Contractor/Subcontractor Address:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Authorized Representative (typed or printed):** \_\_\_\_\_

**Authorized Representative (signature):** \_\_\_\_\_

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

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

My Commission expires \_\_\_\_\_. NOTARY PUBLIC \_\_\_\_\_.

**THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.**

STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

**BID BOND**

TO ACCOMPANY PROPOSAL  
(Not necessary if security is used)

KNOW ALL MEN BY THESE PRESENTS That: \_\_\_\_\_  
\_\_\_\_\_ of \_\_\_\_\_ in the County of \_\_\_\_\_  
\_\_\_\_\_ and State of \_\_\_\_\_ as **Principal**, and \_\_\_\_\_  
\_\_\_\_\_ of \_\_\_\_\_ in the County of \_\_\_\_\_  
and State of \_\_\_\_\_ as **Surety**, legally authorized to do business in the State of Delaware  
("State"), are held and firmly unto the **State** in the sum of \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$\_\_\_\_\_), or \_\_\_\_\_ percent not to exceed \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$\_\_\_\_\_)  
of amount of bid on Contract No. \_\_\_\_\_, to be paid to the **State** for the use and  
benefit of \_\_\_\_\_ (*insert State agency name*) for which payment  
well and truly to be made, we do bind ourselves, our and each of our heirs, executors, administrators, and  
successors, jointly and severally for and in the whole firmly by these presents.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH That if the above bonded **Principal**  
who has submitted to the \_\_\_\_\_ (*insert State agency name*) a  
certain proposal to enter into this contract for the furnishing of certain material and/or services within the  
**State**, shall be awarded this Contract, and if said **Principal** shall well and truly enter into and execute this  
Contract as may be required by the terms of this Contract and approved by the \_\_\_\_\_  
\_\_\_\_\_ (*insert State agency name*) this Contract to be entered into within twenty days after  
the date of official notice of the award thereof in accordance with the terms of said proposal, then this  
obligation shall be void or else to be and remain in full force and virtue.

Sealed with \_\_\_\_\_ seal and dated this \_\_\_\_\_ day of \_\_\_\_\_ in the year of our Lord two  
thousand and \_\_\_\_\_ (20\_\_\_\_).

SEALED, AND DELIVERED IN THE  
Presence of

\_\_\_\_\_  
Name of Bidder (Organization)

Corporate  
Seal

By:

\_\_\_\_\_  
Authorized Signature

Attest \_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name of Surety

Witness: \_\_\_\_\_

By:

\_\_\_\_\_  
Title

**DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL**

**89 KINGS HIGHWAY**

**DOVER, DE 19901**

**CONTRACT DOCUMENT**

FOR

**RECONSTRUCTION OF THE MILLSBORO BOAT RAMP**  
**CONTRACT NO. = NAT-2019001-MILLSBORO**

THIS AGREEMENT, made and executed this \_\_\_\_\_ day of \_\_\_\_\_, 2019, by and between \_\_\_\_\_ (Hereinafter designated as Contractor) party of the first part, and the Department of Natural Resources and Environmental Control, a Department created under the laws of the State of Delaware (hereinafter designated as Department) party of the second part.

WITNESSETH that the Contractor, in consideration of the covenants and agreements herein contained and made by the Department, agrees to the following:

ARTICLE ONE. The Contractor shall provide and furnish all the material, supplies, machinery, implements, appliances, tools and labor required to complete this contract in [INSERT COUNTY], State of Delaware, as shown and specified in the specifications, proposals, drawings or plans as indicated in the project manual issued for the Department, with specifications, proposals, drawings or plans entitled **RECONSTRUCTION OF THE MILLSBORO BOAT RAMP (#NAT2019001-MILLSBORO)** is hereby incorporated by reference as part of this contract. This contract will be binding on both parties upon receipt by the Contractor of an approved State of Delaware Purchase Order (not to exceed \_\_\_\_\_ unless approved by a change order). An award letter was issued to the contractor on \_\_\_\_\_. The Contractor must prosecute the work in such order as to complete the project by \_\_\_\_\_.

The undersigned, representing that [he/she] has read and understands the Bidding Documents and that this bid is made in accordance therewith, that [he/she] has visited the site and has familiarized [himself/herself] with the local conditions under which the Work is to be performed, and that [his/her] bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to abide by all required permits, provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum base bid with any accepted additions or alternates along with any associated unit pricing to complete the Reconstruction for the Millsboro Boat Ramp as described in the technical specifications and contract drawings.

**CONTRACT DOCUMENT (CONTINUED)**

IN WITNESS WHEREOF, the said parties have duly executed this agreement in triplicate the day and year first above written.

IN WITNESS WHEREOF, the parties below have hereunto set their hands on the \_\_\_\_\_ day of \_\_\_\_\_, 2019.

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

\_\_\_\_\_  
Witness Title

State of \_\_\_\_\_  
County of \_\_\_\_\_

Sworn and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
Notary Public

IN WITNESS WHEREOF, the parties below have hereunto set their hands on the \_\_\_\_\_ day of \_\_\_\_\_, 2019.

By: \_\_\_\_\_  
Project Manager  
Division of Fish & Wildlife

\_\_\_\_\_  
Witness

State of \_\_\_\_\_  
County of \_\_\_\_\_

Sworn and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
Notary Public

**CONTRACT DOCUMENT (CONTINUED)**

IN WITNESS WHEREOF, the parties below have hereunto set their hands on the \_\_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
Witness By: \_\_\_\_\_  
Director, Division of Fish & Wildlife

State of \_\_\_\_\_  
County of \_\_\_\_\_

Sworn and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
Notary Public

IN WITNESS WHEREOF, the parties below have hereunto set their hands on the \_\_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
Witness By: \_\_\_\_\_  
Secretary, Department of Natural Resources and  
Environmental Control

State of \_\_\_\_\_  
County of \_\_\_\_\_

Sworn and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

\_\_\_\_\_  
Notary Public

STATE OF DELAWARE  
OFFICE OF MANAGEMENT AND BUDGET

**PERFORMANCE BOND**

Bond Number: \_\_\_\_\_

KNOW ALL PERSONS BY THESE PRESENTS, that we, \_\_\_\_\_, as principal (“**Principal**”), and \_\_\_\_\_, a \_\_\_\_\_ corporation, legally authorized to do business in the State of Delaware, as surety (“**Surety**”), are held and firmly bound unto the \_\_\_\_\_ (“**Owner**”) (*insert State agency name*), in the amount of \_\_\_\_\_ (\$\_\_\_\_\_), to be paid to **Owner**, for which payment well and truly to be made, we do bind ourselves, our and each and every of our heirs, executors, administrations, successors and assigns, jointly and severally, for and in the whole, firmly by these presents.

Sealed with our seals and dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH, that if **Principal**, who has been awarded by **Owner** that certain contract known as Contract No. \_\_\_\_\_ dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ (the “Contract”), which Contract is incorporated herein by reference, shall well and truly provide and furnish all materials, appliances and tools and perform all the work required under and pursuant to the terms and conditions of the Contract and the Contract Documents (as defined in the Contract) or any changes or modifications thereto made as therein provided, shall make good and reimburse **Owner** sufficient funds to pay the costs of completing the Contract that **Owner** may sustain by reason of any failure or default on the part of **Principal**, and shall also indemnify and save harmless **Owner** from all costs, damages and expenses arising out of or by reason of the performance of the Contract and for as long as provided by the Contract; then this obligation shall be void, otherwise to be and remain in full force and effect.

**Surety**, for value received, hereby stipulates and agrees, if requested to do so by **Owner**, to fully perform and complete the work to be performed under the Contract pursuant to the terms, conditions and covenants thereof, if for any cause **Principal** fails or neglects to so fully perform and complete such work.

**Surety**, for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of **Surety** and its bond shall be in no way impaired or affected by any extension of time, modification, omission, addition or change in or to the Contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any work to be performed or any monies due or to become due thereunder; and **Surety** hereby waives notice of any and all such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, subcontractors, and other

transferees shall have the same effect as to **Surety** as though done or omitted to be done by or in relation to **Principal**.

**Surety** hereby stipulates and agrees that no modifications, omissions or additions in or to the terms of the Contract shall in any way whatsoever affect the obligation of **Surety** and its bond.

Any proceeding, legal or equitable, under this Bond may be brought in any court of competent jurisdiction in the State of Delaware. Notices to **Surety** or Contractor may be mailed or delivered to them at their respective addresses shown below.

IN WITNESS WHEREOF, **Principal** and **Surety** have hereunto set their hand and seals, and such of them as are corporations have caused their corporate seal to be hereto affixed and these presents to be signed by their duly authorized officers, the day and year first above written.

PRINCIPAL

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

Witness or Attest: Address: \_\_\_\_\_

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

(Corporate Seal)

By: \_\_\_\_\_ (SEAL)  
Name:  
Title:

SURETY

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

Witness or Attest: Address: \_\_\_\_\_

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

(Corporate Seal)

By: \_\_\_\_\_ (SEAL)  
Name:  
Title:

STATE OF DELAWARE  
OFFICE OF MANAGEMENT AND BUDGET

**PAYMENT BOND**

Bond Number: \_\_\_\_\_

KNOW ALL PERSONS BY THESE PRESENTS, that we, \_\_\_\_\_, as principal (“**Principal**”), and \_\_\_\_\_, a \_\_\_\_\_ corporation, legally authorized to do business in the State of Delaware, as surety (“**Surety**”), are held and firmly bound unto the \_\_\_\_\_ (“**Owner**”) (*insert State agency name*), in the amount of \_\_\_\_\_ (\$\_\_\_\_\_), to be paid to **Owner**, for which payment well and truly to be made, we do bind ourselves, our and each and every of our heirs, executors, administrations, successors and assigns, jointly and severally, for and in the whole firmly by these presents.

Sealed with our seals and dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

NOW THE CONDITION OF THIS OBLIGATION IS SUCH, that if **Principal**, who has been awarded by **Owner** that certain contract known as Contract No. \_\_\_\_\_ dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ (the “Contract”), which Contract is incorporated herein by reference, shall well and truly pay all and every person furnishing materials or performing labor or service in and about the performance of the work under the Contract, all and every sums of money due him, her, them or any of them, for all such materials, labor and service for which **Principal** is liable, shall make good and reimburse **Owner** sufficient funds to pay such costs in the completion of the Contract as **Owner** may sustain by reason of any failure or default on the part of **Principal**, and shall also indemnify and save harmless **Owner** from all costs, damages and expenses arising out of or by reason of the performance of the Contract and for as long as provided by the Contract; then this obligation shall be void, otherwise to be and remain in full force and effect.

**Surety**, for value received, for itself and its successors and assigns, hereby stipulates and agrees that the obligation of **Surety** and its bond shall be in no way impaired or affected by any extension of time, modification, omission, addition or change in or to the Contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provisions thereof, or by any assignment, subletting or other transfer thereof or of any work to be performed or any monies due or to become due thereunder; and **Surety** hereby waives notice of any and all such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers and hereby expressly stipulates and agrees that any and all things done and omitted to be done by and in relation to assignees, subcontractors, and other transferees shall have the same effect as to **Surety** as though done or omitted to be done by or in relation to **Principal**.

**Surety** hereby stipulates and agrees that no modifications, omission or additions in or to the terms of the Contract shall in any way whatsoever affect the obligation of **Surety** and its bond.

Any proceeding, legal or equitable, under this Bond may be brought in any court of competent jurisdiction in the State of Delaware. Notices to **Surety** or Contractor may be mailed or delivered to them at their respective addresses shown below.

IN WITNESS WHEREOF, **Principal** and **Surety** have hereunto set their hand and seals, and such of them as are corporations have caused their corporate seal to be hereto affixed and these presents to be signed by their duly authorized officers, the day and year first above written.

PRINCIPAL

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

Witness or Attest: Address: \_\_\_\_\_

\_\_\_\_\_  
Name:  
  
(Corporate Seal)

By: \_\_\_\_\_(SEAL)  
Name:  
Title:

SURETY

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

Witness or Attest: Address: \_\_\_\_\_

\_\_\_\_\_  
Name:  
  
(Corporate Seal)

By: \_\_\_\_\_(SEAL)  
Name:  
Title:

**GENERAL CONDITIONS**

**TO THE  
CONTRACT**

The General Conditions of this Contract are as stated in the American Institute of Architects Document AIA A201 (2007 Edition) entitled General Conditions of the Contract for Construction and is part of this project manual as if herein written in full.

**SECTION 00 73 13 - SUPPLEMENTARY GENERAL CONDITIONS A201-2007**

The following supplements modify the “General Conditions of the Contract for Construction,” AIA Document A201-2007. Where a portion of the General Conditions is modified or deleted by the Supplementary Conditions, the unaltered portions of the General Conditions shall remain in effect.

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8. TIME
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10. PROTECTION OF PERSONS AND PROPERTY
11. INSURANCE AND BONDS
12. UNCOVERING AND CORRECTION OF WORK
13. MISCELLANEOUS PROVISIONS
14. TERMINATION OR SUSPENSION OF THE CONTRACT
15. CLAIMS AND DISPUTES

## **ARTICLE 1: GENERAL PROVISIONS**

### 1.1 BASIC DEFINITIONS

#### 1.1.1 THE CONTRACT DOCUMENTS

Delete the last sentence in its entirety and replace with the following:

“The Contract Documents also include Advertisement for Bid, Instructions to Bidder, sample forms, the Bid Form, the Contractor’s completed Bid and the Award Letter.”

Add the following Paragraph:

1.1.1.1 In the event of conflict or discrepancies among the Contract Documents, the Documents prepared by the State of Delaware, Division of Facilities Management shall take precedence over all other documents.

### 1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

Add the following Paragraphs:

1.2.4 In the case of an inconsistency between the Drawings and the Specifications, or within either document not clarified by addendum, the better quality or greater quantity of work shall be provided in accordance with the Architect’s interpretation.

1.2.5 The word “PROVIDE” as used in the Contract Documents shall mean “FURNISH AND INSTALL” and shall include, without limitation, all labor, materials, equipment, transportation, services and other items required to complete the Work.

1.2.6 The word “PRODUCT” as used in the Contract Documents means all materials, systems and equipment.

### 1.5 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE

Delete Paragraph 1.5.1 in its entirety and replace with the following:

“All pre-design studies, drawings, specifications and other documents, including those in electronic form, prepared by the Architect under this Agreement are, and shall remain, the property of the Owner whether the Project for which they are made is executed or not. Such documents may be used by the Owner to construct one or more like Projects without the approval of, or additional compensation to, the Architect. The Contractor, Subcontractors, Sub-subcontractors and Material or Equipment Suppliers are authorized to use and reproduce applicable portions of the Drawings, Specifications and other documents prepared by the Architect and the Architect’s consultants appropriate to and for use in the execution of their Work under the Contract Documents. They are not to be used by the Contractor or any Subcontractor, Sub-subcontractor or Material and Equipment Supplier on other Projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner, Architect and Architect’s consultants.

The Architect shall not be liable for injury or damage resulting from the re use of drawings and specifications if the Architect is not involved in the re use Project. Prior to re-use of construction documents for a Project in which the Architect is not also involved, the Owner will remove from such documents all identification of the original Architect, including name, address and professional seal or stamp.”

Delete Paragraph 1.5.2 in its entirety.

## **ARTICLE 2: OWNER**

### **2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER**

To Subparagraph 2.2.3 – Add the following sentence:

“The Contractor, at their expense shall bear the costs to accurately identify the location of all underground utilities in the area of their excavation and shall bear all cost for any repairs required, out of failure to accurately identify said utilities.”

Delete Subparagraph 2.2.5 in its entirety and substitute the following:

2.2.5 The Contractor shall be furnished free of charge up to five (5) sets of the Drawings and Project Manuals. Additional sets will be furnished at the cost of reproduction, postage and handling.

## **ARTICLE 3: CONTRACTOR**

### **3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR**

Amend Paragraph 3.2.2 to state that any errors, inconsistencies or omissions discovered shall be reported to the Architect and Owner immediately.

Delete the third sentence in Paragraph 3.2.3.

### **3.3 SUPERVISION AND CONSTRUCTION PROCEDURES**

Add the following Paragraphs:

3.3.2.1 The Contractor shall immediately remove from the Work, whenever requested to do so by the Owner, any person who is considered by the Owner or Architect to be incompetent or disposed to be so disorderly, or who for any reason is not satisfactory to the Owner, and that person shall not again be employed on the Work without the consent of the Owner or the Architect.

3.3.4 The Contractor must provide suitable storage facilities at the Site for the proper protection and safe storage of their materials. Consult the Owner and the Architect before storing any materials.

3.3.5 When any room is used as a shop, storeroom, office, etc., by the Contractor or Subcontractor(s) during the construction of the Work, the Contractor making use of

these areas will be held responsible for any repairs, patching or cleaning arising from such use.

### 3.4 LABOR AND MATERIALS

Add the Following Paragraphs:

3.4.4 Before starting the Work, each Contractor shall carefully examine all preparatory Work that has been executed to receive their Work. Check carefully, by whatever means are required, to insure that its Work and adjacent, related Work, will finish to proper contours, planes and levels. Promptly notify the General Contractor/Construction Manager of any defects or imperfections in preparatory Work which will in any way affect satisfactory completion of its Work. Absence of such notification will be construed as an acceptance of preparatory Work and later claims of defects will not be recognized.

3.4.5 Under no circumstances shall the Contractor's Work proceed prior to preparatory Work having been completely cured, dried and/or otherwise made satisfactory to receive this Work. Responsibility for timely installation of all materials rests solely with the Contractor responsible for that Work, who shall maintain coordination at all times.

### 3.5 WARRANTY

Add the following Paragraphs:

3.5.1 The Contractor will guarantee all materials and workmanship against original defects, except injury from proper and usual wear when used for the purpose intended, for two years after Acceptance by the Owner, and will maintain all items in perfect condition during the period of guarantee.

3.5.2 Defects appearing during the period of guarantee will be made good by the Contractor at his expense upon demand of the Owner, it being required that all work will be in perfect condition when the period of guarantee will have elapsed.

3.5.3 In addition to the General Guarantee there are other guarantees required for certain items for different periods of time than the two years as above, and are particularly so stated in that part of the specifications referring to same. The said guarantees will commence at the same time as the General Guarantee.

3.5.4 If the Contractor fails to remedy any failure, defect or damage within a reasonable time after receipt of notice, the Owner will have the right to replace, repair, or otherwise remedy the failure, defect or damage at the Contractor's expense.

### 3.11 DOCUMENTS AND SAMPLES AT THE SITE

Add the following Paragraphs:

3.11.1 During the course of the Work, the Contractor shall maintain a record set of drawings on which the Contractor shall mark the actual physical location of all piping, valves, equipment, conduit, outlets, access panels, controls, actuators,

including all appurtenances that will be concealed once construction is complete, etc., including all invert elevations.

3.11.2 At the completion of the project, the Contractor shall obtain a set of reproducible drawings from the Architect, and neatly transfer all information outlined in 3.11.1 to provide a complete record of the as-built conditions.

3.11.3 The Contractor shall provide two (2) prints of the as-built conditions, along with the reproducible drawings themselves, to the Owner and one (1) set to the Architect. In addition, attach one complete set to each of the Operating and Maintenance Instructions/Manuals.

3.17 In the second sentence of the paragraph, insert “indemnify” between “shall” and “hold”.

#### **ARTICLE 4: ADMINISTRATION OF THE CONTRACT**

##### 4.2 ADMINISTRATION OF THE CONTRACT

Delete the first sentence of Paragraph 4.2.7 and replace with the following:

The Architect will review and approve or take other appropriate action upon the Contractor’s submittals such as Shop Drawings, Product Data and Samples for the purpose of checking for conformance with the Contract Documents.

Delete the second sentence of Paragraph 4.2.7 and replace with the following:

The Architect’s action will be taken with such reasonable promptness as to cause no delay in the Work in the activities of the Owner, Contractor or separate Contractors, while allowing sufficient time in the Owner’s professional judgment to permit adequate review.

Add the following Paragraph:

4.2.10.1 There will be no full-time project representative provided by the Owner or Architect on this project.

Add to Paragraph 4.2.13 “and in compliance with all local requirements.” to the end of the sentence

#### **ARTICLE 5: SUBCONTRACTORS**

##### 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

Delete Paragraph 5.2.3 in its entirety and replace with the following:

5.2.3 If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection, subject to the statutory requirements of 29 Delaware Code § 6962(d)(10)b.3 and 4.

#### **ARTICLE 6: CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**

6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

Delete Paragraph 6.1.4 in its entirety.

6.2 MUTUAL RESPONSIBILITY

6.2.3 In the second sentence, strike the word "shall" and insert the word "may".

**ARTICLE 7: CHANGES IN THE WORK**

(SEE ARTICLE 7: CHANGES IN WORK IN THE GENERAL REQUIREMENTS)

**ARTICLE 8: TIME**

8.2 PROGRESS AND COMPLETION

Add the following Paragraphs:

8.2.1.1 Refer to Specification Section SUMMARY OF WORK for Contract time requirements.

8.2.4 If the Work falls behind the Progress Schedule as submitted by the Contractor, the Contractor shall employ additional labor and/or equipment necessary to bring the Work into compliance with the Progress Schedule at no additional cost to the Owner.

8.3 DELAYS AND EXTENSION OF TIME

8.3.1 Strike "arbitration" and insert "remedies at law or in equity".

Add the following Paragraph:

8.3.2.1 The Contractor shall update the status of the suspension, delay, or interruption of the Work with each Application for Payment. (The Contractor shall report the termination of such cause immediately upon the termination thereof.) Failure to comply with this procedure shall constitute a waiver for any claim for adjustment of time or price based upon said cause.

Delete Paragraph 8.3.3 in its entirety and replace with the following:

8.3.3 Except in the case of a suspension of the Work directed by the Owner, an extension of time under the provisions of Paragraph 8.3.1 shall be the Contractor's sole remedy in the progress of the Work and there shall be no payment or compensation to the Contractor for any expense or damage resulting from the delay.

Add the following Paragraph:

8.3.4 By permitting the Contractor to work after the expired time for completion of the project, the Owner does not waive their rights under the Contract.

## **ARTICLE 9: PAYMENTS AND COMPLETION**

### 9.2 SCHEDULE OF VALUES

Add the following Paragraphs:

9.2.1 The Schedule of Values shall be submitted using AIA Document G702, Continuation Sheet to G703.

9.2.2 The Schedule of Values is to include a line item for Project Closeout Document Submittal. The value of this item is to be no less than 1% of the initial contract amount.

### 9.3 APPLICATIONS FOR PAYMENT

Add the following Paragraph:

9.3.1.3 Application for Payment shall be submitted on AIA Document G702 “Application and Certificate for Payment”, supported by AIA Document G703 “Continuation Sheet”. Said Applications shall be fully executed and notarized.

Add the following Paragraphs:

9.3.4 Until Closeout Documents have been received and outstanding items completed the Owner will pay 95% (ninety-five percent) of the amount due the Contractor on account of progress payments.

9.3.5 The Contractor shall provide a current and updated Progress Schedule to the Architect with each Application for Payment. Failure to provide Schedule will be just cause for rejection of Application for Payment.

### 9.5 DECISIONS TO WITHHOLD CERTIFICATION

Add the following to 9.5.1:

.8 failure to provide a current Progress Schedule;

.9 a lien or attachment is filed;

.10 failure to comply with mandatory requirements for maintaining Record Documents.

### 9.6 PROGRESS PAYMENTS

Delete Paragraph 9.6.1 in its entirety and replace with the following:

9.6.1 After the Architect has approved and issued a Certificate for Payment, payment shall be made by the Owner within 30 days after Owner’s receipt of the Certificate for Payment.

### 9.7 FAILURE OF PAYMENT

In first sentence, strike “seven” and insert “thirty (30)”. Also strike “binding dispute resolution” and insert “remedies at law or in equity”.

9.8 SUBSTANTIAL COMPLETION

To Subparagraph 9.8.3 - Add the following sentence:

“If the Architect is required to make more than 2 inspections of the same portion of work, the Contractor shall be responsible for all costs associated with subsequent inspections including but not limited to any Architect’s fees.”

9.8.5 In the second sentence, strike “shall” and insert “may”.

**ARTICLE 10: PROTECTION OF PERSONS AND PROPERTY**

10.1 SAFETY PRECAUTIONS AND PROGRAMS

Add the following Paragraphs:

10.1.1.1.1 Each Contractor shall develop a safety program in accordance with the Occupational Safety and Health Act of 1970. A copy of said plan shall be furnished to the Owner and Architect prior to the commencement of that Contractor’s Work.

10.1.2 Each Contractor shall appoint a Safety Representative. Safety Representatives shall be someone who is on site on a full time basis. If deemed necessary by the Owner or Architect, Contractor Safety meetings will be scheduled. The attendance of all Safety Representatives will be required. Minutes will be recorded of said meetings by the Contractor and will be distributed to all parties as well as posted in all job offices/trailers etc.

10.2 SAFETY OF PERSONS AND PROPERTY

Add the following Paragraph:

10.2.4.1 As required in the Hazardous Chemical Act of June 1984, all vendors supplying any material that may be defined as hazardous must provide Material Safety Data Sheets for those products. Any chemical product should be considered hazardous if it has a caution warning on the label relating to a potential physical or health hazard, if it is known to be present in the work place, and if employees may be exposed under normal conditions or in foreseeable emergency situations. Material Safety Data Sheets shall be provided directly to the Owner, along with the shipping slips that include those products.

10.3 HAZARDOUS MATERIALS

Delete Paragraph 10.3.3 in its entirety.

Delete Paragraph 10.3.6 in its entirety.

**ARTICLE 11: INSURANCE AND BONDS**

11.1 CONTRACTOR'S LIABILITY INSURANCE

11.1.4 Strike "the Owner" immediately following "(1)" and strike "and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations."

11.2 OWNER'S LIABILITY INSURANCE

+Delete Paragraph 11.2 in its entirety.

11.3 PROPERTY INSURANCE

Delete Paragraph 11.3 in its entirety and replace with the following:

11.3 The State will not provide Builder's All Risk Insurance for the Project. The Contractor and all Subcontractors shall provide property coverage for their tools and equipment, as necessary. Any mandatory deductible required by the Contractor's Insurance shall be the responsibility of the Contractor.

11.4 PERFORMANCE BOND AND PAYMENT BOND

11.4.1 Add the following sentence: "The bonds will conform to those forms approved by the Office of Management and Budget."

**ARTICLE 12: UNCOVERING AND CORRECTION OF WORK**

12.2.2 AFTER SUBSTANTIAL COMPLETION

Add the following Paragraph:

12.2.2.1.1 At any time during the progress of the Work, or in any case where the nature of the defects will be such that it is not expedient to have corrected, the Owner, at its option, will have the right to deduct such sum, or sums, of money from the amount of the Contract as it considers justified to adjust the difference in value between the defective work and that required under contract including any damage to the structure.

12.2.2.1 Strike "one" and insert "two".

12.2.2.2 Strike "one" and insert "two".

12.2.2.3 Strike "one" and insert "two".

12.2.5 In second sentence, strike "one" and insert "two".

**ARTICLE 13: MISCELLANEOUS PROVISIONS**

13.1 GOVERNING LAW

Strike "except that, if the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4."

13.6 INTEREST

Strike “the date payment is due at such rate as the parties may agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.” Insert “30 days of presentment of the authorized Certificate of Payment at the annual rate of 12% or 1% per month.

13.7 TIME LIMITS ON CLAIMS

Strike the last sentence.

Add the following Paragraph:

13.8 CONFLICTS WITH FEDERAL STATUTES OR REGULATIONS

13.8.1 If any provision, specifications or requirement of the Contract Documents conflict or is inconsistent with any statute, law or regulation of the government of the United State of America, the Contractor shall notify the Architect and Owner immediately upon discovery.

**ARTICLE 14: TERMINATION OR SUSPENSION OF THE CONTRACT**

14.4 TERMINATION BY THE OWNER FOR CONVENIENCE

Delete Paragraph 14.4.3 in its entirety and replace with the following:

14.4.3 In case of such termination for the Owner’s convenience, the Contractor shall be entitled to receive payment for Work executed, and cost incurred by reason of such termination along with reasonable overhead.

**ARTICLE 15: CLAIMS AND DISPUTES**

15.1.2 Throughout the Paragraph strike “21” and insert “45”.

15.1.6 CLAIMS FOR CONSEQUENTIAL DAMAGES

Delete Paragraph 15.1.6 in its entirety.

15.2 INITIAL DECISION

Delete Paragraph 15.2.5 in its entirety and replace with the following:

15.2.5 The Architect will approve or reject Claims by written decision, which shall state the reasons therefore and shall notify the parties of any change in the Contract Sum or Contract Time or both. The approval or rejection of a Claim by the Architect shall be subject to mediation and other remedies at law or in equity.

Delete Paragraph 15.2.6 and its subparagraphs in their entirety.

15.3 MEDIATION

15.3.1 Strike “binding dispute resolution” and insert “any or all remedies at law or in equity”.

15.3.2 In the first sentence, delete “administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedure in effect on the date of the Agreement,” Strike “binding dispute resolution” and insert “remedies at law and in equity”.

15.4 ARBITRATION

Delete paragraph 15.4 and its sub-sections in its entirety.

**END OF SECTION 00 73 13**

STATE OF DELAWARE  
DEPARTMENT OF LABOR  
DIVISION OF INDUSTRIAL AFFAIRS  
OFFICE OF LABOR LAW ENFORCEMENT  
PHONE: 302 761 8200

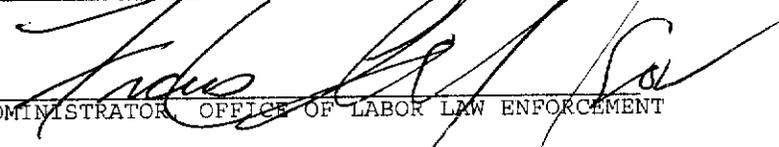
Mailing Address:  
4425 North Market St., 3rd Fl  
Wilmington, DE 19802

Located at:  
4425 North Market St., 3rd Fl  
Wilmington, DE 19802

PREVAILING WAGES FOR HEAVY CONSTRUCTION EFFECTIVE MARCH 15, 2018

CLASSIFICATION	NEW CASTLE	KENT	SUSSEX
ASBESTOS WORKERS	22.57	19.85	43.17
BOILERMAKERS	79.62	32.80	60.17
BRICKLAYERS	67.95	23.69	25.44
CARPENTERS	54.81	54.81	43.57
CEMENT FINISHERS	44.52	24.87	18.53
ELECTRICAL LINE WORKERS	75.22	74.83	66.03
ELECTRICIANS	68.70	68.70	68.70
GLAZIERS	20.85	18.11	12.26
INSULATORS	56.53	56.53	56.53
IRON WORKERS	62.73	62.25	59.55
LABORERS	46.20	46.20	46.20
MILLWRIGHTS	71.60	71.60	57.70
PAINTERS	81.41	81.41	81.41
PILEDRIVERS	76.77	40.19	31.28
PLASTERERS	19.64	17.06	11.53
PLUMBERS/PIPEFITTERS/STEAMFITTERS	89.13	79.50	18.27
POWER EQUIPMENT OPERATORS	69.29	64.30	69.29
SHEET METAL WORKERS	31.38	19.47	18.28
SPRINKLER FITTERS	33.82	12.81	10.60
TRUCK DRIVERS	32.64	21.06	22.74

CERTIFIED: 03/19/2018

BY:   
ADMINISTRATOR OFFICE OF LABOR LAW ENFORCEMENT

**NOTE:** THESE RATES ARE PROMULGATED AND ENFORCED PURSUANT TO THE PREVAILING WAGE REGULATIONS ADOPTED BY THE DEPARTMENT OF LABOR ON APRIL 3, 1992.

CLASSIFICATIONS OF WORKERS ARE DETERMINED BY THE DEPARTMENT OF LABOR. FOR ASSISTANCE IN CLASSIFYING WORKERS, OR FOR A COPY OF THE REGULATIONS OR CLASSIFICATIONS, PHONE 302 761 8200

NON-REGISTERED APPRENTICES MUST BE PAID THE MECHANIC'S RATE.

PROJECT: NAT18

## PREVAILING WAGE DEBARMENT LIST

The following contractors have been debarred for violations of the prevailing wage law 29Del.C. §6960 or other applicable State statutes.

Therefore, no public construction contract in this State shall be bid on, awarded to, or received by contractors and individuals on this list for a period of (3) three years from the date of the judgment or as deemed by a court of competent jurisdiction.

Contractor	Address	Date of Debarment
Mullen Brothers, Inc. and Daniel Mullen, individually	3375 Garnett Road, Boothwyn, PA 19060	Indefinite/ Civil Contempt
MMR Associates DBA Peninsula Glass and Michael Rooney, individually	679 Horse Pond Road, Dover, DE 19901	1/20/2015
Site Work Safety Supplies, Inc. and Peter Coker, individually	4020 Seven Hickories Road Dover, DE 19904	1/12/2016
Green Granite and Jason Green, individually	604 Heatherbrooke Court Avondale, PA 19311	Indefinite/ Civil Contempt
Pro Image Landscaping, Inc. and Owner(s) individually	23 Commerce Street Wilmington, DE 19801 and/or 2 Cameo Road Claymont, DE 19703	Indefinite/19 Del.C. §108 & 10 Del.C. 542(c)
Liberty Mechanical, LLC and Owner(s), individually	2032 Duncan Road Wilmington, DE 19801	Indefinite/ 19 Del.C. 2374(f)
Integrated Mechanical and Fire Systems Inc. and Allison Sheldon, individually	4601 Governor Printz Boulevard Wilmington, DE 19809	Indefinite/19 Del.C. §108 & 10 Del.C. 542(c)

Updated: May 11, 2017

## **GENERAL REQUIREMENTS**

### **TABLE OF ARTICLES**

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13. MISCELLANEOUS PROVISIONS
14. TERMINATION OR SUSPENSION OF THE CONTRACT

**ARTICLE 1: GENERAL****1.1 CONTRACT DOCUMENTS**

1.1.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary and what is required by one shall be as binding as if required by all. Performance by the Contractor shall be required to an extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the intended results.

1.1.2 Work including material purchases shall not begin until the Contractor is in receipt of a bonafide State of Delaware Purchase Order. Any work performed or material purchases prior to the issuance of the Purchase Order is done at the Contractor's own risk and cost.

**1.2 EQUALITY OF EMPLOYMENT OPPORTUNITY ON PUBLIC WORKS**

1.2.1 For Public Works Projects financed in whole or in part by state appropriation the Contractor agrees that during the performance of this contract:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, sex, color, sexual orientation, gender identity or national origin. The Contractor will take positive steps to ensure that applicants are employed and that employees are treated during employment without regard to their race, creed, sex, color, sexual orientation, gender identity or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided by the contracting agency setting forth this nondiscrimination clause.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, sex, color, sexual orientation, gender identity or national origin."

**ARTICLE 2: OWNER**

(NO ADDITIONAL GENERAL REQUIREMENTS – SEE SUPPLEMENTARY GENERAL CONDITIONS)

**ARTICLE 3: CONTRACTOR**

3.1 Schedule of Values: The successful Bidder shall within twenty (20) days after receiving notice to proceed with the work, furnish to the Owner a complete schedule of values on the various items comprising the work.

3.2 Subcontracts: Upon approval of Subcontractors, the Contractor shall award their Subcontracts as soon as possible after the signing of their own contract and see that all material, their own and those of their Subcontractors, are promptly ordered so that the work will not be delayed by failure of materials to arrive on time.

3.3 Before commencing any work or construction, the General Contractor is to consult with the Owner as to matters in connection with access to the site and the allocation of Ground Areas for the various features of hauling, storage, etc.

- 3.4 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions.
- 3.5 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.
- 3.6 The Contractor warrants to the Owner that materials and equipment furnished will be new and of good quality, unless otherwise permitted, and that the work will be free from defects and in conformance with the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved, may be considered defective. If required by the Owner, the Contractor shall furnish evidence as to the kind and quality of materials and equipment provided.
- 3.7 Unless otherwise provided, the Contractor shall pay all sales, consumer, use and other similar taxes, and shall secure and pay for required permits, fees, licenses, and inspections necessary for proper execution of the Work.
- 3.8 The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on performance of the Work. The Contractor shall promptly notify the Owner if the Drawings and Specifications are observed to be at variance therewith.
- 3.9 The Contractor shall be responsible to the Owner for the acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons performing portions of the Work under contract with the Contractor.
- 3.10 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work the Contractor shall remove from and about the Project all waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials. The Contractor shall be responsible for returning all damaged areas to their original conditions.
- 3.11 STATE LICENSE AND TAX REQUIREMENTS
- 3.11.1 Each Contractor and Subcontractor shall be licensed to do business in the State of Delaware and shall pay all fees and taxes due under State laws. In conformance with Section 2503, Chapter 25, Title 30, Delaware Code, "the Contractor shall furnish the Delaware Department of Finance within ten (10) days after entering into any contract with a contractor or subcontractor not a resident of this State, a statement of total value of such contract or contracts together with the names and addresses of the contracting parties."
- 3.12 The Contractor shall comply with all requirements set forth in Section 6962, Chapter 69, Title 29 of the Delaware Code.

- 3.13 During the contract Work, the Contractor and each Subcontractor, shall implement an Employee Drug Testing Program in accordance with OMB Regulation 4104 - "Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on "Large Public Works Projects". "Large Public Works" is based upon the current threshold required for bidding Public Works as set by the Purchasing and Contracting Advisory Council.

**ARTICLE 4: ADMINISTRATION OF THE CONTRACT**

4.1 CONTRACT SURETY

4.1.1 PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND

- 4.1.2 All bonds will be required as follows unless specifically waived elsewhere in the Bidding Documents.

- 4.1.3 Contents of Performance Bonds – The bond shall be in the form approved by the Office of Management and Budget. The bond shall be conditioned upon the faithful compliance and performance by the successful bidder of each and every term and condition of the contract and the proposal, plans, specifications, and bid documents thereof. Each term and condition shall be met at the time and in the manner prescribed by the Contract, Bid documents and the specifications, including the payment in full to every person furnishing material or performing labor in the performance of the Contract, of all sums of money due the person for such labor and material. (The bond shall also contain the successful bidder's guarantee to indemnify and save harmless the State and the agency from all costs, damages and expenses growing out of or by reason of the Contract in accordance with the Contract.)

- 4.1.4 Invoking a Performance Bond – The agency may, when it considers that the interest of the State so require, cause judgement to be confessed upon the bond.

- 4.1.5 Within twenty (20) days after the date of notice of award of contract, the Bidder to whom the award is made shall furnish a Performance Bond and Labor and Material Payment Bond, each equal to the full amount of the Contract price to guarantee the faithful performance of all terms, covenants and conditions of the same. The bonds are to be issued by an acceptable Bonding Company licensed to do business in the State of Delaware and shall be issued in duplicate.

- 4.1.6 Performance and Payment Bonds shall be maintained in full force (warranty bond) for a period of two (2) years after the date of the Certificate for Final Payment. The Performance Bond shall guarantee the satisfactory completion of the Project and that the Contractor will make good any faults or defects in his work which may develop during the period of said guarantees as a result of improper or defective workmanship, material or apparatus, whether furnished by themselves or their Sub-Contractors. The Payment Bond shall guarantee that the Contractor shall pay in full all persons, firms or corporations who furnish labor or material or both labor and material for, or on account of, the work included herein. The bonds shall be paid for by this Contractor. The Owner shall have the right to demand that the proof parties signing the bonds are duly authorized to do so.

**4.2 FAILURE TO COMPLY WITH CONTRACT**

4.2.1 If any firm entering into a contract with the State, or Agency that neglects or refuses to perform or fails to comply with the terms thereof, the Agency which signed the Contract may terminate the Contract and proceed to award a new contract in accordance with this Chapter 69, Title 29 of the Delaware Code or may require the Surety on the Performance Bond to complete the Contract in accordance with the terms of the Performance Bond. Nothing herein shall preclude the Agency from pursuing additional remedies as otherwise provided by law.

**4.3 CONTRACT INSURANCE AND CONTRACT LIABILITY**

4.3.1 In addition to the bond requirements stated in the Bid Documents, each successful Bidder shall purchase adequate insurance for the performance of the Contract and, by submission of a Bid, agrees to indemnify and save harmless and to defend all legal or equitable actions brought against the State, any Agency, officer and/or employee of the State, for and from all claims of liability which is or may be the result of the successful Bidder's actions during the performance of the Contract.

4.3.2 The purchase or nonpurchase of such insurance or the involvement of the successful Bidder in any legal or equitable defense of any action brought against the successful Bidder based upon work performed pursuant to the Contract will not waive any defense which the State, its agencies and their respective officers, employees and agents might otherwise have against such claims, specifically including the defense of sovereign immunity, where applicable, and by the terms of this section, the State and all agencies, officers and employees thereof shall not be financially responsible for the consequences of work performed, pursuant to said contract.

**4.4 RIGHT TO AUDIT RECORDS**

4.4.1 The Owner shall have the right to audit the books and records of a Contractor or any Subcontractor under any Contract or Subcontract to the extent that the books and records relate to the performance of the Contract or Subcontract.

4.4.2 Said books and records shall be maintained by the Contractor for a period of seven (7) years from the date of final payment under the Prime Contract and by the Subcontractor for a period of seven (7) years from the date of final payment under the Subcontract.

**ARTICLE 5: SUBCONTRACTORS****5.1 SUBCONTRACTING REQUIREMENTS**

5.1.1 All contracts for the construction, reconstruction, alteration or repair of any public building (not a road, street or highway) shall be subject to the following provisions:

1. A contract shall be awarded only to a Bidder whose Bid is accompanied by a statement containing, for each Subcontractor category, the name and address (city or town and State only – street number and P.O. Box addresses not required) of the subcontractor whose services the Bidder intends to use in performing the Work and providing the material for such Subcontractor category.

2. A Bid will not be accepted nor will an award of any Contract be made to any Bidder which, as the Prime Contractor, has listed itself as the Subcontractor for any Subcontractor unless:
  - A. It has been established to the satisfaction of the awarding Agency that the Bidder has customarily performed the specialty work of such Subcontractor category by artisans regularly employed by the Bidder's firm;
  - B. That the Bidder is duly licensed by the State to engage in such specialty work, if the State requires licenses; and
  - C. That the Bidder is recognized in the industry as a bona fide Subcontractor or Contractor in such specialty work and Subcontractor category.
- 5.1.2 The decision of the awarding Agency as to whether a Bidder who list itself as the Subcontractor for a Subcontractor category shall be final and binding upon all Bidders, and no action of any nature shall lie against any awarding agency or its employees or officers because of its decision in this regard.
- 5.1.3 After such a Contract has been awarded, the successful Bidder shall not substitute another Subcontractor for any Subcontractor whose name was set forth in the statement which accompanied the Bid without the written consent of the awarding Agency.
- 5.1.4 No Agency shall consent to any substitution of Subcontractors unless the Agency is satisfied that the Subcontractor whose name is on the Bidders accompanying statement:
  - A. Is unqualified to perform the work required;
  - B. Has failed to execute a timely reasonable Subcontract;
  - C. Has defaulted in the performance on the portion of the work covered by the Subcontract; or
  - D. Is no longer engaged in such business.
- 5.1.5 Should a Bidder be awarded a contract, such successful Bidder shall provide to the agency the taxpayer identification license numbers of such subcontractors. Such numbers shall be provided on the later of the date on which such subcontractor is required to be identified or the time the contract is executed. The successful Bidder shall provide to the agency to which it is contracting, within 30 days of entering into such public works contract, copies of all Delaware Business licenses of subcontractors and/or independent contractors that will perform work for such public works contract. However, if a subcontractor or independent contractor is hired or contracted more than 20 days after the Bidder entered the public works contract the Delaware Business license of such subcontractor or independent contractor shall be provided to the agency within 10 days of being contracted or hired.
- 5.1.6 The Contractor may employ additional Subcontractors on the jobsite only after submitting a copy of the Subcontractor's Employee Drug Testing Program to the Owner for approval. A Contractor or Subcontractor shall not commence work until the Owner has concluded its review and determined that the submitted Employee Drug Testing Program complies with OMB Regulation 4104.

**5.2 PENALTY FOR SUBSTITUTION OF SUBCONTRACTORS**

- 5.2.1 Should the Contractor fail to utilize any or all of the Subcontractors in the Contractor's Bid statement in the performance of the Work on the public bidding, the Contractor shall be penalized in the amount of (project specific amount\*). The Agency may determine to deduct payments of the penalty from the Contractor or have the amount paid directly to the Agency. Any penalty amount assessed against the Contractor may be remitted or refunded, in whole or in part, by the Agency awarding the Contract, only if it is established to the satisfaction of the Agency that the Subcontractor in question has defaulted or is no longer engaged in such business. No claim for the remission or refund of any penalty shall be granted unless an application is filed within one year after the liability of the successful Bidder accrues. All penalty amounts assessed and not refunded or remitted to the contractor shall be reverted to the State.

\*one (1) percent of contract amount not to exceed \$10,000

**5.3 ASBESTOS ABATEMENT**

- 5.3.1 The selection of any Contractor to perform asbestos abatement for State-funded projects shall be approved by the Office of Management and Budget, Division of Facilities Management pursuant to Chapter 78 of Title 16.

**5.4 STANDARDS OF CONSTRUCTION FOR THE PROTECTION OF THE PHYSICALLY HANDICAPPED**

- 5.4.1 All Contracts shall conform with the standard established by the Delaware Architectural Accessibility Board unless otherwise exempted by the Board.

**5.5 CONTRACT PERFORMANCE**

- 5.5.1 Any firm entering into a Public Works Contract that neglects or refuses to perform or fails to comply with its terms, the Agency may terminate the Contract and proceed to award a new Contract or may require the Surety on the Performance Bond to complete the Contract in accordance with the terms of the Performance Bond.

**ARTICLE 6: CONSTRUCTION BY OWNER OR SEPARATE CONTRACTORS**

- 6.1 The Owner reserves the right to simultaneously perform other construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other Projects at the same site.
- 6.2 The Contractor shall afford the Owner and other Contractors reasonable opportunity for access and storage of materials and equipment, and for the performance of their activities, and shall connect and coordinate their activities with other forces as required by the Contract Documents.

**ARTICLE 7: CHANGES IN THE WORK**

- 7.1 The Owner, without invalidating the Contract, may order changes in the Work consisting of Additions, Deletions, Modifications or Substitutions, with the Contract Sum and Contract completion date being adjusted accordingly. Such changes in the Work shall be authorized by written Change Order signed by the Professional, as the duly authorized agent, the Contractor and the Owner.

- 7.2 The Contract Sum and Contract Completion Date shall be adjusted only by a fully executed Change Order.
- 7.3 The additional cost, or credit to the Owner resulting from a change in the Work shall be by mutual agreement of the Owner, Contractor and the Architect. In all cases, this cost or credit shall be based on the 'DPE' wages required and the "invoice price" of the materials/equipment needed.
- 7.3.1 "DPE" shall be defined to mean "direct personnel expense". Direct payroll expense includes prevailing wage rates plus a maximum multiplier of 1.35 times DPE. For example, if the prevailing wage rate is \$50/hour, the DPE would be \$67.50/hour (50 x 1.35).
- 7.3.2 "Invoice price" of materials/equipment shall be defined to mean the actual cost of materials and/or equipment that is paid by the Contractor, (or subcontractor), to a material distributor, direct factory vendor, store, material provider, or equipment leasing entity. Rates for equipment that is leased and/or owned by the Contractor or subcontractor(s) shall not exceed those listed in the latest version of the "Means Building Construction Cost Data" publication.
- 7.3.3 In addition to the above, the General Contractor is allowed a fifteen percent (15%) markup for overhead and profit for additional work performed by the General Contractor's own forces. For additional subcontractor work, the Subcontractor is allowed a fifteen (15) percent overhead and profit on change order work above and beyond the direct costs stated previously. To this amount, the General Contractor will be allowed a mark-up not exceeding seven and one half percent (7.5%) on the subcontractors work. These mark-ups shall include all costs including, but not limited to: overhead, profit, bonds, insurance, supervision, etc. No markup is permitted on the work of the subcontractors subcontractor. No additional costs shall be allowed for changes related to the Contractor's onsite superintendent/staff, or project manager, unless a change in the work changes the project duration and is identified by the CPM schedule. There will be no other costs associated with the change order.

**ARTICLE 8: TIME**

- 8.1 Time limits, if any, are as stated in the Project Manual. By executing the Agreement, the Contractor confirms that the stipulated limits are reasonable, and that the Work will be completed within the anticipated time frame.
- 8.2 If progress of the Work is delayed at any time by changes ordered by the Owner, by labor disputes, fire, unusual delay in deliveries, abnormal adverse weather conditions, unavoidable casualties or other causes beyond the Contractor's control, the Contract Time shall be extended for such reasonable time as the Owner may determine.
- 8.3 Any extension of time beyond the date fixed for completion of the construction and acceptance of any part of the Work called for by the Contract, or the occupancy of the building by the Owner, in whole or in part, previous to the completion shall not be deemed a waiver by the Owner of his right to annul or terminate the Contract for abandonment or delay in the matter provided for, nor relieve the Contractor of full responsibility.

#### 8.4 SUSPENSION AND DEBARMENT

8.4.1 Per Section 6962(d)(14), Title 29, Delaware Code, "Any Contractor who fails to perform a public works contract or complete a public works project within the time schedule established by the Agency in the Invitation To Bid, may be subject to Suspension or Debarment for one or more of the following reasons: a) failure to supply the adequate labor supply ratio for the project; b) inadequate financial resources; or, c) poor performance on the Project."

8.4.2 "Upon such failure for any of the above stated reasons, the Agency that contracted for the public works project may petition the Director of the Office of Management and Budget for Suspension or Debarment of the Contractor. The Agency shall send a copy of the petition to the Contractor within three (3) working days of filing with the Director. If the Director concludes that the petition has merit, the Director shall schedule and hold a hearing to determine whether to suspend the Contractor, debar the Contractor or deny the petition. The Agency shall have the burden of proving, by a preponderance of the evidence, that the Contractor failed to perform or complete the public works project within the time schedule established by the Agency and failed to do so for one or more of the following reasons: a) failure to supply the adequate labor supply ratio for the project; b) inadequate financial resources; or, c) poor performance on the project. Upon a finding in favor of the Agency, the Director may suspend a Contractor from Bidding on any project funded, in whole or in part, with public funds for up to 1 year for a first offense, up to 3 years for a second offense and permanently debar the Contractor for a third offense. The Director shall issue a written decision and shall send a copy to the Contractor and the Agency. Such decision may be appealed to the Superior Court within thirty (30) days for a review on the record."

#### 8.5 RETAINAGE

8.5.1 Per Section 6962(d)(5) a.3, Title 29, Delaware Code: The Agency may at the beginning of each public works project establish a time schedule for the completion of the project. If the project is delayed beyond the completion date due to the Contractor's failure to meet their responsibilities, the Agency may forfeit, at its discretion, all or part of the Contractor's retainage.

8.5.2 This forfeiture of retainage also applies to the timely completion of the punchlist. A punchlist will only be prepared upon the mutual agreement of the Owner, Architect and Contractor. Once the punchlist is prepared, all three parties will by mutual agreement, establish a schedule for its completion. Should completion of the punchlist be delayed beyond the established date due to the Contractor's failure to meet their responsibilities, the Agency may hold permanently, at its discretion, all or part of the Contractor's retainage.

### **ARTICLE 9: PAYMENTS AND COMPLETION**

#### 9.1 APPLICATION FOR PAYMENT

9.1.1 Applications for payment shall be made to Department of Natural Resources and Environmental Control Division of Fish & Wildlife, at Room B172, Richardson & Robbins Building, 89 Kings Highway, Dover, DE 19901 and marked Contract No. NAT-201801/MILLSBORO; Attention: Jeremy Ashe. There will be a five percent (5%) retainage on all Contractor's monthly invoices until completion of the project. This retainage may become payable upon receipt of all required closeout documentation, provided all other requirements of the Contract Documents have been met.

9.1.2 A date will be fixed for the taking of the monthly account of work done. Upon receipt of Contractor's itemized application for payment, such application will be audited, modified, if found necessary, and approved for the amount. Statement shall be submitted to the Owner.

9.1.3 Section 6516, Title 29 of the Delaware Code annualized interest is not to exceed 12% per annum beginning thirty (30) days after the "presentment" (as opposed to the date) of the invoice.

## 9.2 PARTIAL PAYMENTS

9.2.1 Any public works Contract executed by any Agency may provide for partial payments at the option of the Owner with respect to materials placed along or upon the sites or stored at secured locations, which are suitable for use in the performance of the contract.

9.2.2 When approved by the agency, partial payment may include the values of tested and acceptable materials of a nonperishable or noncontaminative nature which have been produced or furnished for incorporation as a permanent part of the work yet to be completed, provided acceptable provisions have been made for storage.

9.2.2.1 Any allowance made for materials on hand will not exceed the delivered cost of the materials as verified by invoices furnished by the Contractor, nor will it exceed the contract bid price for the material complete in place.

9.2.3 If requested by the Agency, receipted bills from all Contractors, Subcontractors, and material, men, etc., for the previous payment must accompany each application for payment. Following such a request, no payment will be made until these receipted bills have been received by the Owner.

## 9.3 SUBSTANTIAL COMPLETION

9.3.1 When the building has been made suitable for occupancy, but still requires small items of miscellaneous work, the Owner will determine the date when the project has been substantially completed.

9.3.2 If, after the Work has been substantially completed, full completion thereof is materially delayed through no fault of the Contractor, and without terminating the Contract, the Owner may make payment of the balance due for the portion of the Work fully completed and accepted. Such payment shall be made under the terms and conditions governing final payment that it shall not constitute a waiver of claims.

9.3.3 On projects where commissioning is included, the commissioning work as defined in the specifications must be complete prior to the issuance of substantial completion.

## 9.4 FINAL PAYMENT

9.4.1 Final payment, including the five percent (5%) retainage if determined appropriate, shall be made within thirty (30) days after the Work is fully completed and the Contract fully performed and provided that the Contractor has submitted the following closeout documentation (in addition to any other documentation required elsewhere in the Contract Documents):

9.4.1.1 Evidence satisfactory to the Owner that all payrolls, material bills, and other indebtedness connected with the work have been paid,

9.4.1.2 An acceptable RELEASE OF LIENS,

- 9.4.1.3 Copies of all applicable warranties,
- 9.4.1.4 As-built drawings,
- 9.4.1.5 Operations and Maintenance Manuals,
- 9.4.1.6 Instruction Manuals,
- 9.4.1.7 Consent of Surety to final payment.
- 9.4.1.8 The Owner reserves the right to retain payments, or parts thereof, for its protection until the foregoing conditions have been complied with, defective work corrected and all unsatisfactory conditions remedied.

#### **ARTICLE 10: PROTECTION OF PERSONS AND PROPERTY**

- 10.1 The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall take all reasonable precautions to prevent damage, injury or loss to: workers, persons nearby who may be affected, the Work, materials and equipment to be incorporated, and existing property at the site or adjacent thereto. The Contractor shall give notices and comply with applicable laws ordinances, rules regulations, and lawful orders of public authorities bearing on the safety of persons and property and their protection from injury, damage, or loss. The Contractor shall promptly remedy damage and loss to property at the site caused in whole or in part by the Contractor, a Subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable.
- 10.2 The Contractor shall notify the Owner in the event any existing hazardous material such as lead, PCBs, asbestos, etc. is encountered on the project. The Owner will arrange with a qualified specialist for the identification, testing, removal, handling and protection against exposure or environmental pollution, to comply with applicable regulation laws and ordinances. The Contractor and Architect will not be required to participate in or to perform this operation. Upon completion of this work, the Owner will notify the Contractor and Architect in writing the area has been cleared and approved by the authorities in order for the work to proceed. The Contractor shall attach documentation from the authorities of said approval.
- 10.3 As required in the Hazardous Chemical Information Act of June 1984, all vendors supplying any materials that may be defined as hazardous, must provide Material Safety Data Sheets for those products. Any chemical product should be considered hazardous if it has a warning caution on the label relating to a potential physical or health hazard, if it is known to be present in the work place, and if employees may be exposed under normal conditions or in any foreseeable emergency situation. Material Safety Data Sheets must be provided directly to the Owner along with the shipping slips that include those products.
- 10.4 The Contractor shall certify to the Owner that materials incorporated into the Work are free of all asbestos. This certification may be in the form of Material Safety Data Sheet (MSDS) provided by the product manufacturer for the materials used in construction, as specified or as provided by the Contractor.

**ARTICLE 11: INSURANCE AND BONDS**

- 11.1 The Contractor shall carry all insurance required by law, such as Unemployment Insurance, etc. The Contractor shall carry such insurance coverage as they desire on their own property such as a field office, storage sheds or other structures erected upon the project site that belong to them and for their own use. The Subcontractors involved with this project shall carry whatever insurance protection they consider necessary to cover the loss of any of their personal property, etc.
- 11.2 Upon being awarded the Contract, the Contractor shall obtain a minimum of two (2) copies of all required insurance certificates called for herein, and submit one (1) copy of each certificate, to the Owner, within 20 days of contract award.
- 11.3 Bodily Injury Liability and Property Damage Liability Insurance shall, in addition to the coverage included herein, include coverage for injury to or destruction of any property arising out of the collapse of or structural injury to any building or structure due to demolition work and evidence of these coverages shall be filed with and approved by the Owner.
- 11.4 The Contractor's Property Damage Liability Insurance shall, in addition to the coverage noted herein, include coverage on all real and personal property in their care, custody and control damaged in any way by the Contractor or their Subcontractors during the entire construction period on this project.
- 11.5 Builders Risk (including Standard Extended Coverage Insurance) on the existing building during the entire construction period, shall not be provided by the Contractor under this contract. The Owner shall insure the existing building and all of its contents and all this new alteration work under this contract during entire construction period for the full insurable value of the entire work at the site. Note, however, that the Contractor and their Subcontractors shall be responsible for insuring building materials (installed and stored) and their tools and equipment whenever in use on the project, against fire damage, theft, vandalism, etc.
- 11.6 Certificates of the insurance company or companies stating the amount and type of coverage, terms of policies, etc., shall be furnished to the Owner, within 20 days of contract award.
- 11.7 The Contractor shall, at their own expense, (in addition to the above) carry the following forms of insurance:

11.7.1 Contractor's Contractual Liability Insurance

Minimum coverage to be:

Bodily Injury	\$500,000	for each person
	\$1,000,000	for each occurrence
	\$1,000,000	aggregate
Property Damage	\$500,000	for each occurrence
	\$1,000,000	aggregate

11.7.2 Contractor's Protective Liability Insurance

Minimum coverage to be:

Bodily Injury	\$500,000	for each person
	\$1,000,000	for each occurrence
	\$1,000,000	Aggregate
Property Damage	\$500,000	for each occurrence
	\$500,000	aggregate

11.7.3 Automobile Liability Insurance

Minimum coverage to be:

Bodily Injury	\$1,000,000	for each person
	\$1,000,000	for each occurrence
Property Damage	\$500,000	per accident

11.7.4 Prime Contractor's and Subcontractors' policies shall include contingent and contractual liability coverage in the same minimum amounts as 11.7.1 above.

11.7.5 Workmen's Compensation (including Employer's Liability):

11.7.5.1 Minimum Limit on employer's liability to be as required by law.

11.7.5.2 Minimum Limit for all employees working at one site.

11.7.6 Certificates of Insurance must be filed with the Owner guaranteeing fifteen (15) days prior notice of cancellation, non-renewal, or any change in coverages and limits of liability shown as included on certificates.

11.7.7 Social Security Liability

11.7.7.1 With respect to all persons at any time employed by or on the payroll of the Contractor or performing any work for or on their behalf, or in connection with or arising out of the Contractor's business, the Contractor shall accept full and exclusive liability for the payment of any and all contributions or taxes or unemployment insurance, or old age retirement benefits, pensions or annuities now or hereafter imposed by the Government of the United States and the State or political subdivision thereof, whether the same be measured by wages, salaries or other remuneration paid to such persons or otherwise.

11.7.7.2 Upon request, the Contractor shall furnish Owner such information on payrolls or employment records as may be necessary to enable it to fully comply with the law imposing the aforesaid contributions or taxes.

11.7.7.3 If the Owner is required by law to and does pay any and/or all of the aforesaid contributions or taxes, the Contractor shall forthwith reimburse the Owner for the entire amount so paid by the Owner.

**ARTICLE 12: UNCOVERING AND CORRECTION OF WORK**

- 12.1 The Contractor shall promptly correct Work rejected by the Owner or failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed, and shall correct any Work found to be not in accordance with the requirements of the Contract Documents within a period of two years from the date of Substantial Completion, or by terms of an applicable special warranty required by the Contract Documents. The provisions of this Article apply to work done by Subcontractors as well as to Work done by direct employees of the Contractor.
- 12.2 At any time during the progress of the work, or in any case where the nature of the defects shall be such that it is not expedient to have them corrected, the Owner, at their option, shall have the right to deduct such sum, or sums, of money from the amount of the contract as they consider justified to adjust the difference in value between the defective work and that required under contract including any damage to the structure.

**ARTICLE 13: MISCELLANEOUS PROVISIONS**

- 13.1 CUTTING AND PATCHING
- 13.1.1 The Contractor shall be responsible for all cutting and patching. The Contractor shall coordinate the work of the various trades involved.
- 13.2 DIMENSIONS
- 13.2.1 All dimensions shown shall be verified by the Contractor by actual measurements at the project site. Any discrepancies between the drawings and specifications and the existing conditions shall be referred to the Owner for adjustment before any work affected thereby has been performed.
- 13.3 LABORATORY TESTS
- 13.3.1 Any specified laboratory tests of material and finished articles to be incorporated in the work shall be made by bureaus, laboratories or agencies approved by the Owner and reports of such tests shall be submitted to the Owner. The cost of the testing shall be paid for by the Contractor.
- 13.3.2 The Contractor shall furnish all sample materials required for these tests and shall deliver same without charge to the testing laboratory or other designated agency when and where directed by the Owner.
- 13.4 ARCHAEOLOGICAL EVIDENCE
- 13.4.1 Whenever, in the course of construction, any archaeological evidence is encountered on the surface or below the surface of the ground, the Contractor shall notify the authorities of the State Historic Preservation Office and suspend work in the immediate area for a reasonable time to permit those authorities, or persons designated by them, to examine the area and ensure the proper removal of the archaeological evidence for suitable preservation by the Division of Historical and Cultural Affairs.

**13.5 GLASS REPLACEMENT AND CLEANING**

13.5.1 The General Contractor shall replace without expense to the Owner all glass broken during the construction of the project. If job conditions warrant, at completion of the job the General Contractor shall have all glass cleaned and polished.

**13.6 WARRANTY**

13.6.1 For a period of two (2) years from the date of substantial completion, as evidenced by the date of final acceptance of the work, the contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect of equipment, material or workmanship performed by the contractor or any of his subcontractors or suppliers. However, manufacturer's warranties and guarantees, if for a period longer than two (2) years, shall take precedence over the above warranties. The contractor shall remedy, at his own expense, any such failure to conform or any such defect. The protection of this warranty shall be included in the Contractor's Performance Bond.

**ARTICLE 14: TERMINATION OF CONTRACT**

14.1 If the Contractor defaults or persistently fails or neglects to carry out the Work in accordance with the Contract Documents or fails to perform a provision of the Contract, the Owner, after seven days written notice to the Contractor, may make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor. Alternatively, at the Owner's option, and the Owner may terminate the Contract and take possession of the site and of all materials, equipment, tools, and machinery thereon owned by the Contractor and may finish the Work by whatever method the Owner may deem expedient. If the costs of finishing the Work exceed any unpaid compensation due the Contractor, the Contractor shall pay the difference to the Owner.

14.2 "If the continuation of this Agreement is contingent upon the appropriation of adequate state, or federal funds, this Agreement may be terminated on the date beginning on the first fiscal year for which funds are not appropriated or at the exhaustion of the appropriation. The Owner may terminate this Agreement by providing written notice to the parties of such non-appropriation. All payment obligations of the Owner will cease upon the date of termination. Notwithstanding the foregoing, the Owner agrees that it will use its best efforts to obtain approval of necessary funds to continue the Agreement by taking appropriate action to request adequate funds to continue the Agreement."

END OF GENERAL REQUIREMENTS

**EMPLOYEE DRUG TESTING REPORT FORM**

**Period Ending:** \_\_\_\_\_

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors who work on Large Public Works Contracts funded all or in part with public funds maintain testing data that includes but is not limited to the data elements below.

Project Number: \_\_\_\_\_

Project Name: \_\_\_\_\_

Contractor/Subcontractor Name: \_\_\_\_\_

Contractor/Subcontractor Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Number of employees who worked on the jobsite during the report period: \_\_\_\_\_

Number of employees subject to random testing during the report period: \_\_\_\_\_

Number of Negative Results \_\_\_\_\_ Number of Positive Results \_\_\_\_\_

Action taken on employee(s) in response to a failed or positive random test:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: \_\_\_\_\_

This form is not required to be submitted to the Owner. Included as a reference to show information required to be maintained by the Contractor. The Owner shall have the right to periodically audit all Contractor and Subcontractor test results at the Contractor's or Subcontractor's offices (or by other means to make the data available for inspection by the Owner).

**EMPLOYEE DRUG TESTING  
REPORT OF POSITIVE RESULTS**

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors who work on Large Public Works Contracts funded all or in part with public funds to notify the Owner in writing of a positive random drug test.

Project Number: \_\_\_\_\_

Project Name: \_\_\_\_\_

Contractor/Subcontractor Name: \_\_\_\_\_

Contractor/Subcontractor Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name of employee with positive test result: \_\_\_\_\_

Last 4 digits of employee SSN: \_\_\_\_\_

Date test results received: \_\_\_\_\_

Action taken on employee in response to a positive test result:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Authorized Representative of Contractor/Subcontractor: \_\_\_\_\_  
(typed or printed)

Authorized Representative of Contractor/Subcontractor: \_\_\_\_\_  
(signature)

Date: \_\_\_\_\_

**This form shall be sent by mail to the Owner within 24 hours of receipt of test results.**

**Enclose this test results form in a sealed envelope with the notation "Drug Testing Form – DO NOT OPEN" on the face thereof and place in a separate mailing envelope.**

## **Technical Specifications**

## **SECTION 01 00 01 – PROJECT SPECIFIC REQUIREMENTS**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. This section includes items required for the project that are not described elsewhere in the Project Manual.

#### **1.2 WORK RESTRICTIONS**

- A. Work Restrictions, General: Comply with restrictions on construction operations.
  - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
  - 2. Unless a cofferdam preventing fish from entering the project area for nest building is installed prior to April 1, no in-water work shall occur between April 1 and July 15 as required by DNREC Fisheries. The contractor shall notify DNREC Fisheries (302-735-8654) seven (7) days prior to any in-water construction so that fisheries can prepare appropriate press releases.
- B. On-Site Work Hours: Limit work to the site and/or existing building to normal business working hours of 8:00 a.m. to 6:00 p.m., Monday through Friday, unless otherwise indicated.
  - 1. Weekend Hours: Weekend work shall not be allowed unless preapproved by the Owner.
  - 2. Early Morning Hours: Early morning hours are not allowed unless required for utility shut downs.
  - 3. Holidays: No work shall occur on State or Federally recognized holidays.
- C. Noise, Vibration, and Odors: Coordinate operations that may result in any level of noise and vibration, odors, or other disruption to the occupancy or use of adjacent occupied areas, the buildings and adjacent properties with the Owner.
  - 1. Notify Architect and Owner not less than seven (7) days in advance of proposed disruptive operations.
  - 2. Obtain Architect's and/or Owner's written permission before proceeding with disruptive operations.
- D. Nonsmoking Campus and Building: Smoking is prohibited within the boundaries of all state workplaces including all buildings, facilities, indoor and outdoor spaces and all the surrounding grounds owned by the State. This policy also includes but is not limited to parking lots, walkways, State vehicles and private vehicles parked or operated on State workplace property.

### 1.3 FIELD ENGINEERING

- A. Provide field engineering services; establish grades, lines, and levels, by use of recognized engineering survey practices.
- B. Control datum for survey is that shown on drawings. Locate and protect control and reference points.

### 1.4 SCHEDULE

- A. The following is the required schedule for this work:
  - 1. Bids Due: 2:00 p.m. local time on March 29th, 2019 at 89 Kings Highway, Dover, DE 19901.
  - 2. Notice of Building Contract Award: Within thirty (30) days of receipt and acceptance of qualified low bid.
  - 3. Purchase Order Issuance: The issuance of a State of Delaware purchase order is contingent upon the successful Contractor submitting bonds on State-approved forms, signed contracts and insurance certificates to the State of Delaware within twenty (20) days of Notice of Award. A purchase order will be issued in approximately thirty (30) days after these items have been submitted to the State of Delaware.
  - 4. On-Site Mobilization: Upon receipt of State of Delaware purchase order and issuance of the Notice to Proceed. Anticipated July 15, 2019.
    - a. Mobilization payment shall not exceed 10% of the total contract value. 60% of the mobilization payments shall be payable for initial mobilization, and the remaining 40% shall be payable upon final demobilization.
  - 5. Substantial Completion: The work shall be completed by December 1, 2019.
  - 6. Completion of Punch List: 21 calendar days from date of substantial completion.

### 1.5 CONSTRUCTION PROGRESS DOCUMENTATION

- A. Contractor's Construction Schedule: Submit two opaque copies of initial schedule, large enough to show entire schedule for entire construction period.
  - 1. Bar-Chart Schedule: Submit horizontal bar-chart-type construction schedule within five days of date established for commencement of the Work.
  - 2. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities.
  - 3. Time Frame: Extend schedule from date established for commencement of the Work to date of substantial completion.
    - a. Contract completion date shall not be changed unless specifically authorized by Change Order.
  - 4. Contractor's Construction Schedule Updating: At bi-weekly intervals, update schedule to reflect actual construction progress and activities. Issue schedule at each regularly scheduled progress meeting.
    - a. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made.
- B. Field Condition Reports: Submit two copies at time of discovery of differing conditions.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 01 00 01**

## **SECTION 02 41 19 - SELECTIVE DEMOLITION**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

**A. Section Includes:**

1. Demolition and removal of selected site elements.
2. Salvage of existing items to be reused or recycled.

#### **1.2 MATERIALS OWNERSHIP**

- A.** Unless otherwise indicated, demolition waste becomes property of Contractor.
- B.** Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner as determined by the Owner.
1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

#### **1.3 PREINSTALLATION MEETINGS**

- A.** Pre-demolition Conference: Conduct conference at Project site.

#### **1.4 INFORMATIONAL SUBMITTALS**

- A.** Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control and, for noise control. Indicate proposed locations and construction of barriers.
- B.** Schedule of selective demolition activities with starting and ending dates for each activity.

#### **1.5 CLOSEOUT SUBMITTALS**

- A.** Inventory of items that have been removed and salvaged.

#### **1.6 FIELD CONDITIONS**

- A.** Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

- B. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- C. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
  - 1. Hazardous materials will be removed by Owner before start of the Work.
  - 2. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
- D. Storage or sale of removed items or materials on-site is not permitted.
- E. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
- F. Arrange selective demolition schedule so as not to interfere with Owner's operations.

#### 1.7 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials and using approved contractors so as not to void existing warranties.

### PART 2 - PRODUCTS

#### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ASSE A10.6 and NFPA 241.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Inventory and record the condition of items to be removed and salvaged.

### 3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
  - 1. Arrange to shut off utilities with utility companies.
  - 2. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.

### 3.3 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- B. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
- C. Remove temporary barricades and protections where hazards no longer exist.

### 3.4 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - 1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
  - 2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  - 3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
  - 4. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  - 5. Dispose of demolished items and materials promptly. Comply with requirements in Section 017419 "Construction Waste Management and Disposal."

- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- C. Removed and Salvaged Items:
  - 1. Clean salvaged items.
  - 2. Pack or crate items after cleaning. Identify contents of containers.
  - 3. Store items in a secure area until delivery to Owner.
  - 4. Transport items to Owner's storage area designated by Owner.
  - 5. Protect items from damage during transport and storage.
- D. Removed and Reinstalled Items:
  - 1. Clean and repair items to functional condition adequate for intended reuse.
  - 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  - 3. Protect items from damage during transport and storage.
  - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- E. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

### 3.5 CLEANING

- A. Remove demolition waste materials from Project site and recycle or dispose of them according to Section 017419 "Construction Waste Management and Disposal."
  - 1. Do not allow demolished materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
  - 4. Comply with requirements specified in Section 017419 "Construction Waste Management and Disposal."
- B. Burning: Do not burn demolished materials.
- C. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

**END OF SECTION 02 41 19**

## **SECTION 26 10 00 – LED LIGHT FIXTURES AND POLES**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. This section includes site lighting and related components.

#### **1.2 ACTION SUBMITTALS**

- A. Shop Drawings:
  - 1. Include manufacturer's cut sheets clearly delineating the type of fixture for each submission. At a minimum, include voltage, drive current, LED configuration, LED color generation, light spread diagrams, and finish.
  - 2. Manufacturer's cut sheets for each type of light pole as required for this contract. Include material type, pole dimensions, finish and finish color.

#### **1.3 QUALITY ASSURANCE**

- A. Testing Agency Qualifications: Provide documentation from a qualified testing facility or facilities for wet locations.

### **PART 2 - PRODUCTS**

#### **2.1 SITE & FIXED DOCK LIGHTING PERFORMANCE REQUIREMENTS**

- A. Light fixture to be constructed of a one-piece die-cast aluminum housing with integral heat dissipating fins, one piece die cast door frame and integral arm.
- B. Driver compartment to be rated IP65 and LED light engine to be rated IP66.
- C. Fixture to be tested and labeled to conform to a 3G vibration rating per ANSI C136.31 standard on 3 axes.
- D. Driver efficiency to be greater than 90%, be provided with 10KA surge protector and provide 350mA drive current.
- E. LED light engines to consist of individual LED boards with quick connect electrical connections that provides amber phosphor coated, wildlife friendly light.
- F. Provide manufacturer's wildlife friendly shielding.

- G. Fixture optical system to provide a Type 3 distribution. Fixture lumen output to be 3196 lumens at 61 lumens per watt efficacy.
- H. Fixture to provide a BUG rating of B1-U0-G1. Finish to be brushed aluminum.
- I. Provide with integral twist lock photoelectric receptacle.
- J. Fixture shall be fitted with a bi-level, ambient sensor, 8-15' mounting height, enabled at 1 foot candle.
- K. Provide with 5 year warranty on all parts.
- L. Fixture shall be placed in the horizontal position to project light downward.

## 2.2 ACCESSORIES

- A. General: Provide and install manufacturer's standard accessory materials for lighting for a complete job.
- B. Mounting poles shall be spun aluminum and meeting all details and requirements shown on the drawings and as follows:
  - 1. Rated for 100 mph wind with 1.3 gust factor.
  - 2. Outside dimension of 5.00 inches at the base and 3.00 inches at the top.
  - 3. Minimum wall thickness of 0.125 inches.
  - 4. Anchor base fabricated from cast 356 aluminum alloy with T6 temper.
  - 5. Anchor bolts conforming to ASTM F1554, Gr. 55, galvanized with hook ends, and two hex nuts and flat washers per bolt.
  - 6. Pole finish to be satin brushed.
  - 7. Covered handhole with hardware and grounding provisions provided.
  - 8. Pole top capable of supporting single or double light fixtures.
- C. Provide factory supplied bird deterrent on each luminaire fixture in accordance with manufacturer's requirements.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Install LED site lighting at locations shown on the plans. Luminaires and poles shall be installed per the manufacturer's directions. Contractor shall adjust light angles as noted within these specifications or as shown on the lighting plans.
- B. Work shall include all foundations, conduit, light poles, wiring, installation, equipment and labor to provide a complete and working luminaire. Installation of concrete, electrical conduit and wiring shall meet all relevant specifications required by local, state, and federal codes.

**END OF SECTION 26 10 00**

## **SECTION 31 10 00 - SITE CLEARING**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

**A. Section Includes:**

1. Protecting existing vegetation to remain.
2. Removing existing vegetation.
3. Clearing and grubbing.
4. Stripping and stockpiling topsoil.
5. Removing above- and below-grade site improvements.
6. Disconnecting, capping, or sealing site utilities.
7. Temporary erosion and sedimentation control.

#### **1.2 PREINSTALLATION MEETINGS**

- A. Preinstallation Conference:** Hold Erosion and Sediment Control Preconstruction Meeting on-site prior to beginning site clearing.

#### **1.3 MATERIAL OWNERSHIP**

- A.** Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

#### **1.4 FIELD CONDITIONS**

- A. Traffic:** Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
  2. Provide alternate routes around closed or obstructed trafficways if required by Owner or authorities having jurisdiction.
- B. Utility Locator Service:** Notify utility locator service for area where Project is located before site clearing.
- C.** Do not commence site clearing operations until temporary erosion- and sedimentation-control measures are in place.

### **PART 2 - PRODUCTS**

#### **2.1 MATERIALS**

- A. Satisfactory Soil Material:** Requirements for satisfactory soil material are specified in Section 31 20 00 "Earth Moving."

1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.

### PART 3 - EXECUTION

#### 3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Protect existing site improvements to remain from damage during construction.
  1. Restore damaged improvements to their original condition, as acceptable to Owner.

#### 3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to the construction plans and requirements of authorities having jurisdiction.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls, and restore and stabilize areas disturbed during removal.
- E. Coordinate with the Owner and attend site inspections as required by the Owner.

#### 3.3 EXISTING UTILITIES

- A. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place.
  1. Arrange with utility companies to shut off indicated utilities.
- B. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others, unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
  1. Notify Architect not less than two days in advance of proposed utility interruptions.
  2. Do not proceed with utility interruptions without Architect's written permission.

### 3.4 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
  - 1. Grind down stumps and remove roots larger than 3 inches in diameter, obstructions, and debris to a depth of 18 inches below exposed subgrade.
  - 2. Use only hand methods or air spade for grubbing within protection zones.
  - 3. An ISA (International Society of Arboriculture) licensed arborist shall be employed to conduct an evaluation of the trees to be trimmed. The contractor shall follow recommendations made by the arborist to selectively trim limbs as needed to minimize the potential impact to trees within the project limits.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
  - 1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches and compact each layer to a density equal to adjacent original ground.

### 3.5 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to depth of 6 inches in a manner to prevent intermingling with underlying subsoil or other waste materials.
- C. Stockpile topsoil away from edge of excavations without intermixing with subsoil or other materials. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.

### 3.6 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.

### 3.7 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials, and transport them to recycling facilities. Do not interfere with other Project work.

**END OF SECTION 31 10 00**

## **SECTION 31 20 00 - EARTH MOVING**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

##### **A. Section Includes:**

1. Excavating and filling for rough grading the Site.
2. Preparing subgrades for slabs-on-grade walks pavements turf and grasses and plants.
3. Excavating and backfilling for buildings and structures.
4. Drainage course for concrete slabs-on-grade.
5. Subbase course for concrete walks and pavements.
6. Subbase course and base course for asphalt paving.
7. Excavating and backfilling trenches for utilities and pits for buried utility structures.

#### **1.2 DEFINITIONS**

##### **A. Backfill: Soil material used to fill an excavation.**

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
2. Final Backfill: Backfill placed over initial backfill to fill a trench.

##### **B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.**

##### **C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.**

##### **D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.**

##### **E. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.**

##### **F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.**

1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Architect. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
2. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.

##### **G. Fill: Soil materials used to raise existing grades.**

- H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- I. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.
- J. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- K. Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

### 1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct preexcavation conference at Project site.

### 1.4 INFORMATIONAL SUBMITTALS

- A. Material test reports.

### 1.5 FIELD CONDITIONS

- A. Utility Locator Service: Notify utility locator service for area where Project is located before beginning earth-moving operations.

## PART 2 - PRODUCTS

### 2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D 2487, or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487, or a combination of these groups.
  - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.

- D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M 0; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- H. Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and zero to 5 percent passing a No. 8 sieve.

## 2.2 ACCESSORIES

- A. Detectable Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; colored to comply with local practice or requirements of authorities having jurisdiction.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth-moving operations.
- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

### 3.2 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil

materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.

1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

### 3.3 EXCAVATION FOR STRUCTURES

- A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
  1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
  2. Pile Foundations: Stop excavations 6 to 12 inches above bottom of pile cap before piles are placed. After piles have been driven, remove loose and displaced material. Excavate to final grade, leaving solid base to receive concrete pile caps.
  3. Excavation for Underground Tanks, Basins, and Mechanical or Electrical Utility Structures: Excavate to elevations and dimensions indicated within a tolerance of plus or minus 1 inch. Do not disturb bottom of excavations intended as bearing surfaces.
- B. Excavations at Edges of Tree- and Plant-Protection Zones:
  1. Excavate by hand or with an air spade to indicated lines, cross sections, elevations, and subgrades. If excavating by hand, use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.

### 3.4 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

### 3.5 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.
  1. Clearance: 12 inches each side of pipe or conduit.
- B. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.

1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

### 3.6 SUBGRADE INSPECTION

- A. Proof-roll subgrade below the building slabs and pavements with a pneumatic-tired dump truck to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
- B. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

### 3.7 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
  1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

### 3.8 UTILITY TRENCH BACKFILL

- A. Place backfill on subgrades free of mud, frost, snow, or ice.
- B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
- C. Trenches under Roadways: Provide 4-inch- thick, concrete-base slab support for piping or conduit less than 30 inches below surface of roadways. After installing and testing, completely encase piping or conduit in a minimum of 4 inches of concrete before backfilling or placing roadway subbase course.
- D. Initial Backfill: Place and compact initial backfill of satisfactory soil, free of particles larger than 1 inch in any dimension, to a height of 12 inches over the pipe or conduit.
  1. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.
- E. Final Backfill: Place and compact final backfill of satisfactory soil to final subgrade elevation.
- F. Warning Tape: Install warning tape directly above utilities, 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

### 3.9 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:
  - 1. Under grass and planted areas, use satisfactory soil material.
  - 2. Under walks and pavements, use satisfactory soil material.
  - 3. Under steps and ramps, use engineered fill.
  - 4. Under building slabs, use engineered fill.
  - 5. Under footings and foundations, use engineered fill.

### 3.10 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
  - 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
  - 2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

### 3.11 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 1557:
  - 1. Under structures, building slabs, steps, and pavements, scarify and recompact top 8 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent.
  - 2. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 92 percent.
  - 3. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.
  - 4. For utility trenches, compact each layer of initial and final backfill soil material at 85 percent.

### 3.12 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:
  - 1. Turf or Unpaved Areas: Plus or minus 1 inch.
  - 2. Walks: Plus or minus 1 inch.
  - 3. Pavements: Plus or minus 1/2 inch.

### 3.13 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

- A. Place subbase course and base course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place subbase course and base course under pavements and walks as follows:
  - 1. Shape subbase course and base course to required crown elevations and cross-slope grades.
  - 2. Place subbase course and base course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
  - 3. Compact subbase course and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.

### 3.14 DRAINAGE COURSE UNDER CONCRETE SLABS-ON-GRADE

- A. Place drainage course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place and compact drainage course under cast-in-place concrete slabs-on-grade as follows:
  - 1. Place drainage course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
  - 2. Compact each layer of drainage course to required cross sections and thicknesses to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

### 3.15 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform inspections:
- B. Testing Agency: Owner will engage a qualified geotechnical engineering testing agency to perform tests and inspections.

- C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
- D. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Architect.
- E. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

### 3.16 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
  - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

### 3.17 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

**END OF SECTION 31 20 00**

## **SECTION 31 62 16 - ALUMINUM SHEET PILES**

### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. This section covers all members, caps and fasteners to be used in the construction of aluminum sheet piles. This specification also covers the installation of aluminum sheet piling, trimming of the sheet pile to the lines and grades shown on the drawings or as required, and installation of the sheet pile caps.

#### **1.02 REFERENCES**

- A. The following is a list of standards which may be referenced in this section:
  - 1. American Welding Society (AWS):
    - a. D1.2, Structural Welding Code—Aluminum.

#### **1.02 INFORMATIONAL SUBMITTALS**

- A. Qualifications of proposed sheet pile installer.
- B. Welding certificates.

#### **1.03 ACTION SUBMITTALS**

- A. Pile-driving equipment data including; type, make, rated energy range, weight of hammer, weight of drive cap, and properties of hammer cushion. Contractor shall submit verification from the manufacturer that the hammer can deliver the required energy.
- B. Shop drawings and product data for all fabricated elements and field welds.
- C. Sample field quality control reports, including pile driving records.
- D. Bituminous asphalt protective coating for aluminum. Acceptable materials shall include:
  - a) Wohl Coatings Company, BB-110 Pile Paint,
  - b) Approved Equal.

#### **1.04 QUALITY ASSURANCE**

- A. Installer Qualifications: Sheet piling installer shall have, as a minimum, three (3) successful past installations of aluminum sheet piling of comparable overall heights and sections and comparable penetration into soils similar to those found on the project.
- B. Welding Qualifications: Qualify procedures and personnel according to AWS D1.2 "Structural Welding Code - Aluminum."

- C. Field Quality Control Reports: Contractor shall prepare, maintain, and provide field quality control reports for all piles per Section 3.04 of this specification.

#### 1.05 PAYMENT

- A. Lump Sum: All work associated with installing aluminum piles shall be included in the Lump Sum price submitted for the project.
- B. Work of this Section is affected as follows:
  - 1. No payment is made for rejected piles, including piles driven out of tolerance, defective piles, or piles damaged during handling or driving. The Contractor shall be responsible for providing additional piles to replace those damaged as noted above.
  - 2. No payment will be made for excess pile lengths cut-off to achieve top of pile elevations shown on the plans.

### PART 2 PRODUCTS

#### 2.01 GENERAL

- A. All sheet piles (including caps, tieback system, and hardware) shall be provided by the Contractor. Upon delivery, the Contractor and Owner shall jointly inspect and reject, if necessary, the sheet pile materials.
- B. All aluminum sheet piling shall be new and unspliced material throughout, unless otherwise reviewed and accepted by engineer.
- C. Aluminum sheet piles and special fabricated shapes shall be of a design that ensures continuous interlock throughout the entire length when in place.

#### 2.02 MATERIALS

- A. Aluminum sheet piles required for the project shall be the type and weight shown on the drawings.
  - 1. Additional length beyond those indicated on the drawings may be required to provide for trimming of tops of sheet piling.
- B. The interlocks between aluminum sheet pile sections shall be configured such that the average width of the annular space between all contact points of the interlocks shall be a maximum of one-eighth (1/8) inch.
- C. Aluminum sheet piles and interlocks shall not have excessive kinks, camber or twist that would prevent the pile from reasonably free sliding during installation.
- D. All fabricated connections shall be made with the use of angles or bent plates, as necessary, and shall be adequately welded or connected with high strength bolts as accepted by engineer.

E. Handling Holes:

1. If handling holes are provided, they shall be two (2) standard two and nine-sixteenth (2-9/16) inch diameter handling holes located six (6) inches from one end.
2. The holes shall be plugged by welding a piece of aluminum (minimum one-eighth [1/8] inch thickness) over the hole prior to installing any riprap, backfill or drop structure cap. The plated hole shall be watertight.
3. Materials and labor to cover handling holes shall be provided by the contractor.

2.03 STORAGE AND HANDLING

1. Do not subject piles to damage by impact bending stresses in storing piles onsite.
2. Contractor shall be responsible for storage and security of the materials.

PART 3 INSTALLATION

3.01 EXAMINATION

- A. Notify Architect/Engineer and owner 48 hours prior to installing first sheet pile. Architect/Engineer and owner will provide representatives to observe installation of first sheet pile and approve the methods utilized.
- B. Upon completion of installation, Architect/Engineer or Owner will verify select piles for compliance with specify tolerances and for depth driven.

3.02 PREPARATION

- A. Pile-Length Markings: Mark each pile with horizontal lines at 12-inch intervals; label the distance from pile tip at 60-inch intervals. Maintain markings on piles until approved by Architect/Engineer or Owner.
- B. Protective Coating: Apply bituminous asphalt protective coating to all surfaces of aluminum sheet piles to come in contact with cast-in-place concrete, in accordance with the manufacturer's specifications. In the absence of manufacturer application requirements, apply two coats of bituminous asphalt coating, allowing sufficient drying time between coats. Bituminous asphalt coating may be applied to sheet piles prior to driving. Coating that is damaged during the installation of the piles shall be touched up prior to placement of concrete.

3.03 INSTALLATION

- A. General:

1. All welding or gas cutting shall be in accordance with the current standards of the American Welding Society.
  2. An appropriately sized vibratory hammer shall be used for installation of the aluminum sheet piles.
  3. Virtual Refusal:
    - a. Aluminum sheet piling shall be driven to the depths shown on the drawings or to virtual refusal.
    - b. Virtual refusal is defined as a rate of penetration below 10 mm/s (~0.39 in/s) with an approved vibratory hammer or per hammer manufacturer recommendations.
    - c. The hammer shall be operating at the manufacturer's recommended stroke, frequency and speed when virtual refusal is measured.
- B. Sheet Piling Driving:
1. At the discretion of the Contractor, the aluminum sheet piling shall be assembled before driving and then driven as a continuous wall, progressively in stages, to keep the piles aligned correctly and minimize the danger of breaking the interlock between the sheets.
  2. Aluminum sheet piling shall be driven to form a tight bulkhead.
    - a. A suitable driving head/jaws shall be used and any piling which is damaged in driving or which has broken interlocks between sections shall be repaired, or pulled and replaced at the Contractor's expense. Any proposed repairs to damaged sheet piles shall be approved by the Architect/Engineer.
  3. The piling shall be driven within the following tolerances:
    - a. Alignment:
      - i) Sheet pile shall be driven to form a relatively straight line between the termini points shown on the drawings.
      - ii) Horizontal deviation of any point from a straight line connecting the two ends of the wall section shall be a maximum of six (6) inches.
    - b. Location:
      - i) 2 inches from the location indicated on the drawings after initial driving, and 4 inches after driving is completed.
    - c. Plumbness:

- i) Each individual sheet pile section shall be driven vertical, within a horizontal tolerance of two percent (2%) of any vertical length measured along the pile.
    - d. Elevation:
      - i) Tops of sheet pile sections shall be within a tolerance of one (1) inch from plan elevations.
      - ii) Contractor shall not be paid for excess sheet pile trimmed off the end of the pile to meet final grade.
- C. Contractor shall brace and/or provide soil grading as necessary during construction operations in order to provide lateral stability for the sheet pile wall. The sheet pile wall has been designed for the soil loading developed as part of the final configuration denoted on the drawings only. Other temporary loading configurations that exceed these design loads shall not be allowed.
- D. Care shall be taken during driving to keep from causing deformations of the top of the piles, splitting of section, or breaking of the interlock between sections. Care shall also be taken during driving to prevent and correct any tendency of sheet piles to twist or lose plumb.
- E. Aluminum sheet piling shall be driven with the ball-end leading. Proper care and planning shall be used to allow for this construction procedure in both immediate and possible future walls.
- F. Alternate sheet piles shall be reversed end for proper interlocking in the “normal” position. Piles shall also be aligned properly to maintain a “normal” driving width.
- G. For sheet piles driven into the native soils, pre-drilled soils, or excavated soils, a vibratory driver shall be used as long as the required depth is obtained.
- H. Aluminum sheet pile that is full length, as shown on the drawings, and is required to be driven below the specified cutoff elevation shall be spliced with additional aluminum sheet piling with a full penetration butt weld.
- I. Splice locations, if necessary, shall be reviewed and accepted by engineer prior to installation.
- J. Install sheet pile caps per the manufacturer’s recommendations.

### 3.04 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Tests and Inspections:

1. Weld Testing: In addition to visual inspection, splice welds shall be tested and inspected according to AWS D1.2.
- C. Aluminum piles will be considered defective if they do not pass tests and inspections.
- D. Prepare test and inspection reports.
  1. Contractor shall provide to the owner a record of: driven depth of each pile; values for tolerance items; method utilized for checking tolerances; and confirmation that piles are driven within tolerances.
    - a. Contractor shall include the following items in the pile driving records: blow counts per foot of penetration, type and size of hammer used, rate of operation of pile driving equipment, plumbness, tip elevation, top elevation (before and after cut-off), compiled and attested to by a qualified professional engineer.
  2. Sheet piles shall be left uncut, with depth markings legible, until the Architect/Engineer or Owner can confirm the driven depths provided by visual inspection of the increments marked on the sheet pile.

**END OF SECTION 31 62 16**

## **SECTION 31 62 19 - TIMBER PILES**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. Section includes round timber piles. This specification also covers the installation of timber piles and trimming of the piles to the grades shown on the drawings or as required.

#### **1.2 REFERENCES**

- A. The following is a list of standards which may be referenced in this section:
  - 1. American Wood Protection Association (AWPA)
    - a. AWPA Book of Standards (2017 or Latest Edition)
  - 2. ASTM International (ASTM)
    - a. D 25, Standard Specification for Round Timber Piles
    - b. A1011/ A1011M, Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength

#### **1.3 INFORMATIONAL SUBMITTALS**

- A. Qualifications of proposed pile installer.
- B. Welding certificates.

#### **1.4 ACTION SUBMITTALS**

- A. Product Data: For each type of product.
- B. Shop Drawings: For timber piles including fabrication and installation details for piles, details of driving shoes, tips or boots, and pile butt protection.
- C. Sample field quality-control reports, including pile driving records.
- D. Pile-driving equipment data including; type, make, rated energy range, weight of hammer, weight of drive cap, and properties of hammer cushion. Contractor shall submit verification from the manufacturer that the hammer can deliver the required energy.

## 1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Timber piling installer shall have, as a minimum, three (3) successful past installations of timber piling of comparable overall lengths and driving criteria similar to those found on the project.
- B. Field Quality Control Reports: Contractor shall prepare, maintain, and provide field quality control reports for all piles per Section 3.4 of this specification.

## 1.6 PAYMENT

- A. Lump Sum: All work associated with installing timber piles shall be included in the Lump Sum price submitted for the project.
- B. Work of this Section is affected as follows:
  - 1. Lump sum prices include labor, tools, equipment, and incidentals for driving, cutting off, capping, and disposing of cutoffs.
  - 2. Rejected piles, including piles driven out of tolerance, defective piles, or piles damaged during handling or driving, shall be removed and replaced at no additional cost to the owner.

## PART 2 - PRODUCTS

### 2.1 GENERAL

- A. All piles (including caps and hardware) shall be provided by the Contractor. Upon delivery, the Contractor and Owner shall jointly inspect and reject, if necessary, the pile materials. Once the pile materials have been accepted, they become the responsibility of the Contractor.
- B. All piling shall be new and unspliced material throughout, unless otherwise reviewed and accepted by Architect/Engineer.

### 2.2 MATERIALS

- A. Round Timber Piles: ASTM D 25, unused, clean peeled, one piece from butt to tip; of the following species and size basis:
  - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Long Life Treated Wood, Hebron, MD; (410) 543-0700.
    - b. Culpeper Products, Culpeper, VA; (540) 825-5201.
  - 2. Species: Southern yellow pine.
  - 3. Size Basis: Class B with natural taper, diameter as shown on plans.

- B. Pressure-treat round timber piles according to AWPA U1 as follows:
  - 1. Service Condition: UC5B Marine Use Central Waters
  - 2. Treatment: Waterborne preservative, severe marine borer hazard.
    - a. Chromated Copper Arsenate (CCA): 2.5 lbs/cf retention.
    - b. Ammoniacal Copper Zinc Arsenate (ACZA): 2.5 lbs/cf retention.

### 2.3 PILE ACCESSORIES

- A. Driving Shoes: Fabricate from ASTM A 1011/A 1011M, hot-rolled carbon-steel strip to suit pile-tip diameter. Pile shoes shall feature conical points.

### 2.4 STORAGE AND HANDLING

- A. Handle and store piles at Project site to prevent breaks, cuts, abrasions, or other physical damage and as required by AWPA M4. Do not drill holes or drive spikes or nails into pile below cutoff elevation.
- B. Contractor shall be responsible for storage and security of the materials.

## PART 3 - INSTALLATION

### 3.1 EXAMINATION

- A. Notify Architect/Engineer and owner 48 hours prior to installing first pile. Architect/Engineer and Owner will provide representatives to observe installation of first timber pile and approve the methods utilized.
- B. Upon completion of installation, Architect/Engineer or Owner will verify select piles for compliance with specify tolerances and for depth driven.

### 3.2 PREPARATION

- A. Pile Tips: Cut and shape pile tips to accept driving shoes. Fit and fasten driving shoes to pile tips according to manufacturer's written instructions.
- B. Pile Butt: Trim pile butt and cut perpendicular to longitudinal axis of pile. Chamfer and shape butt to fit tightly to driving cap of hammer.
- C. Field-Applied Wood Preservative: Treat field cuts, holes, and other penetrations according to AWPA M4.
- D. Pile-Length Markings: Mark each pile with horizontal lines at 12-inch intervals; label the distance from pile tip at 60-inch intervals. Maintain markings on piles until approved by Architect/Engineer or Owner.

### 3.3 INSTALLATION

#### A. General:

1. Continuously drive piles to elevations, minimum embedment distances, and/or penetration resistance indicated. Establish and maintain axial alignment of leads and piles before and during driving.

#### B. Heaved Piles: Redrive heaved piles to tip elevation at least as deep as original tip elevation with a driving resistance at least as great as original driving resistance. Correction of heaved piles shall be at the Contractor's expense.

#### C. Driving Tolerances: Drive piles without exceeding the following tolerances, measured at pile heads:

1. Location: 2 inches from location indicated after initial driving, and 4 inches after pile driving is completed.
2. Plumb: Maintain 1 inch in 48 inches from vertical, or a maximum of 4 inches, measured when pile is aboveground in leads.
3. Elevation: Tops of piles shall be within a tolerance of one (1) inch from plan elevations. Contractor shall not be paid for excess pile trimmed off the end of the pile to meet final grade.

#### D. Withdraw damaged or defective piles and piles that exceed driving tolerances, and install new piles within driving tolerances. Fill holes left by withdrawn piles as directed by Architect/Engineer.

#### E. Virtual refusal shall be defined per the hammer manufacturer's recommendation using an approved pile hammer.

#### F. Cut off butts of driven piles square with pile axis and at elevations indicated.

1. Cover cut-off piling surfaces with minimum three coats of preservative treatment according to AWPA M4.

### 3.4 FIELD QUALITY CONTROL

#### A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.

#### B. Prepare test and inspection reports.

1. Contractor shall provide to the owner a record of: driven depth of each pile; values for tolerance items; method utilized for checking tolerances; and confirmation that tolerances were driven within tolerances.
  - a. Contractor shall also include the following items in the pile driving records: blow counts for each foot of penetration, type and size of hammer used, rate of operation of pile driving equipment, tip elevation, and butt elevation (before and after cut-off), for each pile, compiled and attested to by a qualified professional engineer.

2. Timber piles shall be left uncut, with depth markings legible, until the Architect/Engineer or Owner can confirm the driven depths and installation quality provided.

**END OF SECTION 31 62 19**

## **SECTION 33 05 00 - COMMON WORK RESULTS FOR UTILITIES**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. This Section includes the following:
  - 1. Piping joining materials.
  - 2. Dielectric fittings.
  - 3. Sleeves.
  - 4. Identification devices.
  - 5. Grout.
  - 6. Piping system common requirements.
  - 7. Equipment installation common requirements.
  - 8. Concrete bases.
  - 9. Metal supports and anchorages.

#### **1.2 DEFINITIONS**

- A. Exposed Installations: Exposed to view outdoors or subject to outdoor ambient temperatures and weather conditions.

#### **1.3 ACTION SUBMITTALS**

- A. Product Data: For the following:
  - 1. Dielectric fittings.
  - 2. Identification devices.

#### **1.4 QUALITY ASSURANCE**

- A. Comply with ASME A13.1 for lettering size, length of color field, colors, and viewing angles of identification devices.

### **PART 2 - PRODUCTS**

#### **2.1 PIPING JOINING MATERIALS**

- A. Pipe-Flange Gasket Materials: Suitable for chemical and thermal conditions of piping system contents.

1. ASME B16.21, nonmetallic, flat, asbestos free, 1/8-inch maximum thickness, unless otherwise indicated.
    - a. Full-Face Type: For flat-face, Class 125, cast-iron and cast-bronze flanges.
    - b. Narrow-Face Type: For raised-face, Class 250, cast-iron and steel flanges.
  2. AWWA C110, rubber, flat face, 1/8 inch thick, unless otherwise indicated; and full-face or ring type, unless otherwise indicated.
- B. Flange Bolts and Nuts: Stainless steel, unless otherwise indicated.
- C. Plastic, Pipe-Flange Gasket, Bolts, and Nuts: Type and material recommended by piping system manufacturer, unless otherwise indicated.
- D. Solvent Cements for Joining Plastic Piping:
1. ABS Piping: ASTM D 2235.
  2. CPVC Piping: ASTM F 493.
  3. PVC Piping: ASTM D 2564. Include primer according to ASTM F 656.
  4. PVC to ABS Piping Transition: ASTM D 3138.

## 2.2 DIELECTRIC FITTINGS

- A. Dielectric Fittings, General: Assembly of copper alloy and ferrous materials or ferrous material body with separating nonconductive insulating material suitable for system fluid, pressure, and temperature.
- B. Dielectric Unions:
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Capitol Manufacturing Co.
    - b. Central Plastics Company.
    - c. EpcO Sales, Inc.
    - d. HART Industrial Unions, LLC.
    - e. Watts; a Watts Water Technologies company.
    - f. Zurn Industries, LLC.
  2. Description: Factory fabricated, union, NPS 2 and smaller.
    - a. Pressure Rating: 150 psig minimum at 180 deg F.
    - b. End Connections: Solder-joint copper alloy and threaded ferrous; threaded ferrous.
- C. Dielectric Nipples:
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- a. Elster Perfection Corporation.
  - b. Precision Plumbing Products.
  - c. Victaulic Company.
2. Description: Electroplated steel nipple with inert and noncorrosive, thermoplastic lining.
- a. Pressure Rating: 300 psig at 225 deg F.
  - b. End Connections: Threaded or grooved.

### 2.3 GROUT

- A. Description: ASTM C 1107, Grade B, nonshrink and nonmetallic, dry hydraulic-cement grout.
1. Characteristics: Post hardening, volume adjusting, nonstaining, noncorrosive, nongaseous, and recommended for interior and exterior applications.
  2. Design Mix: 5000-psi, 28-day compressive strength.
  3. Packaging: Premixed and factory packaged.

## PART 3 - EXECUTION

### 3.1 DIELECTRIC FITTING APPLICATIONS

- A. Connect piping of dissimilar metals with the following:
1. NPS 2 and Smaller: Dielectric unions.
  2. NPS 2-1/2 and Larger: Dielectric nipples.

### 3.2 PIPING INSTALLATION

- A. Install piping according to the following requirements and utilities Sections specifying piping systems.
- B. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations to layout are approved on the Coordination Drawings. Diagonal runs are prohibited unless specifically indicated otherwise.
- C. Install piping to permit valve servicing.
- D. Install piping at indicated slopes.
- E. Install piping free of sags and bends.
- F. Install fittings for changes in direction and branch connections.

- G. Select system components with pressure rating equal to or greater than system operating pressure.
- H. Verify final service locations and pad placement for roughing-in.

### 3.3 PIPING JOINT CONSTRUCTION

- A. Join pipe and fittings according to the following requirements and utilities Sections specifying piping systems.
- B. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.
- C. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.
- D. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:
  - 1. Apply appropriate tape or thread compound to external pipe threads unless dry seal threading is specified.
  - 2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.
- E. Flanged Joints: Select appropriate gasket material, size, type, and thickness for service application. Install gasket concentrically positioned. Use suitable lubricants on bolt threads.
- F. Grooved Joints: Assemble joints with grooved-end pipe coupling with coupling housing, gasket, lubricant, and bolts according to coupling and fitting manufacturer's written instructions.
- G. Plastic Piping Solvent-Cemented Joints: Clean and dry joining surfaces. Join pipe and fittings according to the following:
  - 1. Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements.
  - 2. ABS Piping: Join according to ASTM D 2235 and ASTM D 2661 appendixes.
  - 3. CPVC Piping: Join according to ASTM D 2846/D 2846M Appendix.
  - 4. PVC Pressure Piping: Join schedule number ASTM D 1785, PVC pipe and PVC socket fittings according to ASTM D 2672. Join other-than-schedule-number PVC pipe and socket fittings according to ASTM D 2855.
  - 5. PVC Nonpressure Piping: Join according to ASTM D 2855.
  - 6. PVC to ABS Nonpressure Transition Fittings: Join according to ASTM D 3138 Appendix.
- H. Plastic Pressure Piping Gasketed Joints: Join according to ASTM D 3139.
- I. Plastic Nonpressure Piping Gasketed Joints: Join according to ASTM D 3212.

- J. Plastic Piping Heat-Fusion Joints: Clean and dry joining surfaces by wiping with clean cloth or paper towels. Join according to ASTM D 2657.
  - 1. Plain-End PE Pipe and Fittings: Use butt fusion.
  - 2. Plain-End PE Pipe and Socket Fittings: Use socket fusion.
- K. Bonded Joints: Prepare pipe ends and fittings, apply adhesive, and join according to pipe manufacturer's written instructions.

### 3.4 PIPING CONNECTIONS

- A. Make connections according to the following, unless otherwise indicated:
  - 1. Install unions, in piping NPS 2 and smaller, adjacent to each valve and at final connection to each piece of equipment.
  - 2. Install flanges, in piping NPS 2-1/2 and larger, adjacent to flanged valves and at final connection to each piece of equipment.
  - 3. Install dielectric fittings at connections of dissimilar metal pipes.

### 3.5 EQUIPMENT AND COMPONENT INSTALLATION

- A. Install equipment and components level and plumb, unless otherwise indicated.
- B. Install equipment and components to facilitate service, maintenance, and repair or replacement. Connect for ease of disconnecting, with minimum interference with other installations. Extend grease fittings to an accessible location.
- C. Install to allow right of way to piping systems installed at required slope.

### 3.6 CONCRETE BASES

- A. Concrete Bases: Install concrete bases according to equipment manufacturer's written instructions and according to Project Drawings.
  - 1. Construct concrete bases as required for support, but not less than 4 inches larger in both directions than supported unit.
  - 2. Use 3000-psi, 28-day compressive-strength concrete and reinforcement.

### 3.7 GROUTING

- A. Mix and install grout for equipment base bearing surfaces, pump and other equipment base plates, and anchors.
- B. Clean surfaces that will come into contact with grout.
- C. Provide forms as required for placement of grout.

- D. Avoid air entrapment during placement of grout.
- E. Place grout, completely filling equipment bases.
- F. Place grout on concrete bases and provide smooth bearing surface for equipment.
- G. Place grout around anchors.
- H. Cure placed grout.

**END OF SECTION 33 05 00**

**SECTION 60 20 03 – PCC MASONRY, CLASS B**  
**SECTION 60 20 15 – PCC MASONRY, CLASS A**

**Description of Work:**

The item shall consist of furnishing and installing all necessary materials, concrete, bar reinforcement, excavation and backfill, dewatering and incidentals needed for constructing portland cement concrete elements as shown and noted on the plans and specifications. Excavation and dewatering which are necessary for construction of portland cement concrete masonry subfoundation shall be included with work under this item.

**Materials and Construction Methods:**

**Concrete:**

All materials used in the production of portland cement concrete (P.C.C.) shall conform to the applicable requirements of Section 610 and 1022 of the Standard Specifications for Class A and/or Class B concrete as specified on the plans. Bar reinforcement as shown on the plans, shall conform to the requirements of Section 611 as applicable. All applicable requirements of Section 610 of the Standard Specifications shall be in effect. The Contractor shall submit a separate DelDOT approved concrete mix to match each Class of Concrete specified on the Contract Plans.

**Cement Concrete Criteria**

Class of Concrete	28-Day Structural Design Compressive Strength (psi)	Maximum Water Cement Ratio (lbs/lbs)	Minimum Design Cement Content (lbs/cy)	Air Content (Percent)	Minimum Mix Design Compressive Strength, (psi)	
					7 Days	28 Days
A	4500	0.40	705	4.0 – 7.0	3,600	4,500
B	3000	0.45	564	4.0 – 7.0	2,750	3,300

**Excavation and Backfill:**

Excavation and backfill for P.C.C. shall be performed in accordance with Section 202 of the Standard Specifications.

**Quality Control Testing During Construction:**

Contractor shall employ and pay for services of an Independent Testing Laboratory to perform tests in accordance with the most recent test methods of AASHTO, or ASTM in effect on the date of advertisement for bid proposals:

- a. Slump: One test at point of discharge for each concrete truck delivery.
- b. Compression Test Specimen: One set of four standard cylinders for each compressive-strength test.
- c. Compressive-Strength Tests: One set for each concrete truck delivery; one specimen tested at 7 days, two specimens tested at 28 days, and one specimen retained in reserve for later testing if required.
- d. Test results will be reported in writing to Engineer within 24 hours after tests.
- e. Concrete that fails the 28-day compressive strength shall be tested by means of core samples of the in-place concrete.
- f. Concrete with core samples that fail the required minimum compressive strength shall be rejected, removed and replaced at the discretion of the Owner at no additional cost to the Owner or the Owner's representatives.

**Method of Measurement and Basis of Payment:**

The item shall be included in the lump sum price bid for the contract with no separate measurement made for the individual item including but not limited to furnishing and placing all materials required, concrete, bar reinforcement, excavation, backfill and backfilling, dewatering, finishing concrete surfaces, all labor, tools, equipment and necessary incidentals to complete the work, and testing.

**END OF SECTION 60 20 03 / 60 20 15**

## **Appendix #1**

### **DNREC Subaqueous Lands Permit**



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES &  
ENVIRONMENTAL CONTROL  
**DIVISION OF WATER**  
89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

WETLANDS & SUBAQUEOUS  
LANDS SECTION

TELEPHONE (302) 739-9943  
FAX (302) 739-6304

DNREC Division of Fish & Wildlife  
Attention: Jeremy Ashe  
89 Kings Hwy  
Dover, DE 19901  
Tax Parcel: 1-33-16.00-172.00 & 2-34-32.00-7.00

Subaqueous Lands Permit: SP-182/18  
Associated Permit: MP-182/18  
Date of Issuance: 9-25-2018  
Construction Expiration Date: 9-25-2021  
Amended Date: N/A

### SUBAQUEOUS LANDS PERMIT

**GRANTED TO:**

**DNREC Division of Fish & Wildlife**

**TO REMOVE:**

**An existing single lane boat ramp**

**TO CONSTRUCT AND UTILIZE:**

- A 16 by 40 foot long concrete boat ramp consisting of 26.94 cubic yards of fill
- A 6 by 60 foot long courtesy dock

**TO INSTALL:**

- 174 linear feet of steel sheet piling to contain the fill for the construction of an expanded parking facility
- A temporary cofferdam to create a dry working environment for the installation of the concrete boat ramp.

**TO FILL:**

- Approximately .061 acres consisting of 210 cubic yards of fill for the construction of an expanded parking facility

**TO MITIGATE:**

- Impacts to subaqueous lands by managing Japanese Knotweed to promote native wetland growth

*Delaware's good nature depends on you!*

**LOCATED ON PUBLIC SUBAQUEOUS LANDS:**

**Along Gravel Hill Road  
In Millsboro Pond  
Millsboro, Sussex County, Delaware**

Pursuant to the provisions of 7 Del. C. 7205, the Department's Regulations Governing the Use of Subaqueous Lands, permission is hereby granted on this 25<sup>th</sup> day of September A.D. 2018 to construct the above referenced project in accordance with the approved plans (14 sheets), as approved on September 10, 2018; and application dated April 28, 2018, and received by this Division on May 1, 2018.

WHEREAS, DNREC Division of Fish & Wildlife, recipient of an easement to Millsboro Pond, has applied for permission to install the indicated structures for public use; and;

WHEREAS, pursuant to the provisions of 7 Del. C., §7203, the Secretary of the Department of Natural Resources and Environmental Control through his duly authorized representative finds that it is not contrary to the public interest if this project is approved subject to the terms and conditions herein set forth.

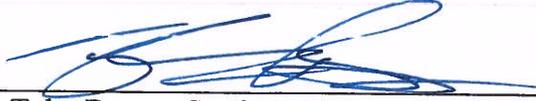
NOW THEREFORE, this Permit is issued subject to the attached Subaqueous Lands General Conditions and the following special conditions:

**SPECIAL CONDITIONS**

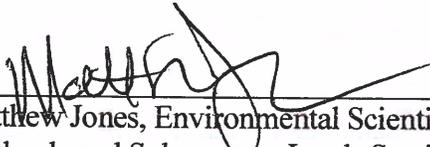
1. This approval is in accordance with the plans and application submitted to the Department of Natural Resources and Environmental Control, a copy of which is attached hereto and made a part hereof.
2. The permittee is responsible to ensure that all workers are informed of the provisions of the Permits. All workers shall be trained in the proper avoidance of protected environmental resources and be made aware of the limits of construction in environmentally protected areas.
3. This Permit is granted for the purpose of providing expanded launching access to Millsboro Pond, as stated in the Permit application. Any other use without prior approval shall constitute reason for this Permit being revoked.
4. The Wetlands and Subaqueous Lands Section shall be notified at least five (5) working days prior to the commencement of work.
5. To maintain habitat for sunfish, no construction shall take place between April 1<sup>st</sup> and July 15<sup>th</sup> of any given year to protect the spawning of these species. If the cofferdam is installed prior to April 1<sup>st</sup> it can be removed at any time.
6. Please notify Edna Stetzar ([Edna.Stetzar@state.de.us](mailto:Edna.Stetzar@state.de.us), 302-735-8654) at least two weeks prior to any necessary boat ramp closures so that a press release can be issued to inform fishing clubs that may have already scheduled tournaments.
7. The work authorized by this Permit is subject to the terms and conditions of the appropriate Department of the Army Nationwide Permit.

8. Permanent impacts to waters shall be performed in a manner that minimizes impacts to the greatest extent possible.
9. Construction shall be performed so that the associated debris is contained and disposed of properly. If any debris is discharged into Millsboro Pond or adjacent lands, it shall be collected, contained and disposed of properly.
10. Upon project completion, no construction materials or debris shall be left on-site.
11. All fill materials associated with the proposed project shall be clean and free from oils, grease, asphalt and other contaminants.
12. The permittee shall employ measures during construction to prevent spills of fuels or lubricants. In the event of a spill, efforts shall be taken to prevent its entry into Millsboro Pond. Any spills entering the associated waters shall be contained immediately. This office shall be notified of any spill(s) within six hours of occurrence. This office will determine the effectiveness of spill and contamination removal and specify remediation as necessary.
13. All equipment and machinery utilized in construction shall arrive on-site in a clean condition and shall be maintained free of fluid leaks. An emergency spill kit shall be available on-site to handle any fluid leaks or spills from machinery.
14. Erosion and sediment control measures shall be implemented in accordance with the specifications and criteria in the current Delaware Erosion and Sediment Control Handbook, so as to minimize entry and dispersal of sediment and other contaminants in surface waters.
15. The applicant shall offset the permanent impacts to subaqueous lands by spraying for Japanese Knotweed between the ponds edge and Gravel Hill Road for the length of the tax parcel (2-34-32.00-7.00) to promote native wetland growth. Spraying/Monitoring shall occur annually for a period of at least three (3) years. A monitoring report shall be submitted to the Wetlands and Subaqueous Lands Section annually which includes the following: chemical sprayed, quantity used, application method, success rate, and percentage of new native species growth.
16. The Contractors Completion Report shall be filled out and returned within 10 days of completion of the authorized work.

IN WITNESS WHEREOF, I, Tyler Brown, the duly authorized representative of Shawn M. Garvin, Secretary of the Department of Natural Resources and Environmental Control, have hereunto set my hand this 25<sup>th</sup> day of September, 2018.



By Tyler Brown, Section Manager  
the duly authorized representative of the Secretary of the  
Department of Natural Resources and Environmental Control



Matthew Jones, Environmental Scientist  
Wetlands and Subaqueous Lands Section



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES &  
ENVIRONMENTAL CONTROL  
**DIVISION OF WATER**  
89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

WETLANDS & SUBAQUEOUS  
LANDS SECTION

TELEPHONE (302) 739-9943  
FAX (302) 739-6304

**SUBAQUEOUS LANDS PERMIT  
CONTRACTOR'S COMPLETION REPORT  
POST-CONSTRUCTION**

**Subaqueous Lands Permit Number: SP-182/18**

**Name:** DNREC Division of Fish & Wildlife

**Address:** 89 Kings Hwy  
Dover, DE 19901

**Parcel #:** 1-33-16.00-172.00  
& 2-34-32.00-7.00

*I hereby certify that I have constructed the project authorized by the above-referenced Subaqueous Lands Permit in accordance with the approved plans for the project.*

\_\_\_\_\_  
**Printed Name of Contractor**

\_\_\_\_\_  
**Name of Company**

\_\_\_\_\_  
**Contractor's Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Telephone Number**

Upon completion of construction, this form shall be completed, signed by the contractor, and mailed to the Wetlands and Subaqueous Lands Section at:

**DNREC  
Wetlands and Subaqueous Lands Section  
89 Kings Highway  
Dover, Delaware 19901**

Or faxed to the Wetlands and Subaqueous Lands Section at: **302-739-6304**

***This form must be received by the Department within ten days of the date that construction is completed.***

\_\_\_\_\_  
*For official use only*

Compliance inspection date \_\_\_\_\_ Built in accordance with plans  Yes  No

Scientist: \_\_\_\_\_

*Delaware's good nature depends on you!*



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES &  
ENVIRONMENTAL CONTROL  
DIVISION OF WATER  
89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

**GENERAL CONDITIONS**

1. The permittee and contractor shall at all times comply with all applicable laws and regulations of the Department of Natural Resources and Environmental Control.
2. The activities authorized herein shall be undertaken in accordance with the Permit conditions, the final stamped and approved plans, and with the information provided in the Permit application.
3. A copy of this Permit and the stamped approved plans shall be available on-site during all phases of construction activity.
4. The conditions contained herein shall be incorporated into any and all construction contracts associated with the construction authorized herein. The permittee and contractor are responsible to ensure that the workers executing the activities authorized by this Permit have full knowledge of, and abide by, the terms and conditions of this Permit.
5. No portion of the structure shall be constructed using creosote treated lumber.
6. No portion of the structure(s) authorized by this Permit shall exceed the dimensions for that structure identified on Page One of this Permit.
7. The activities authorized herein shall be conducted so as not to violate the State of Delaware's Surface Water Quality Standards in effect at the date of Permit authorization.
8. The issuance of this Permit does not constitute approval for any activities that may be required by any other local, state or federal government agency.
9. The issuance of this Permit does not imply approval of any other part, phase, or portion of any overall project the permittee may be contemplating.
10. This Permit authorizes only the activities described herein. Modifications to the project may require a supplemental approval from this office prior to the initiation of construction. A determination of the need for a supplemental approval will be made by this office pursuant to the permittee submitting written notification and revised plans indicating project changes. Failure to contact the Department prior to executing changes to the project shall constitute reason for this Permit being revoked.
11. The Contractors Completion Report shall be filled out and returned within 10 days of completion of the authorized work.
12. The permittee shall protect and hold the State of Delaware harmless from any loss, cost or damage resulting from the activities authorized herein.
13. Representatives of the Department of Natural Resources and Environmental Control shall be allowed to access the property to inspect all work during any phase of the construction and may conduct pre and post-construction inspections, collect any samples or conduct any tests that are deemed necessary.
14. The permittee shall maintain all authorized structures and activities in a good and safe condition.

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15. All construction materials, waste or debris associated with this activity shall be properly disposed of and contained at all times to prevent its entry into waters or wetlands. Construction materials shall not be stockpiled in subaqueous lands or wetlands.
16. The permittee and contractor shall employ measures during construction to prevent spills of fuels, lubricants or other hazardous substances. In the event of a spill, the permittee and contractor shall make every effort to stop the leak and contain the spill, and shall immediately contact the Hazardous Spill Response Team (HAZMAT) at 1-800-662-8802 and this office at (302) 739-9943. The permittee and contractor are responsible to comply with all directives to contain and clean up the spilled material(s) as stipulated by the HAZMAT team, and to restore the site as may be required by this office.
17. No construction shall occur after the construction expiration date identified on Page One of this Permit. The permittee may file a construction expiration date extension request of up to one (1) year if necessary to complete the authorized work. Such requests must be received by the Department at least thirty (30) days prior to the construction expiration date.
18. Any actions, operations or installations which are found by the Department to be contrary to the public interest may constitute reason for the discontinuance and/or removal of said action, operation or installation. Removal and restoration shall be at the expense of the permittee and/or upland property owner within thirty (30) days of receipt of written notice of revocation and demand for removal.
19. Disturbance of subaqueous lands or wetlands adjacent to the authorized structures or activities is prohibited unless specifically addressed in the special conditions of this Permit. Disturbance of subaqueous lands or wetlands in the path of construction activities shall be minimized. Any temporarily impacted subaqueous lands or wetlands shall be returned to pre-disturbance elevations and conditions.
20. This Permit is personal and may not be transferred without the prior written consent of the Department. Prior to the transfer of the adjacent upland property, the permittee shall obtain the written consent of the Department to transfer the Permit to the new upland property owner. Failure to obtain such written consent may result in the revocation of this Permit and the removal of all structures authorized by this Permit at the expense of the permittee.
21. The permittee shall notify the Wetlands and Subaqueous Lands Section prior to the commencement of the work authorized by this Permit.
22. No portion of the structure shall be installed within ten (10) feet of the adjacent property lines.
23. No portion of the structure shall exceed 20% of the width of the water body as measured at mean low water.
24. The structures authorized by this Permit shall be constructed and maintained in a manner so as to assure water access to adjacent properties.
25. This Permit does not authorize any future repairs below the water line, or any additions or modifications to the structures authorized herein. Such activities require separate written authorization from the Department of Natural Resources and Environmental Control.
26. Failure to comply with any of the terms or conditions of this Permit may result in enforcement action which could include the revocation of this Permit and subsequent restoration of the site to preconstruction conditions.



**WETLANDS AND SUBAQUEOUS LANDS SECTION**

PERMIT NO.: SP-182/18

CONSTRUCTION EXPIRATION DATE: 9-25-2021

**TO CONSTRUCT AND UTILIZE:**

- A 16 by 40 foot long concrete boat ramp consisting of 26.94 cubic yards of fill
- A 6 by 60 foot long floating courtesy dock

**TO INSTALL:**

- 174 linear feet of steel sheet piling to contain the fill for the construction of an expanded parking facility
- A temporary cofferdam to create a dry working environment for the installation of the concrete boat ramp.

**TO FILL:**

- Approximately .061 acres consisting of 210 cubic yards of fill for the construction of an expanded parking facility

**TO MITIGATE:**

- Impacts to subaqueous lands by managing Japanese Knotweed to promote native wetland growth

**LOCATED ON PRIVATE SUBAQUEOUS LANDS:**

Along Gravel Hill Road  
In Millsboro Pond  
Millsboro, Sussex County, Delaware

ISSUED TO: DNREC Division Of Fish & Wildlife

LOCATION OF WORK: Same as above

**DISPLAY THIS CERTIFICATE IN A HIGHLY  
VISIBLE LOCATION ON THE JOB SITE.**

Authorized by:



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES &  
ENVIRONMENTAL CONTROL  
**DIVISION OF WATER**  
89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

WETLANDS & SUBAQUEOUS  
LANDS SECTION

TELEPHONE (302) 739-9943  
FAX (302) 739-6304

DNREC Division of Fish & Wildlife  
Attention: Jeremy Ashe  
89 Kings Hwy  
Dover, DE 19901  
Tax Parcel: 1-33-16.00-172.00 & 2-34-32.00-7.00

Marina Permit: MP-182/18  
Associated Permit: SP-182/18  
Date of Issuance: 9-25-2018  
Marina Construction Expiration Date: 9-25-2021  
Amended Date: N/A

### MARINA PERMIT

#### GRANTED TO:

**DNREC Division of Fish & Wildlife**

#### TO OPERATE AND UTILIZE:

**A 16 wide by 40 foot long concrete public boat ramp  
A 6 foot wide by 60 foot long courtesy dock**

#### LOCATED ON PUBLIC SUBAQUEOUS LANDS:

**Along Gravel Hill Road  
In Millsboro Pond  
Millsboro, Sussex County, Delaware**

Pursuant to the provisions of 7 Del. C., Chapter 60, Environmental Control, Chapter 72, the Subaqueous Lands Act, and the "Delaware Marina Regulations" and "Regulations Governing the Use of Subaqueous Lands" permission is hereby granted on this 25<sup>th</sup> day of September A.D. 2018, to construct and operate the above-referenced marina in accordance with the approved plans (14 sheets) as approved on September 10, 2018, and the application dated April 28, 2018 and received by the Department on May 1, 2018.

WHEREAS, DNREC Division of Fish & Wildlife, recipient of an easement to Millsboro Pond, has applied for permission to utilize the indicated structures for public use; and;

*Delaware's good nature depends on you!*

WHEREAS, pursuant to the provisions of 7 Del. C., Chapters 60, Environmental Control, Chapter 72, the Subaqueous Lands Act, and the “Delaware Marina Regulations” and “Regulations Governing the Use of Subaqueous Lands”, the Secretary of the Department of Natural Resources and Environmental Control through his duly authorized representative finds that it is not contrary to the public interest if this project is approved subject to the terms and conditions herein set forth.

NOW THEREFORE, this Permit is issued subject to the attached Subaqueous Permit General Conditions and the following Management Requirements and Special Conditions:

#### **A. MANAGEMENT REQUIREMENTS**

##### **1. Changes of Permit Terms or Conditions**

A report must be submitted to the Department describing any anticipated marina facility changes or expansions that would require modification of the terms and conditions of this Permit. The Department must approve changes prior to implementation.

##### **2. Noncompliance Notification**

In the case of noncompliance with State regulations and Permit conditions, the permittee shall report to the Department:

Orally **within twenty-four (24) hours** from the time the permittee became aware of any noncompliance which may endanger public health or the environment at (302) 739-9943 during normal working hours, or (800) 662-8802 after normal working hours, and In writing, as soon as possible, and within five (5) days of the date the permittee knows or should know of any noncompliance, unless this period is extended by the Department. This written notification shall contain:

- i. A description of the condition of noncompliance and its cause, and
- ii. The period of noncompliance, including exact dates and times, or if not yet corrected, the anticipated time the noncompliance is expected to continue and the steps being taken to reduce, eliminate and prevent recurrence of the non-complying condition.

##### **3. Facilities Operation**

The permittee and contractor shall at all times maintain in good working order, and operate as efficiently as possible, all systems and equipment used for construction activities or to achieve compliance with the terms and conditions of this Permit. The facility shall be operated in accordance with the approved Marina’s Operations and Maintenance Plan.

#### **4. Operations and Maintenance Plan**

Within 90 days of the issuance of this Marina Permit, the permittee shall submit an updated O&M Plan that reflects the marina authorized herein to the Wetlands and Subaqueous Lands Section for review and approval. Every four years thereafter the permittee shall submit an updated O&M plan for review and approval by the Wetlands and Subaqueous Lands Section.

#### **5. Transferability**

This Permit may not be transferred without the prior written consent of the Department. Prior to the transfer of the property, the permittee shall obtain the written consent of the Department to transfer this Permit to the new property owner. Failure to obtain such written consent may result in the revocation of this Permit which would require the removal of all structures authorized by this Permit at the expense of the permittee.

This Permit may be transferable upon Department review and approval of the stated intentions, provided that a letter explaining the intention to transfer, accompanied by a copy of the Permit, is provided to the Department and signed by both the transferor and the transferee at least ten (10) days prior to the actual transfer. A new, updated Operations and Maintenance Plan must be submitted for Department review and approval whenever the marina ownership changes.

#### **6. Reporting a Discharge**

Any person who causes or contributes to the discharge of a pollutant into State waters, whether in excess of any conditions specified in this Permit or in the absence of a specific permit condition, shall report such an incident to the Department as required under 7 Del. C., §6028.

#### **7. Permit Modification, Suspension or Revocation**

This Permit may be modified, suspended or revoked in whole or in part during its term for cause including, but not limited to, the following:

- i. Violation of any terms or conditions of this Permit;
- ii. Obtaining this Permit by misrepresentation or failure to disclose fully all relevant facts, or if information and data provided by the applicant in good faith proves to be false;
- iii. Information that the permitted activity poses a threat to human health or welfare;
- iv. Failure by the permittee to obtain all other applicable Federal, State or local permits or approvals which may be required or failure to comply with such permits or approvals.

## **8. Liability Clause**

Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under any State law or regulation.

## **9. Property Rights**

The issuance of this Permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

## **10. Severability**

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

## **SPECIAL CONDITIONS**

### **1. Purpose:**

The project in subaqueous lands shall be for authorization of the construction of the public boat launch and the installation of a courtesy dock.

### **2. Vessel Maintenance:**

This Permit does not authorize any major vessel maintenance or repair activities at the marina, whether by marina personnel, subcontractors or vessel owners. Only minor maintenance, such as washing, polishing and limited inboard painting is authorized. No pressure washing, bottom or hull scraping, sanding or painting, or major engine overhauls are authorized. All vessel maintenance must be managed to prevent discharge of pollutants into the environment. All materials used in maintenance and any wastes generated from maintenance activities must be stored, handled and disposed properly, and in compliance with Department regulations. Failure to properly handle vessel maintenance material or wastes may result in the revocation of this Permit.

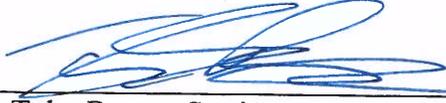
### **3. Dimensions of Decking:**

No portion of the decking on the piers and docks authorized by this Permit shall exceed the width dimensions for those structures identified on the dimension plan of this Permit.

### **4. Corps of Engineers Permit:**

The work authorized by this Permit is subject to the terms and conditions of the applicable Department of the Army Permit.

IN WITNESS WHEREOF, I, Tyler Brown, the duly authorized representative of Shawn M. Garvin, Secretary of the Department of Natural Resources and Environmental Control, have hereunto set my hand this 25<sup>th</sup> day of September, 2018.



By Tyler Brown, Section Manager  
the duly authorized representative of the Secretary of the  
Department of Natural Resources and Environmental Control



Matthew Jones, Environmental Scientist  
Wetlands and Subaqueous Lands Section



**WETLANDS AND SUBAQUEOUS LANDS SECTION**

**PERMIT NO.:** MP-182/18

**CONSTRUCTION EXPIRATION DATE:** 9-25-2021

**TO CONDUCT THE FOLLOWING ACTIVITIES:**

**TO OPERATE AND UTILIZE:**

A 16 wide by 40 foot long concrete public boat ramp  
A 6 foot wide by 60 foot long courtesy dock

**LOCATED ON PUBLIC SUBAQUEOUS LANDS:**

Along Gravel Hill Road  
In Millsboro Pond  
Millsboro, Sussex County, Delaware

**ISSUED TO:** DNREC Division Of Fish & Wildlife

**LOCATION OF WORK:** Same as above

**DISPLAY THIS CERTIFICATE IN A HIGHLY  
VISIBLE LOCATION ON THE JOB SITE.**

Authorized by: \_\_\_\_\_



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES &  
ENVIRONMENTAL CONTROL  
**DIVISION OF WATER**  
89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

WETLANDS & SUBAQUEOUS  
LANDS SECTION

TELEPHONE (302) 739-9943  
FAX (302) 739-6304

**MARINA PERMIT  
CONTRACTOR'S COMPLETION REPORT  
POST-CONSTRUCTION**

**Marina Permit Number: MP-182/18**

**Name:** DNREC Division of Fish & Wildlife  
C/o: Jeremy Ashe

**Address:** 89 Kings Hwy  
Dover, DE 19901

**Parcel #:** 1-33-16.00-172.00  
& 2-34-32.00-7.00

*I hereby certify that I have constructed the project authorized by the above-referenced Marina Permit in accordance with the approved plans for the project.*

\_\_\_\_\_  
**Printed Name of Contractor**

\_\_\_\_\_  
**Name of Company**

\_\_\_\_\_  
**Contractor's Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Telephone Number**

Upon completion of construction, this form shall be completed, signed by the contractor, and mailed to the Wetlands and Subaqueous Lands Section at:

**DNREC  
Wetlands and Subaqueous Lands Section  
89 Kings Highway  
Dover, Delaware 19901**

Or faxed to the Wetlands and Subaqueous Lands Section at: **302-739-6304**

***This form must be received by the Department within ten days of the date that construction is completed.***

\_\_\_\_\_  
*For official use only*

Compliance inspection date \_\_\_\_\_ Built in accordance with plans  Yes  No

Scientist: \_\_\_\_\_

*Delaware's good nature depends on you!*

## **Appendix #2**

### **USACE Nationwide Permit #36**



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
PHILADELPHIA DISTRICT CORPS OF ENGINEERS  
WANAMAKER BUILDING, 100 PENN SQUARE EAST  
PHILADELPHIA, PENNSYLVANIA 19107-3390

Regulatory Branch  
Application Section I

JUN 12 2018

SUBJECT: CENAP-OP-R-2018-403-85 (NWP36)  
Project Name: DDNREC Millsboro Boat Ramp Reconstruction SX  
Latitude/Longitude: 38.597641° N / -75.2922867° W (NAD 83)

TJ Austin  
Century Engineering, Incorporated  
4134 North DuPont Highway  
Dover, Delaware 19901

Dear TJ Austin:

This is in regard to your proposal on behalf of the Delaware Department of Natural Resources and Environmental Control, Division of Fish and Wildlife to reconstruct the Millsboro Boat Ramp located at Millsboro Pond in Millsboro, Sussex County, Delaware. The stated purpose of the project is to provide for a safe and adequate recreational vessel launching facility to the public.

Under current Federal regulations, a Department of the Army permit is required for work or structures in navigable waters of the United States and/or the discharge of dredged or fill material into waters of the United States including wetlands.

**Based upon our review of the information you have provided, it has been determined that the work is approved by the existing Department of the Army Nationwide Permit (NWP) described below, provided the work is conducted in compliance with the NWP general conditions, regional conditions, and the project specific special conditions.**

**NWP 36. Boat Ramps. Activities required for the construction of boat ramps, provided the activity meets all of the following criteria:**

- (a) The discharge into waters of the United States does not exceed 50 cubic yards of concrete, rock, crushed stone or gravel into forms, or in the form of pre-cast concrete planks or slabs, unless the district engineer waives the 50 cubic yard limit by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects;*
- (b) The boat ramp does not exceed 20 feet in width, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects;*
- (c) The base material is crushed stone, gravel or other suitable material;*

*(d) The excavation is limited to the area necessary for site preparation and all excavated material is removed to an area that has no waters of the United States; and,*

*(e) No material is placed in special aquatic sites, including wetlands.*

*The use of unsuitable material that is structurally unstable is not authorized. If dredging in navigable waters of the United States is necessary to provide access to the boat ramp, the dredging must be authorized by another NWP, a regional general permit, or an individual permit.*

**A copy of the NWP General Conditions and the Philadelphia District 2017 NWP Regional Permit Conditions for Delaware for which this verification is subject to, can be found at:**

<http://www.nap.usace.army.mil/Portals/39/docs/regulatory/publicnotices/2017%20Nationwide%20Permit%20General%20Conditions.pdf>

[http://www.nap.usace.army.mil/Portals/39/docs/regulatory/publicnotices/2017\\_DE\\_Reg%20Cond\\_Final.pdf](http://www.nap.usace.army.mil/Portals/39/docs/regulatory/publicnotices/2017_DE_Reg%20Cond_Final.pdf)

In instances where you are unable to access a digital copy of the 2017 NWP General conditions and/or the 2017 NWP Regional Permit Conditions for Delaware, a hard copy will be transmitted by registered mail to you per request. It is further noted that you may request a copy by email at any time in which the NWP General Conditions and Regional Permit Conditions will be provided to you by facsimile or other electronic means per your request.

You should carefully note that this NWP authorization is based upon your agreement to comply with the terms and conditions of this NWP including any and all project specific special conditions listed below. Initiation of any authorized work shall constitute your agreement to comply with all of the NWP's conditions. You should also note that the authorized work may be subject to periodic inspections by a representative of this office. The verification of a Nationwide Permit including all general and special conditions is not subject to appeal.

Please note that the entire State of Delaware has been designated as a Coastal Zone Management Area. Therefore, any federal activity occurring within the state may be subject to Federal Consistency review. It should be carefully noted that the Delaware Department of Natural Resources and Environmental Control (DDNREC) has denied the requisite 401 Water Quality Certification (WQC) and Coastal Zone Management (CZM) consistency for certain NWP activities in ALL waters of the United States in Delaware. For those NWPs for which the DDNREC has denied the requisite WQC and CZM, the NWP authorization is considered denied without prejudice by the Corps of Engineers until an individual, project-specific WQC and/or CZM review and approval has been obtained from the DDNREC. Furthermore, copies of the WQC and CZM approvals must be provided to the Corps of Engineers before the authorized work begins. Any project-specific conditions required by the DDNREC for the WQC and/or CZM approval will automatically become part of the NWP authorization as well. For other NWP activities, the DDNREC has denied the requisite WQC and CZM for projects located in waters of the United States which have been determined to be critical resource waters. A copy of

the table that identifies those NWP's which have been denied WQC and/or CZM consistency by the DDNREC can be found at:

[http://www.nap.usace.army.mil/Portals/39/docs/regulatory/publicnotices/NWP\\_Status\\_Table\\_for\\_CZM\\_and\\_WQC.pdf](http://www.nap.usace.army.mil/Portals/39/docs/regulatory/publicnotices/NWP_Status_Table_for_CZM_and_WQC.pdf)

Additionally, some of the NWP's do not involve a discharge of dredged or fill material and, as such, do not require a 401 WQC. For those NWP's not requiring a 401 WQC, the appropriate rows and columns of the table have been identified with the term "N/A".

You are advised that this verification of NWP authorization is valid until the NWP's expire on March 18, 2022, unless the NWP authorization is modified, suspended or revoked prior to this date. In the event that the NWP authorization is modified during that time period, this expiration date will remain valid, provided the activity complies with any subsequent modification of the NWP authorization.

Activities which have commenced (i.e, are under construction) or are under contract to commence in reliance upon an NWP will remain authorized provided the activity is completed within twelve months of the date of an NWP's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 330.4(e) and 33 CFR 330.5 (c) or (d). Activities completed under the authorization of an NWP which was in effect at the time the activity was completed continue to be authorized by that NWP.

#### **PROJECT SPECIFIC SPECIAL CONDITIONS:**

1. All work performed in association with the above noted project shall be conducted in accordance with the project plans prepared by Century Engineering, Incorporated, dated March 2018, entitled: *CONSTRUCTION PLANS-FOR-DELAWARE DIVISION OF FISH AND WILDLIFE-MILLSBORO BOAT RAMP*, 13 sheets.
2. Construction activities shall not result in the temporary disturbance or alteration of greater than 0.028 acre of waters of the United States, and the permanent disturbance or alteration of greater than 0.068 acre of waters of the United States.
3. Any deviation in construction methodology or project design from that shown on the above noted drawings must be approved by this office, in writing, prior to performance of the work. All modifications to the above noted project plans shall be approved, in writing, by this office. No work shall be performed prior to written approval of this office.
4. This office shall be notified at least 10 days prior to the commencement of authorized work by completing and signing the attached Notification/ Certification of Work Commencement Form (Enclosure 1). This office shall also be notified within 10 days of the completion of the authorized work by completing and signing the attached Notification/Certification of Work Completion/Compliance Form (Enclosure 2). Notifications required by this condition may be in writing by mail, fax, or electronic notification via email. Oral notifications are not acceptable.

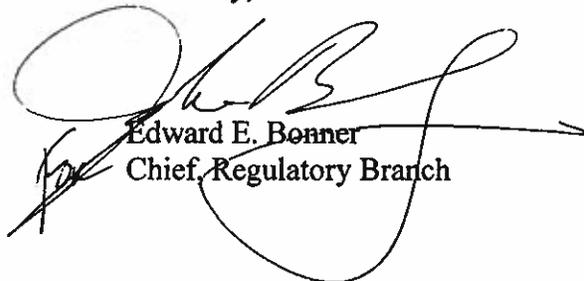
Similar notification is required each time maintenance work is to be done under the terms of this Corps of Engineers permit.

5. Representatives of the U.S. Army Corps of Engineers shall be permitted to inspect the project during its phase of construction, and to collect any samples, or to conduct any tests deemed necessary.
6. The permittee is responsible for ensuring that the contractor and/or workers executing the activity(s) authorized by this permit have knowledge of the terms and conditions of the authorization and that a copy of the permit document is at the project site throughout the period the work is underway.
7. The mechanical equipment used to execute the work authorized shall be operated in such a way as to minimize turbidity that could degrade water quality and adversely affect aquatic plant and animal life.
8. The disposal of trees, brush and other debris in any stream corridor, wetland or surface water is prohibited.
9. All material to be used as fill shall be obtained from an upland source. The fill material shall be free of oil and grease, debris, wood, general refuse, plaster, and other pollutants, and shall contain no broken asphalt.
10. All temporary fills authorized by this permit shall be removed in their entirety, and the area returned to its pre-construction condition.
11. In-water work shall be restricted from April 1 to July 15.

This permit does not obviate the permittee from obtaining any State or local approvals required by law for the activity authorized.

Also enclosed is a pre-addressed postal card (Enclosure 3) soliciting your comments on the processing of your application. Any comments, positive or otherwise, on the procedures, timeliness, fairness, etc., may be made on this card. If you have any questions regarding this matter, please contact Michael D. Yost at (267) 240-5278, by email at [michael.d.yost@usace.army.mil](mailto:michael.d.yost@usace.army.mil) or write to the above address.

Sincerely,



Edward E. Bonner  
Chief, Regulatory Branch

Enclosures

NOTIFICATION/CERTIFICATION OF WORK COMMENCEMENT FORM

Permit Number: CENAP-OP-R-2018-403-85 (NWP36)  
Name of Permittee: DDNREC, Division of Fish and Wildlife  
Project Name: DDNREC Millsboro Boat Ramp Reconstruction SX  
Waterway: Millsboro Pond  
County: Sussex State: Delaware  
Compensation/Mitigation Work Required: Yes  No

TO: U.S. Army Corps of Engineers, Philadelphia District  
Wanamaker Building - 100 Penn Square East  
Philadelphia, Pennsylvania 19107-3390  
Attention: CENAP-OP-R

I have received authorization to reconstruct the Millsboro Boat Ramp located at Millsboro Pond in Millsboro, Sussex County, Delaware.

The work will be performed by:

Name of Person or Firm \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

I hereby certify that I have reviewed the approved plans, have read the terms and conditions of the above referenced permit, and shall perform the authorized work in strict accordance with the permit document. The authorized work will begin on or about \_\_\_\_\_ and should be completed on or about \_\_\_\_\_.

Please note that the permitted activity is subject to compliance inspections by the Army Corps of Engineers. If you fail to return this notification form or fail to comply with the terms or conditions of the permit, you are subject to permit suspension, modification, revocation, and/or penalties.

\_\_\_\_\_  
Permittee (Signature and Date)

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Contractor (Signature and Date)

\_\_\_\_\_  
Telephone Number

NOTE: This form shall be completed/signed and returned to the Philadelphia District Office a minimum of 10 days prior to commencing work.

Enclosure 1

NOTIFICATION/CERTIFICATION OF WORK COMPLETION/COMPLIANCE FORM

Permit Number: CENAP-OP-R-2018-403-85 (NWP36)  
Name of Permittee: DDNREC, Division of Fish and Wildlife  
Name of Contractor: \_\_\_\_\_  
Project Name: DDNREC Millsboro Boat Ramp Reconstruction SX  
County: Sussex State: Delaware  
Waterway: N/A

Within 10 days of completion of the activity authorized by this permit, please sign this certification and return it to the following address:

U.S. Army Corps of Engineers, Philadelphia District  
Wanamaker Building - 100 Penn Square East  
Philadelphia, Pennsylvania 19107-3390  
Attention: CENAP-OP-R

Please note that the permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to return this notification form or fail to perform work in compliance with the permit, you are subject to administrative, civil and/or criminal penalties. Further, the subject permit may be suspended or revoked.

The authorized work was commenced on \_\_\_\_\_.

The authorized work was completed on \_\_\_\_\_.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the above noted permit.

\_\_\_\_\_  
Signature of Contractor

\_\_\_\_\_  
Signature of Permittee

Address: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_  
Telephone Number: \_\_\_\_\_

\_\_\_\_\_  
Telephone Number: \_\_\_\_\_

For project located in areas identified as shellfish habitat, you must include with this form a bill of lading; sales order or any other document(s) demonstrating non-polluting materials were purchased and utilized for your project. I hereby certify that I and/or my contractor have utilized non-polluting materials as defined in the above noted permit.

\_\_\_\_\_  
Signature of Contractor

\_\_\_\_\_  
Signature of Permittee

## **Appendix #3**

### **DelDOT – Letter of No Contention / Authorization to Apply for a Permit for Entrance Construction**



STATE OF DELAWARE  
**DEPARTMENT OF TRANSPORTATION**  
800 BAY ROAD  
P.O. BOX 778  
DOVER, DELAWARE 19903

JENNIFER COHAN  
SECRETARY

March 28, 2018

Mr. John Clark  
Delaware Division of Fish and Wildlife  
89 Kings Highway  
Dover, Delaware 19901

**SUBJECT: Authorization to Apply** for a Permit for Entrance Construction  
Millsboro Boat Ramp  
Tax Parcel # 234-32.00-7.00  
Rt.30 Gravel Hill Road (SCR248)  
Indian River Hundred, Sussex

Dear Mr. John Clark:

The Delaware Department of Transportation (DelDOT) has reviewed your request, dated March 7, 2018 to obtain a Letter of No Contention (LONC) to use an existing commercial building and site entrance for the above referenced project. In coordination with the South District Public Works Office we have determined that your project will require some modifications or enhancements to meet current regulatory requirements. We have therefore determined that this project is eligible to obtain a Permit for Entrance Construction (PEC) to make these modifications. The PEC will include a list of items that must be addressed, as well as requirements for bonding to perform work, where needed, within the State of Delaware right-of-way (ROW). Once the PEC is completed and all work items are accepted by DelDOT, the PEC will serve the same function as a LONC with Land Use Agencies.

**Please note: Your Permit for Entrance Construction must be obtained from the South District Public Works Office, before you can start any construction.**

The following conditions are provided with this response letter:

- 1) Site shall have access from the existing entrance located on Rt.30 Gravel Hill Road (SCR248).
- 2) Only the modifications/construction or traffic pattern changes that are itemized and authorized under the PEC will be permitted. Please coordinate with the DelDOT Public Works Office regarding the scope, location and limits of any items.
- 3) DelDOT reserves the right to review, modify or revoke this authorization letter and PEC and require additional entrance upgrades in the future if proposed activities create traffic conflicts, safety concerns or operational issues.
- 4) The property owner is responsible to:

Millsboro Boat Ramp  
Mr. John Clark  
Page 2  
March 28, 2018

- a. Submit information to DelDOT, regarding any future operational or site changes, (including but not limited to: rezoning, site layout changes, changes in use, entrance modifications, expanded/additional uses, new uses, etc.). Changes of this nature may alter the flow and/or volume of traffic and could require a new PEC, LONC or formal review for Approvals and/or Permits.
  - b. Establish and maintain clear sight lines at the entrance. There shall be no placement of structures, signs, objects, items for sale or parking of vehicles within State ROW or entrance limits. Shrubbery, Plantings, trees and/or other visual barriers that could obstruct the sight distance of a driver preparing to enter the roadway are prohibited.
- 5) The property owner and applicant are responsible to coordinate with DelDOT Public Works Office at (302) 853-1340, for information on obtaining specific permits for sign installation on private property, and for utilities installation within State ROW. Permits for Utilities construction and sign installation require separate permit applications.

The Department would like to thank you for your submittal.

**Please contact the South District Public Works Office at (302) 853-1340, for their assistance in obtaining the PEC. No construction or modification listed under Item 2 is allowed in advance of the DelDOT Public Works Office issuance of the Permit for Entrance Construction.**

Sincerely,



Steve Sisson  
Sussex County Subdivision Engineer,  
Development Coordination

Cc: Alexander Schmidt, Century Engineering, Inc  
Sheldon Hudson, Town of Millsboro, [town@millsboro.org](mailto:town@millsboro.org)  
Janelle Cornwell, Sussex County Planning & Zoning Commission  
Jessica L. Watson, Sussex Conservation District  
Gemez Norwood, South District Public Works manager  
William Kirsch, South District Entrance Permit Supervisor  
Todd Sammons, Subdivision Engineer  
Derek Sapp, Sussex County Subdivision Manager

## **Appendix #4**

# **State of Delaware Architectural Accessibility Board Approval**



**STATE OF DELAWARE**  
**Architectural Accessibility Board**  
**540 S. DuPont Highway, Suite 1**  
**Dover, Delaware 19901**

April 16, 2018

Mr. Mark Strickland  
Century Engineering  
4134 North DuPont Highway  
Dover, DE 19901

RE: Millsboro Boat Ramp Reconstruction  
Case No. 18039

Dear Mr. Strickland:

State of Delaware's Architectural Accessibility Board (AAB) met on Thursday, April 12, 2018, at which time your submission for the above referenced project was reviewed. Based on your plans and drawings your submission was unanimously approved.

The AAB's review and approval is not intended to assume any responsibility or liability for this project. Please know that there may be items pertaining to various codes, or other regulations, that may not have been addressed. You, however, are responsible for ensuring full compliance with all applicable accessibility codes, standards and/or other requirements. You are advised that potential changes to this project's design may have a direct affect on accessibility, and this should be considered prior to any changes or revisions to these drawings. Likewise, errors could also occur when the actual construction deviates from the approved design.

If you have any questions regarding this letter, please contact me at (302) 739-5644.

Very truly yours,

A handwritten signature in black ink, appearing to read "Jennifer Lieber".

Jennifer Lieber  
Chief Administrator, AAB

cc: Board Members

## **Appendix #5**

### **Delaware State Historic Preservation Office (SHPO) - Letter of No Adverse Effect**



State of Delaware  
Historical and Cultural Affairs

21 The Green  
Dover, DE 19901-3611

Phone: (302) 736.7400

Fax: (302) 739.5660

December 22, 2017

ER: 2017.06.20.03

John P. McCarthy, RPA  
Cultural Preservation Specialist  
DNREC - State Parks and Recreation  
152 S. State Street  
Dover, DE 19901

**Reconstruction of the Millsboro Boating Access Facility  
USACE Nationwide 36 (Boat Ramps)  
Gravel Hill Road (Rt. 30) Millsboro, Delaware**

Dear Mr. McCarthy,

The Delaware Fish and Wildlife intends to reconstruct the Millsboro Boating Access Facility located along Gravel Hill Road (Rt. 30) at the existing Millsboro Boating Ramp in Millsboro, Delaware. As we understand it, the project will include removal, realignment, and replacement of the existing boat ramp, construction of a new courtesy dock, repaving, and potentially expanding the existing parking lot.

There are no recorded historic properties in the vicinity that could be affected by the above undertaking. As the construction will involve filling and the working on the existing boat ramp, it is very unlikely the project would disturb intact archaeological deposits if they were present. Therefore, we find there are no historic properties present to be affected by this undertaking.

If you have any questions at this time, I can be reached at [craig.lukezic@state.de.us](mailto:craig.lukezic@state.de.us).

Sincerely,

  
Craig Lukezic, Archaeologist

Cc Gwen Davis, Deputy SHPO, Delaware Division of Historical and Cultural Affairs

## **Appendix #6**

### **Delaware State Fire Marshal - Site Plan Concurrence**



# OFFICE OF STATE FIRE MARSHAL

## Technical Services

2307 MacArthur Road  
New Castle, DE 19720-2426  
Phone: 302-323-5365  
Fax: 302-323-5366

1537 Chestnut Grove Road  
Dover, DE 19904-9610  
Phone: 302-739-4394  
Fax: 302-739-3696

22705 Park Avenue  
Georgetown, DE 19947  
Phone: 302-856-5298  
Fax: 302-856-5800



# FIRE PROTECTION PLAN REVIEW REPORT

Plan Review Number 2018-04-0387-MJS-01

Tax Parcel Number 2-34-32.00-7.00

Review Status APPROVED AS SUBMITTED

Review Date 04/19/2018

### PROJECT

MILLSBORO BOAT RAMP  
DNREC  
Phase# \_\_\_\_\_ Building # \_\_\_\_\_ Unit # \_\_\_\_\_  
GRAVEL HILL RD  
MILLSBORO, DE 19966

### SCOPE OF PROJECT

Project Type MJS Major Site

Number of Stories \_\_\_\_\_

Occupant Load \_\_\_\_\_

Square Footage \_\_\_\_\_

Occupancy Code \_\_\_\_\_

Construction Class \_\_\_\_\_

Fire District 83

### APPLICANT

### OWNER

CENTURY ENGINEERING INC

STATE OF DELAWARE  
JOHN CLARK

4134 N DUPONT HWY

89 KINGS HWY

DOVER, DE 19901

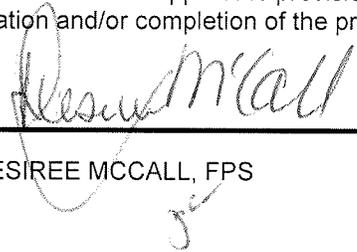
DOVER, DE 19901

This office has reviewed the plans and specifications of the above described project for compliance with the Delaware State Fire Prevention Regulations, in effect as of the date of this review.

A Review Status of "Approved as Submitted" or "Not Approved as Submitted" must comply with the provisions of the attached Plan Review Comments.

Any Conditional Approval does not relieve the Applicant, Owner, Engineer, Contractor, nor their representatives from their responsibility to comply with the plan review comments and the applicable provisions of the Delaware State Fire Prevention Regulations in the construction, installation and/or completion of the project as reviewed by this Agency.

This Plan Review Project was prepared by:

  
DESIREE MCCALL, FPS

# FIRE PROTECTION PLAN REVIEW COMMENTS

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Project Name MILLSBORO BOAT RAMP  
Plan Review Number 2018-04-0387-MJS-01 Tax Parcel Number 2-34-32.00-7.00  
Review Status APPROVED AS SUBMITTED Review Date 04/19/2018

---

## PROJECT COMMENTS

- 1002 This project has been reviewed under the provisions of the Delaware State Fire Prevention Regulations (DSFPR) Effective March 11, 2016. The current Delaware State Fire Prevention Regulations are available on our website at [www.statefiremarshal.delaware.gov](http://www.statefiremarshal.delaware.gov). These plans were not reviewed for compliance with the Americans with Disabilities Act (ADA). These plans were not reviewed for compliance with any Local, Municipal, nor County Building Codes.
- 
- 1180 This report reflects site review only. It is the responsibility of the applicant and owner to forward copies of this review to any other agency as required by those agencies.
- 
- 1501 If there are any questions about the above referenced comments please feel free to contact the Fire Protection Specialist who reviewed this project. Please have the plan review number available when calling about a specific project. When changes or revisions to the plans occur, plans are required to be submitted, reviewed, and approved.
-

## **Appendix #7**

### **Division of Facilities Management Approval Notice**



**STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF MANAGEMENT AND BUDGET**

January 3, 2019

Mr. Mark Strickland, Jr., P.E.  
Century Engineering, Inc.  
4134 North DuPont Highway  
Dover, DE 19901

RE: DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL  
Gravel Hill Road – Millsboro Boat Ramp - Reconstruction  
Final Construction Documents - Review and Approval

Dear Mr. Strickland:

We have reviewed and "Approved for Bidding" the subject project documents submitted to our office on May 30, 2018.

Should you have any questions or require additional information, please contact our office at (302) 739-5644.

Sincerely,

A handwritten signature in blue ink, appearing to read "Robert Minikel, P.E.", written over a light blue horizontal line.

Robert Minikel, P.E.  
Acting Chief of Engineering & Operations

RM/rnb VDFM\REVIEWS\CONSTR\FY18\1803192B.DOC

Enclosures

cc: Julio Seneus, Department of Natural Resources and Environmental Control  
Joseph Kline, Department of Natural Resources and Environmental Control  
Alex Schmidt, Century Engineering, Inc.

## **Appendix #8**

### **Soil Boring Logs (Produced by J.D. Hynes & Associates, Inc.)**



**HYNES  
&  
ASSOCIATES**

# LOG OF BORING B-1

(Page 1 of 1)

Century Engineering, Inc.  
4134 North DuPont Highway  
Dover, Delaware 19901

Date Completed: : December 7, 2017  
 Logged By: : C. Johnston  
 Drilled By: : M. Hynes  
 Drilling Method: : HSA (Mobile B-47 HD)  
 Total Depth: : 30.5 feet

Century-Millsboro Boat Ramp Improvements  
 Project No.: JDH-10/17/438

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	REMARKS
0	Brown, saturated, very loose, fine to coarse SAND, with little to some organic silt, trace peat		SM	1	1-1-3	Scale 1" ~ 5 feet  Depth to midline was 3 feet at the time of drilling.
2	Gray, saturated, loose, fine to coarse SAND, with trace silt		SP	2	3-3-3	
4	Gray, saturated, medium dense, fine to medium SAND, with little to some silt		SM	3	12-12-15	
6	Brown, saturated, medium dense, fine to coarse SAND, with trace silt, trace clay		SP	4	5-7-8	
8	Orange brown, saturated, medium dense, fine to coarse SAND, with trace silt		SP	5	6-8-9	
10	Orange brown, saturated, medium dense, fine to coarse SAND, with trace to little silt		SP-SM	6	6-10-11	
12	Orange brown, saturated, medium dense, fine to coarse SAND, with trace silt		SP	7	4-11-15	
14	Orange brown, saturated, medium dense, fine to coarse SAND, with trace silt		SP	8	8-12-14	
16	Boring terminated at 30.5 feet					
18						
20						
22						
24						
26						
28						
30						
32						



**HYNES  
&  
ASSOCIATES**

# LOG OF BORING B-2

(Page 1 of 1)

Century Engineering, Inc.  
4134 North DuPont Highway  
Dover, Delaware 19901

Date Completed: : December 7, 2017  
 Logged By: : C. Johnston  
 Drilled By: : M. Hynes  
 Drilling Method: : HSA (Geoprobe 3230)  
 Total Depth: : 30.5 feet

Century-Millsboro Boat Ramp Improvements  
 Project No.: JDH-10/17/438

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	REMARKS
0	Dark brown, saturated, very loose, fine to coarse SAND, with little to some organic silt		SM-OL	1	WOH/12"-3	Scale 1" ~ 5 feet
2	Gray, saturated, loose, fine to coarse SAND, with little silt		SM	2	1-1-5-5	Depth to mudline was 2.7 feet at the time of drilling.
4	Brown, saturated, medium dense, fine to coarse SAND, with trace to little silt, trace gravel		SP	3	7-6-10	
6	Brown, saturated, medium dense, fine to coarse SAND, with trace to little silt, trace gravel		SP-SM	4	6-7-7	
8	Orange brown, saturated, medium dense, fine to coarse SAND, with trace silt		SP	5	6-7-9	
10	Orange brown, saturated, medium dense, medium to coarse SAND, with trace silt		SP	6	6-10-11	
12	Orange brown, saturated, medium dense, fine to coarse SAND, with trace silt, trace gravel		SP	7	6-10-15	
14	Orange brown, saturated, medium dense, fine to coarse SAND, with trace silt, trace gravel		SP	8	10-12-15	
16	Boring terminated at 30.5 feet					



**HYNES  
&  
ASSOCIATES**

# LOG OF BORING B-3

(Page 1 of 1)

Century Engineering, Inc.  
4134 North DuPont Highway  
Dover, Delaware 19901

Date Completed: : October 5, 2017  
 Logged By: : C. Johnston  
 Drilled By: : M. Hynes  
 Drilling Method: : HSA (Geoprobe 3230)  
 Total Depth: : 30.5 feet

Century-Millsboro Boat Ramp Improvements  
 Project No.: JDH-10/17/438

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	REMARKS
0	Dark brown, wet, very loose, fine to coarse SAND, with trace silt		SP	1	2-2-1	Scale 1" ~ 5 feet
2	Brown, wet to saturated, very loose, fine to coarse SAND, with trace to little silt		SP-SM	2	1-1-1	Approximately 6 inches of organic bearing soil was encountered at the ground surface.
4	Light gray, saturated, very loose, fine to coarse SAND, with trace to little silt		SP-SM	3	2-1-1	Groundwater was encountered at 3.5 feet during drilling operations.
6	Light gray, saturated, very loose, fine to coarse SAND, with trace to little silt		SP-SM	4	1-1-1	At completion water was at 3 feet; boring caved in at 4 feet.
8	Light gray, saturated, very loose, fine to coarse SAND, with trace to little silt		SP-SM	5	3-4-6	
10	Orange brown, saturated, loose, fine to coarse SAND, with trace to little silt		SP-SM	6	2-4-3	
12	Light orange brown, saturated, loose, fine to coarse SAND, with trace to little silt, trace gravel		SP-SM	7	5-7-1	
14	Orange brown, saturated, loose, medium to coarse SAND, with trace silt		SP	8	5-8-13	
16	Orange brown, saturated, loose, medium to coarse SAND, with trace silt					
18	Orange brown, saturated, medium dense, medium to coarse SAND, with trace silt					
20						
22						
24						
26						
28						
30	Boring terminated at 30.5 feet					
32						



**HYNES  
&  
ASSOCIATES**

# LOG OF BORING B-4

(Page 1 of 1)

Century Engineering, Inc.  
4134 North DuPont Highway  
Dover, Delaware 19901

Date Completed: : December 7, 2017  
 Logged By: : C. Johnston  
 Drilled By: : M. Hynes  
 Drilling Method: : HSA (Geoprobe 3230)  
 Total Depth: : 30.5 feet

Century-Millsboro Boat Ramp Improvements  
 Project No.: JDH-10/17/438

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	REMARKS
0	Light brown, wet, very loose, fine to coarse SAND, with trace silt		SP	1	2-2-1	Scale 1" ~ 5 feet  Approximately 2 inches of asphalt and 6 inches of crushed stone were encountered at the ground surface.  Groundwater was encountered at 3 feet during drilling operations.  Boring caved in at 5 feet.
2	Light brown, wet to saturated, very loose, fine to coarse SAND, with trace silt		SP	2	2-1-2	
4	Light gray, saturated, very loose, fine to coarse SAND, with trace silt		SP	3	WOH/18"	
6	Light brown, saturated, very loose, fine to coarse SAND, with trace silt		SP	4	1-2-2	
8	Orange brown, saturated, loose, fine to coarse SAND, with trace to little silt		SP-SM	5	3-3-5	
10	Brown, saturated, loose, fine to coarse SAND, with trace silt		SP	6	2-4-5	
12	Orange brown, saturated, loose, fine to coarse SAND, with trace to little silt		SP-SM	7	3-5-5	
14	Light orange brown, saturated, medium dense, fine to coarse SAND, with trace silt		SP	8	4-6-9	
16	Boring terminated at 30.5 feet					
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## **Appendix #9**

# **Federal Funding Terms & Conditions**

**To be filled out by Division of Fish and Wildlife project manager upon an awarded contract. These terms will be included into the contract to meet the minimum federal terms required by the Division of Fish and Wildlife federal grant. They will also be included with the notice to precede letter and state purchase order to the awarded contract.**

FEDERAL TERMS AND CONDITIONS TEMPLATE

**FOR USE WITH FEDERAL FUNDED/MATCHED PROJECTS ONLY**

(This is the **minimum** required federal terms and conditions – other terms and conditions may be required based on type of contract (i.e. construction), amount thresholds and your specific grant award terms and conditions, especially for Sub-Recipients. 2 CFR Part 200 Appendix II can be found at: [http://www.ecfr.gov/cgi-bin/text-idx?SID=54ab7958ba7572344e1f210886ba03bf&mc=true&node=ap2.1.200\\_1521.ii&rgn=div9](http://www.ecfr.gov/cgi-bin/text-idx?SID=54ab7958ba7572344e1f210886ba03bf&mc=true&node=ap2.1.200_1521.ii&rgn=div9) and contains a list of contract provision required when using federal funding. Please be sure to check your specific federal grant award for additional terms and conditions that may need to be added to this template. These federal terms and conditions may be inserted into the contract/agreement or referenced as an appendix)

# (Next section number if inserted into contract/agreement) Federal Funding Terms and Conditions:

A. General:

- 1) VENDOR shall comply with all applicable State and Federal laws and regulations. If applicable State and Federal laws and regulations conflict with the Federal Funding Terms and Conditions, then applicable laws and regulations supersede the Federal Funding Terms and Conditions. The Federal Funding Terms and Conditions shall apply to the work to be performed under this Contract and such provisions shall supersede any conflicting provisions of this Contract.
- 2) This Contract is funded by the \_\_\_\_\_ grant from (Federal Agency) under award number \_\_\_\_\_, and Catalog of Federal Domestic Assistance (CFDA) number \_\_\_\_\_. Neither the United States nor any of its Departments, agencies, or employees is a party to this Contract.
- 3) The cover of the title page of all reports, studies, or other documents supported in whole or in part by this sub-award shall acknowledge the financial assistance provided by **(insert Federal agency/agencies)** by including the following statement: *“This project was funded, in part, through a grant(s) from the **(insert Federal agency/agencies)** under award number(s) \_\_\_\_\_.*
- 4) The rights and remedies of Delaware provided for in these clauses are in addition to any other rights and remedies provided by law or under this Contract.

B. Remedies: Except as may be otherwise provided in this Contract all claims, counterclaims, disputes and other matters in question between Delaware and

VENDOR arising out of or relating to this Contract or the breach thereof will be decided by arbitration if the parties hereto mutually agree, or in a court of competent jurisdiction within the State of Delaware.

- C. Audit; Access to Records: VENDOR shall maintain books, records, documents and other evidence directly pertinent to performance on Federal grant work under this Contract in accordance with generally accepted accounting principles and practices. VENDOR shall also maintain the financial information and data used by VENDOR in the preparation or support of the cost submission, and a copy of the cost summary submitted to Delaware. The United States Department of Labor, Delaware or any of their duly authorized representatives shall have access to such books, records, documents and other evidence for the purpose of inspection, audit and copying. VENDOR will provide proper facilities for such access and inspection.
- D. Subcontracts: Any sub-contractors and outside associates or consultants required by VENDOR in connection with the services covered by this Contract will be limited to such individuals or firms as were specifically identified and agreed to in writing during negotiations, or as are specifically authorized in writing by Delaware during the performance of this Contract. Any substitutions in or additions to such sub-contractors, associates, or consultants will be subject to the prior written approval of Delaware.
- E. Whistleblower Protection: 41 United States Code (U.S.C.) 4712, Pilot Program for Enhancement of Recipient and Subrecipient Employee Whistleblower Protection: This requirement applies to all awards issued after July 1, 2013 and was made permanent under Public Law No: 114-261 on 12/14/2016.
  - 1) This award and related subawards and contracts over the simplified acquisition threshold and all employees working on this award and related subawards and contracts over the simplified acquisition threshold are subject to the whistleblower rights and remedies in the pilot program on award recipient employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (P.L. 112-239).
  - 2) Recipients, and their subrecipients and contractors awarded contracts over the simplified acquisition threshold related to this award, shall inform their employees in writing, in the predominant language of the workforce, of the employee whistleblower rights and protections under 41 U.S.C. 4712.
  - 3) The recipient shall insert this clause, including this paragraph (c), in all subawards and contracts over the simplified acquisition threshold related to this award.
- F. Equal Employment Opportunity: VENDOR agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The VENDOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation,

gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The VENDOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- G. Utilization of Small and Minority Business: VENDOR agrees that qualified small business and minority business enterprises shall have the maximum practicable opportunity to participate in the performance of Federal grant-assisted contracts and subcontracts.
- H. Covenant against Contingent Fees: VENDOR warrants that no person or selling agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees. For breach or violation of this warranty, Delaware shall have the right to annul this Contract without liability or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.
- I. Patents: If this Contract involves research, developmental, experimental, or demonstration work and any discovery or invention arises or is developed in the course of or under this Contract, such invention or discovery shall be subject to the reporting and rights provisions of the Code of Federal Regulations for **(insert Federal agency/agencies)**, in effect on the date of execution of this Contract. In such case, VENDOR shall report the discovery or invention to **(insert Federal agency/agencies)** directly or through Delaware and shall otherwise comply with Delaware's responsibilities in accordance with the Code of Federal Regulations. VENDOR hereby agrees that the disposition of rights to inventions made under this Contract shall be in accordance with the terms and conditions of the Code of Federal Regulations. VENDOR shall include provisions appropriate to effectuate the purposes of this condition in all subcontracts involving research, developmental, experimental, or demonstration work.
- J. Debarment, Suspension, Ineligibility and Voluntary Exclusion: The VENDOR certifies, by submission of this proposal, that neither it nor any affiliate, any predecessor company or entity, owner, Director, officer, partner or proprietor is presently, or has within the past five years, been debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal, State, or Local government department or agency.
- K. Clean Air Act: for Federal grant-assisted contract and subcontracts exceeding \$150,000, VENDOR agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387).
- L. Lobbying: Federal grant-assisted contracts and subcontracts exceeding \$100,000 in Federal funds are subject to Section 319 of Public Law 101-121, which added Section 1352, regarding lobbying restrictions, to Chapter 13 of Title 31 of the United States Code as implemented at the part entitled "New Restrictions on Lobbying" in the

Code of Federal Regulations for **(insert Federal agency/agencies)**, in which case the VENDOR must submit a completed "Disclosure of Lobbying Activities" (Form SF-LLL) regarding the use of non-Federal funds for lobbying. The Form SF-LLL shall be submitted within 15 days following the end of the calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed. The Form SF-LLL shall be submitted to Delaware.

- M. Cost and Compensation: It is agreed that the total cost for the services provided under this Contract shall not exceed \$\_\_\_\_\_. Notwithstanding other terms and conditions of this Contract, it is understood and agreed that the total cost and compensation under this Contract shall not exceed the funds made available to Delaware by the **(insert Federal agency/agencies)** for this project.
- N. Obligations: The obligations of Delaware under this Contract shall be subject to the receipt of sufficient funds appropriated by the (insert Federal agency/agencies) and the obligations of Delaware are limited to the amount of such appropriation.

**End of Federal Funding Section**